

THE ARCHDIOCESE OF TABORA



Archbishop Emeritus Paul Ruzoka



Archbishop Protase Cardinal Rugambwa

NDALA HOSPITAL

TANZANIA

2023 ANNUAL REPORT

NDALA HOSPITAL
P.O. BOX 15
NDALA TABORA
UNITED REPUBLIC OF TANZANIA

Email: ndalahospital@gmail.com

TABLE OF CONTENTS

- LIST OF ACRONYMS2
- LIST OF TABLES 3
- ACKNOWLEDGEMENT 4
- A WORD FROM THE HOSPITAL ADMINSTRATOR 5
- A WORD OF THANKS.....6
- GENERAL OVERVIEW OF THE YEAR 2023 6
- CHAPTER ONE: INTRODUCTION 10
 - History 10
 - Location 11
- CHAPTER TWO: MANAGEMENT 11
 - 2.1 Hospital Management..... 11
 - 2.2 Human Resource Management..... 13
 - 2.3 Financial Management..... 17
- CHAPTER THREE: HEALTH SERVICES 19
 - A: CURATIVE SERVICES 19
 - 3.1 Inpatient services..... 19
 - 3.2 Outpatient services..... 27
 - B: PREVENTIVE SERVICES 36
 - 3.3 Reproductive and child health services (RCH) 36
 - 3.4 HIV/AIDS control programme 40
 - C: SUPPORTIVE SERVICES 42
 - 3.5 Medical records and statistics..... 42
 - 3.6 Technical department and transport 42
- CHAPTER FOUR: PROJECTS FOR 2023 43
- CHAPTER FIVE: IN APPRECIATION OF OUR DONORS AND FRIENDS OF NDALA 43

LIST OF ACRONYMS

| | |
|-------|---|
| AMO | Assistant Medical Officer. |
| NHIF | National Health Insurance Fund. |
| OPD | Outpatient Department. |
| HMIS | Health Management Information System. |
| FBO's | Faith Based Organizations. |
| JOCS | Japan Overseas Christian Medical Cooperative Service. |
| RBF | Result Based Financing. |
| HSBF | Health Sector Basket Funds. |
| HIMS | Hospital Information Management System. |
| PLHIV | Patient Living with HIV. |
| EGPAF | Elizabeth Grassier Pediatric AIDS Foundation. |
| MDH | Management and Development for Health. |
| CTC | Care and treatment clinic. |
| PMTCT | Prevention of mother to child infection. |
| PITC | Provider initiated counselling and testing. |
| VCT | Voluntary counselling and testing. |

LIST OF TABLES

| Table No: | Name | Page |
|-----------|--|------|
| Table 1 | Staffing levels at Ndala Hospital | 13 |
| Table 2 | List of Ndala Hospital staff members pursuing further studies | 16 |
| Table 3 | List of Staff completed their studies in 2023 | 17 |
| Table 4 | Income and expenditure of Ndala Hospital in Tanzanian Shillings | 18 |
| Table 5 | Total number of admissions | 22 |
| Table 6 | Top ten diseases in IPD | 23 |
| Table 7 | Total number of deaths | 23 |
| Table 8 | Top five causes of death | 24 |
| Table 9 | Total number of deliveries | 24 |
| Table 10 | Obstetrics complications | 25 |
| Table 11 | Pregnancy outcomes | 25 |
| Table 12 | Total surgical procedures | 26 |
| Table 13 | Top ten Major surgical procedures | 26 |
| Table 14 | Top ten Minor surgical procedures | 27 |
| Table 15 | Top ten diseases in OPD | 29 |
| Table 16 | Total number of OPD cases | 29 |
| Table 17 | Procedures done by the visiting ophthalmologist through the regional mobile eye care program in 2023 | 30 |
| Table 18 | Common eye diseases | 30 |
| Table 19 | Dental cases | 31 |
| Table 20 | Dental procedures | 31 |
| Table 21 | Total number of X-rays | 32 |
| Table 22 | Total number of ultrasounds | 33 |
| Table 23 | Trend in laboratory investigations | 33 |
| Table 24 | Trend in Safe Blood collection and transfusion services | 35 |
| Table 25 | Trend in Intravenous fluid production | 35 |
| Table 26 | Trend in TB patients | 35 |
| Table 27 | Trend in epilepsy and mental health patient's registrations | 36 |
| Table 28 | Trend in Total RCH attendances | 36 |
| Table 29 | Trend under 5 RCH 1 st and re – attendances | 36 |
| Table 30 | Trend in antenatal attendances | 37 |
| Table 31 | Trend in risk factors seen at RCH | 37 |
| Table 32 | Trend in vaccination | 38 |
| Table 33 | Trend in VCT | 40 |
| Table 34 | Trend in CTC patients | 41 |
| Table 35 | Trend in home-based care visits | 41 |
| Table 36 | Trend in PMTCT | 41 |
| Table 37 | Trend in PITC | 41 |

ACKNOWLEDGEMENT

On behalf of Management Team of Ndala Hospital, I would like to express my first and foremost gratitude to the Almighty God who is the source of all goodness and who sustains all including Ndala Hospital foundation, existence and its sustainability.

Also, we would like to express our sincere appreciation to the former medical officer in charge of Ndala Hospital Dr John Nyeho and to everyone who contributed to the achievements of our hospital in the year 2023.

Furthermore, I would like to thank all our staff members who worked tirelessly to ensure our hospital's operations ran smoothly. Your hard work and dedication are greatly appreciated.

Also, I would like to thank our hospital management team for their priceless support in preparing this report for the year 2023.

My sincere thankfulness is extended to the Archdiocese Health Secretary, the District Medical Officer and District Health Secretary for their collaboration with Ndala hospital. We could not have achieved our goals without their partnership and support. Thanks to Mr Thomas Lutungulu the District health secretary of Nzega District Council for his advice and support during preparation of this report. Special thanks to Dr Myrrith who assisted us tirelessly enduring all hardships, offered technical support and with her words of encouragement during the preparation of this work. We appreciate the work done by Ms Kitundu in processing and arranging words tables and figures for this report.

Finally, I would like to acknowledge and thank all friends of Ndala Hospital and organizations that worked with us in the year 2023. The support we received from you has been very helpful in providing quality healthcare services to our patients.

Once again, thank you all for your support and commitment to our hospital's mission. We look forward to continuing to work together in the years to come.



Sr Dr. Christina Njendela Mapunda, MMED.
Medical Officer in Charge
Ndala Hospital

A WORD FROM THE HOSPITAL ADMINSTRATOR

During the year 2023 under review, Ndala Hospital achieved a significant positive impact in the delivery of quality health services to poor people of Ndala area in Nzega district and parts of Igunga, Uyui, Sikonge, Urambo District and many other places. despite experiencing a lot of challenges emanating from financial constraints. For example, quality health service was offered after the procurement of CPAP machines warmer, new delivery beds, baby coats and a CTG machine for monitoring of fetal and maternal well-being during labour and delivery. Readily availability of medication from the retail pharmacy improved the provision of service, because some of the medicines available there are not allowed at the level of our hospital.

The Management team of Ndala Hospital has continued to Implement its Comprehensive Hospital Operational plan to mitigate risk and minimize operational and financial impacts on daily operation of the hospital while ensuring that a scarce resource made available for example equipment, supplies, raw materials, human resources, and money were sensitively managed and preserved across the Hospital.

Through the support from our friends and stakeholders, the hospital managed to embark on several projects. These included establishing the retail pharmacy in the hospital and continuing with carrier development plan for our staff without creating debts. Thus, almost all income generated from patients was directed in financing operational cost of the hospital.

Once again, thanks to all friends and stakeholders for your continuous support to Ndala Hospital which has enabled the Hospital to survive in this period of decreasing income from patients due to financial constraints resulted from drought. Also, some of the patients went to new government health facilities around us. Lastly, I invite all of you to continue with your cooperation and support to Ndala Hospital in the coming year 2024. To all of you BE BLESSED and we keep you in our daily prayers.

Respectively submitted,

A handwritten signature in blue ink, appearing to read 'Andrea', with a stylized initial 'A' above it.

**Sr Florida Andrea CB
Administrator
Ndala Hospital**

WORD OF THANKS

We sincerely and honestly express our utmost gratitude to Archbishop Emeritus Paul Ruzoka for the invaluable support which He showered on us that we felt easy and welcomed anytime we needed Him for matters of concern. Our sincere gratitude to His grace may the Almighty God protect Him and keep Him strong and energetic as He enjoys the benefits of retirement.

For our incoming Chairperson Archbishop Protase Cardinal Rugambwa. We congratulate Him for having been elected to lead the Archdiocese of Tabora and The Almighty God to raise Him as Cardinal. We look forward for His esteemed Cooperation. We promise to adhere to His guidance so that we may fulfil the will of God in rendering this important service to the people of God.

GENERAL OVERVIEW OF THE YEAR 2023

The Annual report 2023 of Ndala Hospital pinpoints challenges and achievements as faced throughout the year.

Several developments strained the budget; these included non-payment for patients treated on exemption without cost recovery by the Government, a decreasing number of patients attending the hospital due to an increase of government facilities around Ndala area, a delay in payment from the National Health Insurance Funds for treatment of its members and the inflation which increased the costs of consumables including drugs. The hospital had to prioritize its spendings and had to find ways to cut unnecessary costs to continue providing quality healthcare to its patients.

Ongoing decreased number of outpatients and inpatients are seen in the hospital. The number of outpatient clients decreased by 8.4% from 17,678 in 2022 to 16,199 in 2023, while the number of inpatient clients decreased by 10.3% from 7,685 in 2022 to 6,892 in 2023. The construction of new government dispensaries near the hospital may have contributed to this decrease in the number of patients. This trend is something that the hospital needs to consider in future planning and strategy. Special option is to think about establishing more specialized services in the coming year 2024, which are currently not available in public facilities, starting with the plan to establish an orthopedic unit, and clinics in ophthalmology, dermatology, internal medicine, ENT and pediatrics, This can serve the poor population who currently need to travel to either Nkinga or Kitete Regional referral Hospital to get these specialized services. In most cases these poor people fail to access the services because they cannot afford the cost of treatment, living and travelling to these areas.

Non-communicable diseases particularly hypertension and diabetes continued to be among top 10 Disease in the OPD and IPD. Also, these diseases appear to be among the top 5 Causes of Death in adults, Hypertension complicated to cerebrovascular accident/stroke is the leading cause of death accounting to 25% of deaths and heart failure reaches around 16% among causes of death. This significant number of death and increased number of patients who are diagnosed with hypertension and some with stroke pushed the management team to conduct screening camp at the hospital. This was done in November 2023 for hypertension and diabetes, The exercise was successful among 78 patients who were screened: 2 (2.5%) patients were newly diagnosed with diabetes and 6 (7.7%) patients were found to have high blood pressure. All patients were attended to and counselled on regular visits for follow-up.

Based on this experience regular camps and sensitization of community regarding risk factors signs and symptoms of non-communicable diseases have started to be an ongoing process. More camps will be conducted in the coming year 2024.

Malaria has continued to be a major health concern, remaining the leading disease among the top ten outpatient and inpatient cases. Tragically, it is also the leading cause of death for children under five years of age.

The year 2023 also witnessed positive developments in healthcare in the area. We saw a 19% decrease in in-hospital deliveries, normal deliveries decreased from 1,384 to 1,100 (21%) which may be caused by an increasing number of facilities providing delivery services in the area. The percentage of cesarean sections increased to 18% of all deliveries in the year 2023 (15.4% in 2022), but the assisted vaginal deliveries, although still performed scarcely, went up as well from 12 in 2022 to 40 in 2023. The reason might be that the dispensaries provide basic delivery services and refer all complicated cases to the hospital for further management. Some of the complicated cases we received included uterine ruptures of which 5 cases were seen, (9 cases in 2022), antepartum hemorrhage was seen in 19 cases (23 in 2022) and eclampsia increased to 20 cases (5 in 2022). Most of these cases were operated on. Death cases reduced, but calculated against the total admissions gives a stable percentage of 2.8%. in the year 2023 compared to 2.7% in the year 2022.

The staffing situation is still unfavorable, some staff members have left Ndala Hospital to government health facilities in different councils, Ndala Hospital is still behind the staffing standard for this hospital with 152 bed capacity, and additional staff especially nurses is highly needed to cover three shifts in the day with other staff having Off days or going for leave.

We would like to express our gratitude to donors and friends of Ndala Hospital who have been supporting us throughout the year. Particularly we thank Mr. Bart van der Ploeg and Tabora foundation for their continuous support to our retail pharmacy to ensure its sustainability during this period of prematurity. Their financial support has enabled us to increase the variety of health commodities in the pharmacy thus backing up the shortage of drugs essential health commodities in the hospital and other facilities around the area.

Ndala Hospital achieved several important milestones in 2023 including:

- Continuous improvement and upgrading in INAYA (Electronic health management system) capture and share all Health Information from one user point to another until the patient leaves the hospital. Despite all the improvements undertaken, there is a great need for 5 additional computers together with one air conditioner in the server room to facilitate smooth functioning of the system.
- Certification of the retail pharmacy in the hospital to provide its service has been successful. The pharmacy provides services in legal accepted manner, all drugs and medicine are available for the Hospital.
- Specialized surgical camps with the collaboration with the ENT, general surgery and ophthalmology specialists from Bugando and Kitete hospital continued to be available at least twice in the year. These camps provide surgical services to many patients at significantly lower cost. Overall, these surgical camps were an enormous success: the camps improved access to vital healthcare services for many people in need and attracted more

patients to our hospital. Through costs sharing program also income for the hospital increased.

- Procurement and installation of a laundry machine with the capacity of 30 Kg. The installation of this machine has greatly reduced the workload in the laundry; it facilitates washing of many clothes at once and simplifies the working process.



Ndala Hospital retail pharmacy. Left Sr Mary Joseph- manager of the pharmacy. Right Mr Peter Robert -pharmacy technician selling medicine to the client.



Mr. Emmanuel Dotto operating the newly purchased Heavy duty washing machine.

Ndala Hospital also faced several challenges in 2023. This includes the following:

- Delay in allocation of funds from the Government especially the Health Sector Basket Fund (HSBF) which has significantly affected the implementation of the planned activities. The hospital had to use user fees and other sources of funds to finance HSBF related activities.
- Significant electricity cuts from the national grid because of the 2023 drought. As a result, the hospital had to rely heavily on solar power capacity to generate electricity, but some of the solar batteries were damaged, reducing the capacity to store energy. As a result, the hospital was forced to run its expensive backup generator, which strongly increased the running costs.
- Continuous late payments of claims from the National Health Insurance Fund (NHIF), which fund covers the costs of care for patients who are enrolled in the NHIF. The delay in payment for these services significantly affected the financial position of the hospital. To continue serving members from NHIF the hospital had to use other sources to ensure quality care for NHIF members.
- The 2023, drought affected many families, resulting in a considerable number of patients being unable to pay their treatment bills. Most of our patients are poor peasants who depend solely on agriculture, which depends on the availability of rainfall.

Overall, despite facing a challenging year, Ndala Hospital remained committed to providing high quality health care to its patients. The hospital's Management and staff members worked together to overcome the obstacles posed by the budget deficit, inflation and other challenges, ensuring that patients received the care they needed in sustainable manners.

STRATEGIES OUTLINED BY THE HOSPITAL TO ADDRESS THE CHALLENGES.

Given the challenges we are facing, our hospital has developed a plan to address these issues to continue with the provision of quality healthcare services.

- Implementing Planned Preventive Maintenance (PPM) to conduct routine maintenance of existing hospital equipment, vehicles, machines, and buildings. An annual budget will be allocated. Additionally, some equipment like surgical operating sets, trolleys, drip stands, stretchers, benches, wheelchairs, furniture and many others used in daily services in the wards are outdated and may not survive for many more years; we are actively seeking funds to purchase new equipment as replacement to ensure continuity of care to our clients.
- The Management of the Hospital will continue to communicate with Government officials to get the allocation of funds for health commodities through MSD (Government Medical store Department) because the number of patients treated with exemption is continuously increasing in the area served by the hospital.
- With universal National Insurance all people are expected to be insured, hopefully resulting in reduced numbers of poor patients who are unable to pay for the costs incurred in their treatment. This would greatly increase income for the hospital and reduce the rate of exemption.
- In the future, we plan to install new and bigger batteries to ensure constant electrical supply.

- The hospital management is still considering replacing the damaged batteries to ensure that the solar system is functioning to its highest capacity and that the national electricity
- supply from the main grid can be stored. However, communication with the ENSOL SOLAR COMPANY from Arusha has not been successful yet.

As management team, we are proud of our staff's hard work and dedication, and we are grateful for the trust and support of our patients and community, we thank them for their continuous trust in using Ndala services. We are looking forward to continuing our efforts to improve and expand our services in the coming year 2024.

On behalf of the Management and Staff of Ndala Hospital, I respectfully submit,



**Sr Dr Christina Njendela Mapunda, MMED.
Medical Officer in Charge
Ndala Hospital.**

CHAPTER ONE: INTRODUCTION

History

Ndala hospital has a long and rich history of providing healthcare services to the people of Nzega, Uyui and Igunga districts in Tanzania. The hospital was established in 1930's by the Missionary Sisters of Our Lady of Africa, also known as the white sisters. Initially it was just a dispensary, but in 1965, it was upgraded to a hospital beginning with 115 beds capacity, 15 nurses and one doctor, Dr H.R. Folmer was the 1st Medical Officer in Charge (MOiC) till 15/9/1971, Dr Herman J. Drewes was the 2nd, and Dr Gerald Haverkamp was the 3rd MOiC to cater the growing healthcare needs of the people in the region.

Ndala hospital is a faith-based organization (FBO) that operates under the Archdiocese of Tabora. Since 1965, the sisters of Charity of St. Charles Borromeo have been responsible for operating the hospital. The sisters have worked tirelessly to improve the quality of medical care provided at the hospital and to expand its services to meet the growing needs of the community. Over the years, Ndala hospital has become a vital healthcare facility in the region. Today, Ndala hospital is still a beacon of hope for the people. The hospital continues to play a vital role in providing essential healthcare services to the community, and its legacy of compassion and dedication to healing continues to inspire those who work here and those who benefit from its services. The hospital has a team of highly skilled and dedicated healthcare professionals who work around the clock to ensure that patients receive the best possible care.

Location

Ndala Hospital is in Nzega District at the border of Nzega, Uyui and Igunga District. In addition to Ndala Hospital, Nzega District Council has 6 Public Health Centres, 1 FBO's Health Centre, 52 Public Dispensaries, 1 FBO's Dispensary and 1 Private Dispensary all of which together with Ndala Hospital provide quality primary health care to the population of Nzega District Council and nearby District of Uyui and Igunga and parts of Nzega Town council.

Nzega District is a stunning region located in the western Tanzania plateau with a population of approximately 616,610 out of whom 303,158 are males and 313,452 female inhabitants and covering an area of 6,569 kilometers. Nzega District is primarily inhabited by Sukuma, Nyamwezi and Nyiramba tribes, with other smaller communities having migrated from the area for a variety of reasons, such as employment and business opportunities. Agricultural and pastoralist activities including Bees keeping are the mainstay of the District Council's economy, making it a vital contributor to the growth and development of the Council.

CHAPTER TWO: MANAGEMENT

2.1 Hospital management

The Management of Ndala Hospital and the Hospital Governing Board chaired by the Archbishop of the Archdioceses of Tabora meet twice per year to discuss matters pertaining to the operation of the Hospital. Whenever needs arise emergency meetings are convened to discuss matters arises in the period under consideration.

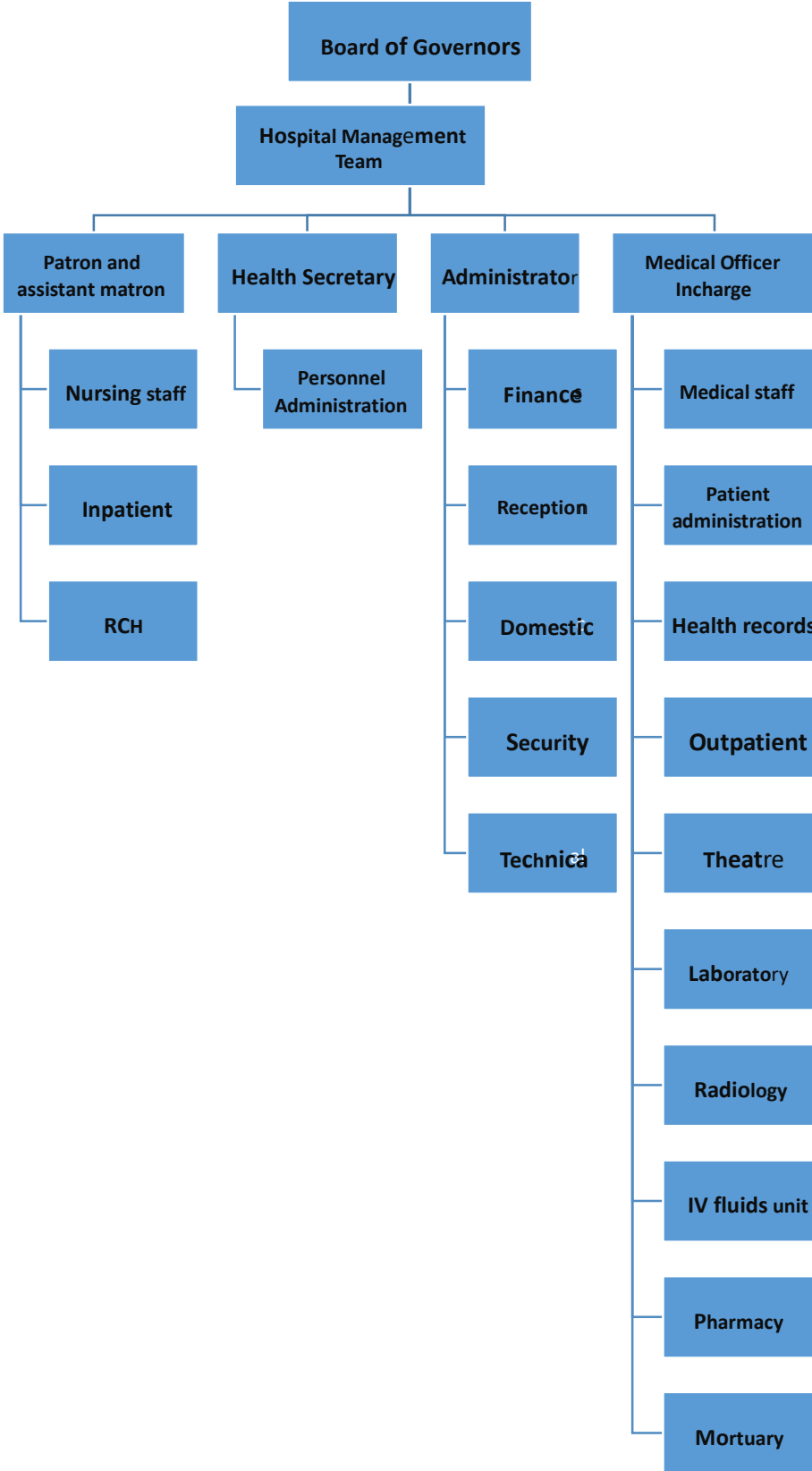
Up till November 2023, Ndala Hospital Board was under Archbishop Emeritus Paul Ruzoka who then- officially retired. He was replaced by Archbishop Protas Cardinal Rugambwa

Routine management of the Hospital Management Team is chaired by the Hospital Medical Officer In charge. The Hospital Management Team meets monthly to discuss all issues of operation of the hospital including the monitoring and evaluation of the services offered to the clients together with the financial position of the Hospital.

The Hospital Management Team is responsible for the management of human and financial resources of the hospital. It prepares the Annual Budget Plan together with the Comprehensive Hospital Operation Plan and submits the plan to the Hospital Governing Board for approval before submission to higher authorities including the office of the Archbishop of the Archdioceses of Tabora, the Christian Social Services Commission and Nzega District Council. Also, the Hospital Management Team prepares and submits combined Technical and Financial Report to these higher authorities monthly, quarterly and annually.

The relation and channel of communication between the various sections, Hospital Management Team and the Hospital Board of Governors is clearly stipulated in the Hospital Organization Chart in the following figure.

ORGANOGRAM





Hospital Management Team From left to right - Sr. Esther Muharami (Human Resources Officer), Sr. Florida Andrea (Hospital Administrator), Sr Christina Mapunda (Medical Officer in Charge), Agnes Elikana (Matron). Mr. Thomas Mtilimbanya (Patron), and Sr. Beatrice Ekisa (Hospital Accountant).

2.2 Human Resource management

The workforce was stable in 2023 with no staff fatalities or significant turnover. This allowed consistent delivery of healthcare services to the local community.

To further illustrate the staffing levels at Ndala Hospital, table 1 is provided below:

Table No 1: Staffing levels at Ndala Hospital

| No | Cadres | Available number | Deficits |
|----|--------------------------------|------------------|----------|
| 1 | Medical Officer | 3 | 5 |
| 2 | Assistant Medical Officer | 2 | 10 |
| 3 | Dental Officer | 0 | 1 |
| 4 | Assistant Dental Officer | 0 | 1 |
| 5 | Dental therapist | 1 | 0 |
| 6 | Nursing Officer | 2 | 10 |
| 7 | Assistant Nursing Officer | 16 | 4 |
| 8 | Nurse | 15 | 18 |
| 9 | Health Laboratory Technologist | 5 | 0 |

| | | | |
|--------------|--|------------|-----------|
| 10 | Assistant Health Laboratory Technologist | 1 | 1 |
| 11 | Radiology Scientist | 0 | 1 |
| 12 | Radiographer Technologist | 2 | 0 |
| 13 | Nutritionist | 0 | 1 |
| 14 | Occupational Therapist | 0 | 1 |
| 16 | Optometrist | 1 | 1 |
| 17 | Physiotherapist | 0 | 1 |
| 18 | Social Welfare | 0 | 1 |
| 19 | Pharmacist | 0 | 1 |
| 20 | Pharmaceutical Technologist | 3 | 0 |
| 21 | Assistant Pharmaceutical Technologist | 0 | 1 |
| 22 | Assistant Environmental Health Officer | 0 | 1 |
| 23 | Economist | 0 | 1 |
| 24 | Biochemical Technologist | 0 | 1 |
| 25 | Medical Record Technician | 1 | 2 |
| 26 | Health Secretary | 1 | 1 |
| 27 | Medical Attendant | 45 | 0 |
| 28 | Mortuary Attendant | 0 | 2 |
| 29 | Computer System Analyst | 1 | 1 |
| 30 | Computer Operator | 0 | 0 |
| 31 | Accountants | 1 | 0 |
| 32 | Accounts Assistant | 0 | 1 |
| 34 | Assistant Supplies Officer | 0 | 1 |
| 35 | Electrical Technician | 0 | 1 |
| 36 | Personal Secretary | 1 | 0 |
| 37 | Plumber | 0 | 1 |
| 38 | Security Guard | 8 | 0 |
| 39 | Kitchen Attendant | 2 | 0 |
| 40 | Laundry Assistants | 3 | 0 |
| TOTAL | | 110 | 87 |

As part of our commitment to human resource management, we encourage our staff to continue with upgrading courses to acquire additional skills. In-hospital training was given as well, for example, the Neonatology Resuscitation and Maternal care during labor and delivery including management of PPH, and Eclampsia. We are proud to support our staff in their pursuit of higher education, and we believe that their newly acquired knowledge will help to provide better care for our patients. Currently we have several staff members who are pursuing

further studies with the support of various sponsors in different training institutions within the country and outside the country (table 2, page 16)



Team of Dedicated Hospital Doctors from Ndala Hospital. From Left to Right Dr Peter Boniphace (MD) newly employed, Dr David Msokwa (MD) newly employed, Sr Christina Mapunda (MMed Gen.Surg), Dr Charles Jonathan (AMO) and Dr Merius Ordas (AMO).



Team of Hospital Clinicians From left to right Sr Christina Salala, Mr Antony Kitula (TB unit in Charge), Ms Winfrida Mihayo, Mr Joseph Mtabazi, and Mr Reuben Orucha (CTC in Charge).

Table No 2: List of Ndala Hospital staff members pursuing further studies

| No | Name | Course | Name of Sponsor | Institution | Year of Study | Expected Year of Graduation |
|----|-----------------------|---|-------------------------|-------------------------------------|---------------|-----------------------------|
| 1. | Sr. Magreth Njuguna | Bachelor of Medicine and Bachelor of Surgery | Imelda Nolet Foundation | Kampala International University | 4th | 2024 |
| 2. | Sr. Jackline Mabimbi | Clinical Officer | JOCS | Sengerema Health Training Institute | 3rd | 2024 |
| 3. | Fr. Francis Kiguli | Clinical Officer | JOCS | Sengerema Health Training Institute | 3rd | 2024 |
| 4. | Japhet Kazilo | Diploma in Nursing (Upgrading) | JOCS | Sumve school of Nursing | 2nd | 2024 |
| 5. | Dr John Romanus Nyeho | Master of Medicine in Obstetrics & Gynecology | ASBN | KCMC | 1st | 2027 |
| 6. | Irene Lyakurwa | Diploma in Pharmacy | JOCS | St Maximillian Tabora | 3rd | 2024 |
| 7. | Calvin Robert | Clinical Officer | JOCS | Mtwara Clinical Training institute | 3rd | 2024 |

Also, we are grateful to the staff who have completed their studies through the support of our benefactors, and we are happy that they are back in the field (table 3 page 17). We believe that their presence will bring much difference in the service and handling of our patients with efficiency and high professionalism.

Table no. 3 List of Staff who completed their studies in 2023.

| No | Name | Course | Name of Sponsor | Institution | Duration of Study |
|----|-------------------------|--|-------------------|---|-------------------|
| 1. | Sr. Christina Mapunda | Masters of medicine in General surgery | ASBN | Kilimanjaro Christian Medical Centre (KCMC) | 4yrs |
| 2. | Fr. Renatus Mashishanga | Diploma of Pharmacy | JOCS | Bugando Medical centre | 3yrs |
| 3. | Janeth Walwa | Kolandoto | JOCS | Diploma in Nursing | 3yrs |
| 4. | Wilbert Fema | Ophthalmology short course | Tabora Foundation | KCMC | 3months |
| 5. | Godfrey Nassib | Infusion short course | Tabora Foundation | KCMC | 2months |

2.3 Financial Management

- The year 2023 was a challenging year for the organization's financial performance. However, despite the difficulties, the hospital was able to successfully manage to finance its operation and to attain its goals and objectives.
- Delay in allocation of funds from the Government especially the Health Sector Basket Fund (HSBF) has significantly affected the implementation of the planned activities. The Hospital had to use user fees and other sources of funds to finance HSBF related activities.
- The hospital faced late payments of claims from the National Health Insurance Fund (NHIF), which fund covers the costs of care for patients who are enrolled in the NHIF. The delay in payment significantly affected the financial position of the hospital. To continue serving members from NHIF the hospital had to use other sources to ensure quality care for NHIF members.
- Cost sharing from patients is little as well, as most of the patients cannot afford to pay for their treatment. The number of exemptions increased to 0.5 % in 2023 (0.3% in 2022).

Table 4 shows a detailed overview of the hospital's income and expenditure in 2023 and the trend in the last three years.

Table No 4: Income and expenditure of Ndala Hospital in Tanzanian Shillings

| INCOME | | 2023 | 2022 | 2021 |
|--------------------------------------|------|-------------------------|-------------------------|-------------------------|
| Cost Sharing | | 819,831,182.40 | 935,753,799.00 | 980,000,000.00 |
| Government | HSBF | 113,203,000.00 | 69,010,604.00 | 119,665,000.00 |
| NHIF | | 169,592,500.00 | 121,800,780.00 | 110,674,145.00 |
| SHIB | | 0 | 0 | 5,823,784.01 |
| MDH | | 105,408,000.00 | 32,961,797.25 | |
| Donors | | 98,859,074.99 | 10,987,265.75 | 1,192,000.00 |
| Other income | | 7,000,000.00 | 40,641,142.00 | 18,530,005.00 |
| TOTAL INCOME | | 1,313,893,757.39 | 1,211,155,388.00 | 1,235,884,934.01 |
| Administrative expenses | | 218,557,214.05 | 108,956,694.00 | 102,835,157.00 |
| Salaries and Wages | | 644,787,954.00 | 674,295,651.00 | 705,540,852.07 |
| Medicines and Medical devices | | 223,710,274.09 | 220,557,370.00 | 289,074,067.01 |
| Maintenances and repairs | | 67,922,180.00 | 31,373,140.00 | 35,240,455.07 |
| Taxes and Levies | | 10,225,000.00 | 12,000,000.00 | 7,514,669.93 |
| Utilities | | 8,198,500.00 | 8,908,200.00 | 7,111,523.00 |
| Transport & travelling | | 21,932,600.00 | 12,949,020.00 | 4,500,000.00 |
| Postage and communication | | 2,058,700.00 | 8,730,020.00 | 2,500,000.00 |
| Other expenses (Clergy & Liturgical) | | 49,360,200.00 | 40,075,184.00 | 1,300,000.00 |
| Bank charges | | 1,966,592.25 | 3,978,449.00 | 4,514,669.93 |
| Building new pharmacy | | 0 | 35,342,500.00 | |
| TOTAL EXPENDITURE | | 1,248,719,214.39 | 1,157,166,228.00 | 1,160,131,394.01 |
| SURPLUS | | 65,174,543.00 | 53,989,160.00 | 75,753,540.00 |

This table shows an increase of income in the year 2023 of 8.5%, after a decrease in income by 2% from the year 2021 to 2022. Expenditure increased as well by 7.9%. Reasons for fluctuations are numerous as stated in the previous parts of this report. Some of the reasons for increased expenditure include increased running costs due to electricity cuts from the national grid; the hospital was forced to run its expensive backup generator. Also, maintenance and repair of hospital equipment and increased administrative costs increased expenditure. The decrease in the cost sharing fund is due to the drought which affected many families, resulting in a considerable number of patients being unable to pay their treatment bills and hence reduced overall income from fee charges.

CHAPTER THREE: HEALTH SERVICES

A: CURATIVE SERVICES

3.1 Inpatient services.

The wards

Ndala hospital has four wards: The Male, Female, Children and Maternity ward, Male and Female wards have two wings, one side for surgical and the other side for medical conditions. All wards have isolation rooms: the Children ward has five and has an extension- which can be used in case of epidemics. A separate isolation building is used for the admission of highly infectious communicable diseases like Tuberculosis, Measles and Covid 19. The hospital has a Private ward, but also each regular ward has a semi-private room. The Private ward was usually used by priests and nuns, Currently they attend to nearby hospitals like St Anna and Malolo Hospital, which offers advanced private hospital services. Other patients prefer to use semi-private rooms within the wards.

Below you will find some pictures of nursing care services in Male, Female, Maternity and Children ward



*On the left: health care worker Evetha Shayo from Male ward preparing medications for patients.
On the Right: Mr Godfrey Silas attending patients by giving an IV drip in the Female ward.*



On the left: Asha Ramadhan from Maternity ward attending a neonate. On the right: Ms Meryciana Mpejiwa in Children ward administering medication attending a child.

The existing few staff are busy with the provision of quality service. Additional staff will be recruited when the financial position of the hospital is improved.

PHARMACY AND IV FLUID PRODUCTION UNIT

These two units, the pharmacy and the IV unit are most sensitive areas since drugs and fluids must always be available. Drugs are kept in the main pharmacy from which daily drugs are dispensed to the sub-store before these drugs reach the patient in the OPD or are taken to the wards. Under KCMC supervision the I.V unit is the place where all intra venous fluids are produced in a highly sterile procedure before the fluid can be used for patients.

Due to financial constraints, we make sure that most essential drugs and medical supplies like gauzes and theatre anesthetics agents are always available. Other more expensive drugs and those not allowed according to the level of our hospital can be found in the retail shop.



I.V. unit section with Osmosis machine, sterilization centre and package area after production.



Pharmacy technicians right Fr Renatus Mashishanga, left Mr Peter Robert.

Hospital statistics, trends from 2021-2023

More women than men are admitted in all three years as can be seen in table 4. The reason behind may be health seeking behavior among the population served by the hospital. Total admission has been decreasing every year, possibly due to the increasing number of health facilities in the district. According to the national statistics of 2022 men are under populated 49% as compared to females (51%) and usually men are less likely to seek medical services unless they are critically ill, the reason behind is not known which could be a topic for research. Generally total admission has been decreasing every year, possibly due to the increasing number of health facilities in the council.

Neonatal complications increased due to referrals from increased health facilities which offer deliveries around Ndala hospital.

Table 5: Total number of admissions

| WARD | 2023 | 2022 | 2021 |
|---|--------------|--------------|--------------|
| Male Ward | 1,257 | 1632 | 1,722 |
| Female Ward | 2,072 | 1,949 | 2,834 |
| Children Ward | 1,864 | 2,093 | 2,218 |
| Maternity Ward | 1,630 | 1,805 | 1,866 |
| Neonatal ward (0-28 days post-delivery) | 67 | 37 | 43 |
| Private Ward | 2 | 89 | 50 |
| Total hospital admissions | 6,892 | 7,685 | 8,733 |

Table No 6: Top ten diseases in IPD

| S/N | ADULTS | Total | % | CHILDREN ≤ 5 yrs | Total | % |
|-----|------------------------------------|--------------|------------|-----------------------------------|--------------|------------|
| 1 | Complicated/severe malaria | 902 | 28.3 | Complicated malaria | 519 | 34.5 |
| 2 | Anemia | 741 | 23.3 | Pneumonia | 343 | 22.8 |
| 3 | Pneumonia | 424 | 13.3 | Anemia | 236 | 15.7 |
| 4 | Gastroenteritis | 234 | 7.3 | Gastroenteritis | 136 | 9.0 |
| 5 | Upper respiratory tract infections | 217 | 6.8 | Upper respiratory tract infection | 121 | 8.0 |
| 6 | Bronchitis | 157 | 4.9 | Malnutrition | 64 | 4.3 |
| 7 | Hypertension | 169 | 5.3 | UTI | 32 | 2.1 |
| 8 | Peptic Ulcer Disease | 138 | 4.3 | Sickle cell Disease | 24 | 1.6 |
| 9 | Sickle Cell crisis | 114 | 3.6 | Bronchitis | 24 | 1.6 |
| 10 | Diabetes Mellitus Type 2 | 91 | 2.9 | Diabetes Mellitus | 6 | 0.4 |
| | TOTAL | 3,187 | 100 | | 1,505 | 100 |

According to WHO Severe malaria is usually caused by infection with Plasmodium falciparum, though less frequently can also be caused by Plasmodium vivax or Plasmodium knowlesi. Complications include severe anaemia and end-organ damage, including coma (cerebral malaria), pulmonary complications (for example, oedema and hyperpnoea syndrome) and hypoglycemia or acute kidney injury. Severe malaria is often associated with hyperparasitaemia and is associated with increased mortality.

Table No 7: Total number of deaths

| | 2023 | % | 2022 | % | 2021 | % |
|--|------------|------------|------------|------------|------------|------------|
| Male Ward | 52 | 27 | 59 | 27.6 | 82 | 35.7 |
| Female Ward | 53 | 27.6 | 60 | 28 | 70 | 30.4 |
| Children Ward | 84 | 43.8 | 85 | 39.7 | 73 | 31.7 |
| Maternity Ward | 0 | 0 | 1 | 0.5 | 1 | 0.5 |
| Neonatal ward (0 -28 days post-delivery) | 3 | 1.6 | 9 | 4.2 | 4 | 1.7 |
| Private Ward | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Number of Deaths | 192 | 100 | 214 | 100 | 230 | 100 |

The number of deaths has been decreasing every year in all wards. Possibly this is due to the decreasing number of admissions. By establishing specialized clinics in the hospital like Diabetes clinics, hypertension clinic and a sickle cell clinic, our expectation is a reduction of deaths due to curable conditions or complications. Also, on-the-job training for early detection and management of these diseases and complications will possibly help to reach this goal.

Table No 8: Top five causes of death

| S/N | Under 5 | Number | Adult | Number |
|-----|-----------------|--------|-----------------|--------|
| 1 | Malaria | 15 | Hypertension | 16 |
| 2 | Pneumonia | 14 | HIV | 15 |
| 3 | Birth Asphyxia | 12 | Anemia | 13 |
| 4 | Malnutrition | 8 | Cardiac Failure | 10 |
| 5 | Neonatal Sepsis | 7 | Malaria | 9 |

Malaria has continued to be the major cause of death among children under 5 while hypertension was the leading cause for adult. Most hypertensive patients after being diagnosed and initiating treatment get lost from clinics and start using local medications. When they return, they arrive in critical condition, being unconscious with very high blood pressure. Most of them develop renal failures and possibly intracranial hemorrhages. Once specialized clinic will be conducted non communicable diseases like hypertension, anemia and cardiac failure cases will be, identified early, and well managed in the hospital, hopefully leading to a reduction of unnecessary death. Meningitis is no longer among the top causes of death due to an improvement of lifestyle. Houses are well ventilated, and hygiene has improved, which reduced the risk of meningitis diseases.

3.1.0 Obstetric services

Table No 9: Total number of deliveries

| TYPE OF DELIVERY | 2023 | 2022 | 2021 |
|-------------------------------|-------------|-------------|-------------|
| Spontaneous vertex delivery | 1100 | 1384 | 1236 |
| Spontaneous breech delivery | 27 | 64 | 42 |
| Assisted Vaginal delivery | 40 | 12 | 3 |
| Delivery by Caesarean section | 279 | 268 | 201 |
| Home delivery/BBA | 0 | 12 | 13 |
| TOTAL DELIVERIES | 1425 | 1740 | 1494 |

Table No 10: Obstetrics complications

| OBSTETRICS EMERGENCIES | 2023 | 2022 | 2021 |
|-------------------------------|-------------|-------------|-------------|
| Uterine Rupture | 5 | 9 | 10 |
| Antepartum Hemorrhage | 19 | 23 | 20 |
| Postpartum Hemorrhage | 27 | 26 | 164 |
| Eclampsia | 20 | 15 | 62 |
| Maternal death | 0 | 1 | 1 |

Table No 11: Pregnancy outcomes

| | 2023 | 2022 | 2021 |
|--|-------------|-------------|-------------|
| Live births | 1377 | 1,728 | 1,481 |
| Born before arrival (BBA)/ Home delivery | 0 | 12 | 13 |
| Fresh stillbirths (FSB) | 28 | 28 | 41 |
| Macerated stillbirths (MSB) | 22 | 18 | 46 |
| Preterm births | 32 | 23 | 43 |

The increased numbers of macerated and fresh still births is possibly due to the availability of small health facilities nearby as well as the local medicine shops which offer some services. Due to lack of knowledge of our community and pregnant mothers who attend to get service in these local shops, they delay coming to our hospital when complications arise.

No maternal death occurred in the year under review.



Ongoing weekly Clinical Educational sessions

3.1.1 Surgical services

Table No 12: Total surgical procedures

| TYPE OF PROCEDURE | 2023 | 2022 | 2021 |
|---------------------------|--------------|--------------|--------------|
| Major surgical procedures | 677 | 686 | 489 |
| Minor surgical procedures | 4,078 | 3,894 | 2,349 |
| Total | 4,755 | 4,580 | 2,838 |

The number of procedures has been increasing yearly. One of the reasons is that most of the public facilities at level of dispensaries cannot provide such services. Also, possibly due to low costs and the trust from our clients Ndala is the best place to get surgery.

Table No 13: Top ten of major surgical procedures

| S/N | TYPE OF PROCEDURE | 2023 | 2022 | 2021 |
|-----|------------------------------|------|------|------|
| 1 | Caesarean section | 279 | 300 | 201 |
| 2 | Open prostatectomy | 148 | 151 | 103 |
| 3 | Explorative laparotomies | 93 | 69 | 65 |
| 4 | Herniorrhaphy | 39 | 35 | 34 |
| 5 | Total abdominal hysterectomy | 40 | 36 | 40 |
| 6 | Tonsillectomy/Adenoidectomy | 20 | 15 | 0 |
| 7 | Uterine myomectomy | 20 | 24 | 30 |

| | | | | |
|----|---------------|-----|-----|-----|
| 8 | Splenectomy | 12 | 10 | 8 |
| 9 | Appendectomy | 10 | 13 | 6 |
| 10 | Thyroidectomy | 3 | 7 | 2 |
| | TOTAL | 664 | 660 | 489 |

Table No 14: Top ten minor surgical procedures

| S/N | TYPE OF PROCEDURE | 2023 | 2022 | 2021 |
|-----|--|------|-------|-------|
| 1 | Wound dressing/ Surgical debridement | 1963 | 1,710 | 1,089 |
| 2 | Suture removal | 911 | 856 | 578 |
| 3 | Uterine evacuation | 220 | 396 | 125 |
| 4 | Wound suturing | 389 | 321 | 236 |
| 5 | Urethral catheterization | 209 | 252 | 120 |
| 6 | Application of P.O.P (back slab/full cast) | 117 | 123 | 48 |
| 7 | Closed reduction (fracture/dislocation) | 80 | 77 | 60 |
| 8 | Incision and drainage | 77 | 71 | 55 |
| 9 | Foreign body removal | 68 | 50 | 15 |
| 10 | Ear syringing | 44 | 38 | 23 |

3.2 Outpatient service

The out-patient department received 16,199 patients in 2023: this is a reduced number of attendances as compared to the year 2022 with 17,678 clients. This decrease could have been due to several factors, for example improved government and private health facilities in our catchment area. On average the OPD department is attending 60-70 clients daily and is open 24 hours per day. The OPD has a reproductive and child health unit (RCH clinic is busy attending 40-90 clients daily.), an eye unit, a CECAP, a dental unit, a mental health clinic, a radiology unit, a TB unit, a CTC, a pharmacy dispensing unit and a minor theatre. The workload is big compared to number of staff available, but we are planning to add more staff in the OPD once funds will be available.



Dr Merius (right) and Dr Orucha (left) are attending to a patient in the OPD.



On the left hand, Clinician Sister Christina Salala is attending a patient by looking at an X-ray taken at the radiology unit. In the right picture Mr Kitula is examining a patient in the consultation room in the OPD.



The left picture: Mrs Frolensia Leo is attending a patient, he is taking specimen. Right picture: Pudensiana Bung'ando and Frank Mtegeki are processing the specimen.

Table No 15: Top 10 diseases in OPD

| S/N | ADULTS | NUMBER | % | UNDER 5 | NUMBER | % |
|-----|--|--------------|------------|-----------------------|--------------|------------|
| 1 | Urinary Tract Infection (UTI) | 1659 | 21 | URTI | 488 | 34.9 |
| 2 | Upper respiratory tract infection (URTI) | 1543 | 19.6 | Uncomplicated Malaria | 394 | 28.2 |
| 3 | Anemia | 1545 | 19.6 | UTI | 149 | 10.7 |
| 4 | Hypertension | 971 | 8.2 | Anemia | 132 | 9.4 |
| 5 | Uncomplicated Malaria | 645 | 8.2 | Gastroenteritis | 86 | 6.2 |
| 6 | Peptic ulcer disease | 551 | 12.3 | Pneumonia | 60 | 4.3 |
| 7 | Diabetic Mellitus | 359 | 4.5 | Asthma | 38 | 2.7 |
| 8 | Cardiovascular Diseases | 272 | 3.4 | Malnutrition | 22 | 1.6 |
| 9 | Pelvic Inflammatory Diseases | 258 | 3.3 | Sickle cell Disease | 17 | 1.2 |
| 10 | Animal bites | 89 | 1.1 | Animal bite | 11 | 0.8 |
| | TOTAL | 7,892 | 100 | | 1,397 | 100 |

Table No 16: Total number of OPD cases

| General OPD | 2023 | 2022 | 2021 |
|----------------|---------------|---------------|---------------|
| New cases | 5,835 | 5,630 | 7,024 |
| Re-attendances | 10,364 | 12,048 | 12,758 |
| Total | 16,199 | 17,678 | 19,782 |

3.2.0 Eye care services

Less patients were seen in 2023 due to a reduction of visits to less frequent visits by the eye doctors, only 2 clinics were conducted and most of the patients couldn't attend due to financial constraints.

Table No 17: Procedures done by the visiting ophthalmologist through the regional mobile eye care program in 2023.

| Eye diseases | 2023 | 2022 | 2021 |
|-------------------------|-------------|-------------|-------------|
| Cataract Surgery (SICS) | 4 | 8 | 24 |
| Refraction | 6 | 6 | 8 |
| Incision | 2 | 4 | 4 |
| Corneal repair | 0 | 1 | 0 |
| Evisceration | 0 | 1 | 0 |
| TOTAL | 12 | 20 | 36 |

Table No 18: Common eye diseases

| Eye diseases | 2023 | 2022 | 2021 |
|----------------------|-------------|-------------|-------------|
| Conjunctivitis | 93 | 124 | 128 |
| Cataract | 28 | 90 | 93 |
| Eye trauma | 21 | 40 | 33 |
| Refractive errors | 16 | 35 | 31 |
| Glaucoma | 23 | 16 | 23 |
| Cornea ulcer | 20 | 14 | 18 |
| Diabetic retinopathy | 2 | 10 | 15 |
| Presbyopia | 6 | 9 | 14 |
| Corneal opacities | 8 | 6 | 9 |
| Others | 104 | 76 | 183 |
| TOTAL | 321 | 420 | 547 |

The most common causes of vision loss among the patients attended at our hospital are cataract, glaucoma and diabetic retinopathy. Due to lack of well-trained personnel and instruments at our hospital, it is impossible to detect these diseases at an early stage which is a major obstacle in the treatments.

In 2023 the hospital management planned to cooperate with various stakeholders inside and outside the country to ask for financial assistance for procurement of modern ophthalmic equipment, and for a scholarship for one student candidate to join Mvumi Institute of health Science for a 3 years' ophthalmology diploma course. We expect that the improvement of the

eye care services at our hospital will reduce referrals to other hospitals to a substantial extent; this will be of benefit for our patients.

3.2.1 Dental services.

Dental services in our hospital have improved significantly; since the end of 2022, our dental unit has started to provide many services that were absent in the past due to lack of equipment. These improvements have been achieved with the financial support from **PIUS XII Foundation** for the establishment of the new dental unit. The number of patients with dental problems arriving to get services has increased significantly.

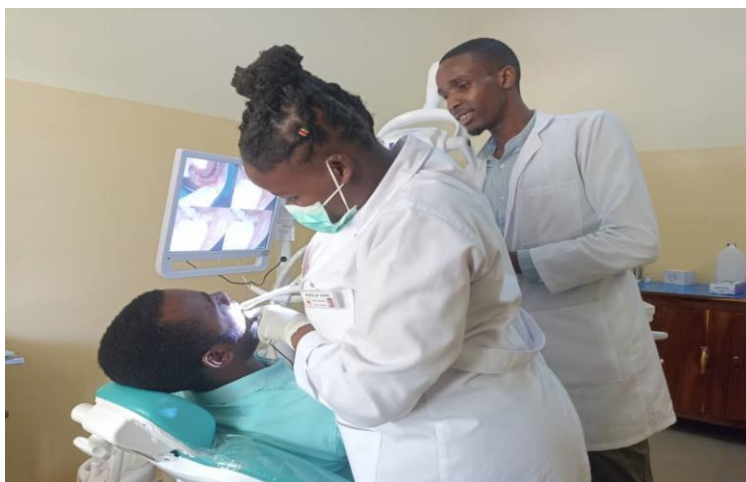
Table 19: Dental cases attended

| | | 2023 | 2022 | 2021 |
|----|----------------------------------|-------------|-------------|-------------|
| 1. | Dental caries | 147 | 73 | 56 |
| 2. | Periodontal disease | 30 | 9 | 2 |
| 3. | Periapical abscess | 8 | 3 | 0 |
| 4. | Dental abscess/ Ludwig angina | 4 | 2 | 1 |
| 5. | Lateral luxation/Intrusion | 3 | 0 | 0 |
| 6. | Mandible Fracture | 1 | 0 | 0 |
| 7. | Dry socket | 1 | 0 | 1 |
| 8. | Tooth fracture | 1 | 0 | 0 |
| 9. | Soft tissue injury | 1 | 0 | 0 |
| | TOTAL | 196 | 87 | 60 |

Table 20: Dental procedures

| | PROCEDURES | 2023 | 2022 | 2021 |
|----|-----------------------|-------------|-------------|-------------|
| 1. | Tooth extraction | 97 | 50 | 31 |
| 2. | Tooth fillings | 30 | 13 | 0 |
| 3. | Scalling | 18 | 11 | 0 |
| 4. | Incision and drainage | 3 | 0 | 0 |
| | TOTAL | 148 | 74 | 31 |
| | | | | |
| | Referrals | 6 | 1 | 2 |

In the year 2023 / 2024 the hospital is planning to send Ms. Priscila, our dental therapist, to Kitete Hospital for some months to get trained in Root Canal Treatment (RCT) and Dental Crown Procedure. This was not done in 2023, and the plan will be in 2024. Our aim is that by the year 2024 all dental services will be provided at our hospital.



Dental Therapist Ms Priscilla is attending a patient using the newly installed dental chair.

3.2.2 Radiology services

The radiology department supplies the hospital with radiography and ultrasonography diagnostic investigations. In 2023 the hospital has made plans to install digitalized x-ray machine and procurement of new ultrasound machine with more capacity to identify 3D images. This would reduce the cost of purchasing x-ray films and fasten the process and reduce waiting time before proper management.

Table No 21: Total number of X-rays

| Type of X-rays | 2023 | 2022 | 2021 |
|-----------------------|-------------|-------------|-------------|
| Chest | 570 | 542 | 657 |
| Extremities | 350 | 306 | 333 |
| Shoulder | 55 | 52 | 48 |
| Pelvis/hip | 55 | 82 | 64 |
| Skull | 41 | 34 | 41 |
| Vertebral column | 54 | 56 | 58 |
| Plain abdomen | 84 | 92 | 58 |
| Barium swallow | 4 | 1 | 4 |
| Barium meal | - | 2 | 3 |
| Hysterosalpingogram | 3 | 12 | 3 |

| | | | |
|-------------------|--------------|--------------|--------------|
| Total | 1,219 | 1,183 | 1,269 |
| Films used | 1,299 | 1,233 | 1,349 |

Table No 22: Total number of ultrasounds

| Type of Ultrasound | 2023 | 2022 | 2021 |
|---------------------------|--------------|--------------|--------------|
| Obstetrical | 581 | 563 | 444 |
| Gynecological | 599 | 751 | 581 |
| Abdominal | 472 | 424 | 412 |
| Urological | 236 | 235 | 209 |
| Cardial | 105 | 70 | 80 |
| Other | 23 | 10 | 5 |
| Total | 2,016 | 2,053 | 1,707 |

3.2.3 Laboratory services

The laboratory unit has 6 staff members. The laboratory operates 24 hrs per day. The tables below describe trends in laboratory investigations.

Table No 23: Trend in laboratory investigations

| TYPE OF LABORATORY TEST | 2023 | Abnormal values | 2022 | Abnormal Values | 2021 | Abnormal Values |
|--------------------------------|-------------|------------------------|-------------|------------------------|-------------|------------------------|
| 1. PARASITOLOGY | | | | | | |
| Blood smear for malaria | 1610 | 444 | 5,085 | 1,996 | 7,992 | 3,852 |
| Malaria Rapid Test | 4724 | 715 | 4,175 | 877 | 5,077 | 2,143 |
| Stool analysis | 1543 | | 898 | 8 | 1,184 | 25 |
| Urine analysis | 3958 | | 1,901 | 787 | 3,984 | 2,002 |
| 2. BACTERIOLOGY | | | | | | |
| Culture & Sensitivity | 31 | | 41 | 21 | - | - |
| MTB (GX, FM) | 1198 | | 1,662 | 91 | 1,242 | 94 |
| Gram Stain | 40 | | 41 | 29 | 14 | 10 |
| 3. BIOCHEMISTRY | | | | | | |
| PSA | 29 | | 30 | 22 | 23 | 14 |
| Serum Cholesterol | 107 | | 23 | 14 | 24 | 15 |
| ASAT (SGOT) | 85 | | 70 | 42 | 75 | 42 |
| ALAT (SGPT) | 80 | | 73 | 45 | 75 | 44 |
| Blood Glucose | 3400 | | 2,362 | 905 | 2,881 | 1,403 |

| | | | | | | |
|-------------------|------|-----|-------|-------|-------|-----|
| Serum Creatinine | 1417 | | 1,285 | 128 | 145 | 36 |
| Serum Urea | 44 | | 107 | 51 | 154 | 54 |
| Serum Uric Acid | 204 | | 112 | 53 | 38 | 18 |
| TSH | 6 | | 11 | 9 | 2 | 1 |
| | 6 | | 16 | 13 | - | - |
| Serum T3 | 6 | | 16 | 11 | - | - |
| Urine for Protein | 3341 | 93 | 1,625 | 1,324 | 1,987 | 918 |
| UPT | 282 | 142 | 325 | 297 | 365 | 190 |

4. SEROLOGY

| | | | | | | |
|-----------------------------------|------|-----|-------|-----|-------|-----|
| RPR | 371 | 21 | 742 | 57 | 2,461 | 139 |
| Widal test | 470 | | 101 | 3 | 971 | 35 |
| Typhoid antigen test | 484 | 39 | 632 | 50 | - | - |
| H pylori Antigen Test | 1226 | 551 | 1,075 | 492 | 1,032 | 400 |
| Hepatitis B | 292 | 13 | 485 | 35 | 2,102 | 115 |
| Hepatitis C | 271 | 01 | 593 | 9 | - | - |
| Brucella Test | 269 | 49 | 23 | 9 | - | - |
| CrAg Test | 119 | 6 | 71 | 12 | - | - |
| HEID (HIV Early infant diagnosis) | 207 | 5 | 447 | 12 | - | - |
| HIV (VCT/PITC) | 5433 | 114 | 4,911 | 116 | 6,523 | 191 |

5. HEMATOLOGY

| | | | | | | |
|----------------------------|------|----|--------|-------|--------|-------|
| Hb | 9647 | | 15,913 | 2,082 | 13,950 | 3,414 |
| Blood Grouping & Rh typing | 3750 | | 753 | | | |
| Full blood Picture | 1863 | | 1,898 | 854 | 1,166 | 964 |
| ESR | 15 | | 28 | 21 | 12 | 8 |
| CD4 | 568 | | 256 | 71 | 211 | |
| Sickling test | 122 | 44 | 104 | 57 | 44 | 23 |
| HVL | 2099 | | 1,718 | | - | - |

6. HISTOPATHOLOGY

| | | | | | | |
|---------------------|----|--|----|----|---|---|
| Semen Analysis | 9 | | 9 | 3 | 7 | 5 |
| Prostate biopsy | 16 | | 88 | 36 | - | - |
| Breast biopsy | 2 | | 9 | 1 | - | - |
| Other tumors biopsy | 8 | | 23 | 12 | - | - |

According to the standard guideline for Malaria treatment, MRDT is the mostly used diagnostic tool. If positive, a blood slide will follow. This explains the reduction in number of blood slide investigations in 2023. A reduced number of HB tests can be explained by the fact that the Hematology machine was working well. Therefore, most HB tests were performed by Full Blood

Picture. Blood grouping was 5-fold increased possibly due to good documentation in the INAYA system for all patients.

Table No 24: Trend in Safe Blood collection and transfusion services

| | 2023 | 2023 | 2021 |
|---------------------------------------|------|-------|-------|
| Number of blood units collected | 1323 | 1,366 | 2,918 |
| Number of Safe Blood Units transfused | 1141 | 1,299 | 2,722 |

Table No 25: Trend in Intravenous fluid production consecutives periods of three years

| LITRES | 2023 | 2023 | 2021 |
|-------------------------------|-------------|-------------|-------------|
| Normal saline 0.9% | 1799 | 5,447 | 3,634 |
| Dextrose 5% | 445 | 382 | 1,627 |
| Ringer's Lactate | 2736 | 805 | 4,088 |
| Dextrose 50% | - | 9.5 | 34 |
| | 2023 | 2022 | 2021 |
| OTHER FLUIDS in liters | | | |
| Irrigation fluid | 3845 | | |
| Water for injection | 365 | | |

3.2.4 TB clinic services

Table No 26: Trend in TB patients

| | 2023 | 2023 | 2021 |
|---------------------------|------------|------------|------------|
| New patients | 96 | 85 | 113 |
| Re-treatment | 5 | 3 | 6 |
| Transferred-in | 4 | 4 | 9 |
| Transferred out | 25 | 43 | 58 |
| Total registered | 126 | 142 | 186 |
| Pulm. (Sputum pos.) | 37 | 37 | 59 |
| Pulm. (Sputum-neg.) | 54 | 41 | 47 |
| Extra-pulmonary | 24 | 31 | 03 |
| HIV-Pos | 26 | 41 | 24 |
| Treatment results: | | | |
| Completed | 101 | 87 | 17 |
| Cured | 21 | 14 | 11 |
| Failed | 0 | 0 | 0 |
| Transferred | 4 | 0 | 0 |
| Died | 7 | 8 | 9 |

| | | | |
|-----------|---|---|---|
| Defaulted | 1 | 2 | 2 |
|-----------|---|---|---|

3.2.5 Epilepsy and mental health clinic services

Table No 27: Trend in epilepsy and mental health patient’s registrations

| | | | |
|--------------------|-------------|-------------|-------------|
| | 2023 | 2023 | 2021 |
| Patient registered | 232 | 245 | 236 |

B: PREVENTIVE SERVICES

3.3 Reproductive and child health services (RCH).

In 2023, we have remained committed to providing RCH Services in accordance with the guidelines of the World Health Organization and the Ministry of Health. Our goal is to ensure safe delivery for the mothers and the birth of healthy children. However, we have observed a decline in the number of clients attending RCH services, a decrease attributed to the recent establishment of government dispensaries near our hospital that also provide RCH services. As a result, some clients who live near these dispensaries opt to seek services there instead of coming to our hospital.

Table No 28: Trend in total under-5 RCH attendances

| | | | |
|-----------------|---------------|---------------|---------------|
| | 2023 | 2023 | 2021 |
| Under-5 and ANC | 20,273 | 21,129 | 24,439 |

Table No 29: Trend under 5 RCH 1st and re-attendances

| NDALA RCH | 2023 | | 2022 | | 2021 | |
|--------------------------------|---------------------|---------------------|--------------|---------------|------------|---------------|
| | 1 st att | 2 nd att | 1st att | 2nd att | 1st att | 2nd att |
| Children < 12 months. | 1,109 | 10,530 | 1,030 | 11,826 | 812 | 10,098 |
| Children > 12 months. | 0 | 3,940 | 0 | 3,764 | 0 | 2,945 |
| Subtotal Ndala RCH | 1,109 | 14,470 | 1,030 | 15,590 | 812 | 13,043 |
| | | | | | | |
| MOBILE CLINIC | 2023 | | 2022 | | 2021 | |
| Children < 12 months. | 35 | 627 | 51 | 575 | 334 | 4,350 |
| Children > 12 months. | 4 | 752 | 0 | 602 | 0 | 2,375 |
| Subtotal mobile clinic. | 39 | 1,380 | 51 | 1,177 | 334 | 6,725 |

| | | | |
|--------------------------------------|---------------|---------------|---------------|
| Ndala RCH & Mobile Clinic | 16,998 | 17,848 | 20,914 |
|--------------------------------------|---------------|---------------|---------------|

Table No 30: Trend in antenatal attendances

| NDALA RCH | 2023 | 2022 | 2021 |
|----------------------|--------------|--------------|-------------|
| New Cases | 829 | 799 | 891 |
| Re-attendance | 2270 | 2,213 | 2066 |
| Total: | 3,099 | 3,012 | 2957 |
| | | | |
| MOBILE CLINIC | | | |
| Total: | 176 | 269 | 568 |
| Total: | 3,275 | 3,281 | 3525 |

Table No 31: Trend in risk factors seen at RCH.

| Malnutrition Under 5, 1st attendance | 2023 | 2022 | 2021 |
|---|-------------|-------------|-------------|
| BWT 60-80 th percentile | 28 | 16 | 59 |
| BWT below 60 th percentile | 21 | 78 | 13 |
| TOTAL | 49 | 94 | 72 |
| | | | |
| Risk factors Antenatal 1st attendance | | | |
| Age < 16 years | 101 | 1 | 15 |
| Age > 35 years | 0* | 139 | 164 |
| Parity > 4 | 430 | 432 | 420 |
| Hypertension (>140/90 mmHg) | 4 | 2 | 13 |
| Anemia (Hb <6g/dL) | 31 | 19 | 76 |

NB* No at-risk group aged above 35yrs came as primigravida in 2023. The register in the year 2021 and 2022 reported at risk group any women aged above 35yrs being primigravida or multipara. Also, a high number of teenage pregnancies reported because of community sensitization on importance of early antenatal visit.

Table No 32: Trend in vaccinations

| TYPE OF VACCINE | 2023 | 2022 | 2021 |
|-----------------------------------|--------|--------|--------|
| Tetanus toxoid (antenatal) | | | |
| Dose I | 323 | 290 | 418 |
| Dose II | 409 | 318 | 663 |
| Dose III | 343 | 229 | 406 |
| Dose IV | 266 | 185 | 270 |
| Dose V | 154 | 88 | 182 |
| BCG | | | |
| At birth + at later time | 3620 | 2,520 | 960 |
| At later time | 222 | 0 | 0 |
| Polio | | | |
| 0 (at birth) | 1715 | 1,012 | 1,029 |
| I | 1487 | 843 | 976 |
| II | 1122 | 733 | 873 |
| III | 1505 | 635 | 779 |
| DTP > Penta | | | |
| I | 1,221 | 1,387 | 1,433 |
| II | 966 | 1,167 | 1,312 |
| III | 994 | 996 | 1,137 |
| Measles | | 1,554 | 1,895 |
| Rotavirus | | | |
| I | 1,358 | 802 | 1,102 |
| II | 1,026 | 708 | 991 |
| III | 859 | - | - |
| PCV-13 | | | |
| I | 1,306 | 1,208 | 1,339 |
| II | 955 | 1,044 | 1,199 |
| III | 1,080 | 877 | 1,044 |
| Vitamin A | 12,514 | 16,254 | 15,973 |
| Total Vaccinations | 10,445 | 32,850 | 33,981 |

More people received Tetanus vaccination, these include all pregnant women and patients with injuries.



Staff in the RCH unit providing RCH services to clients, on the left Neema Malembeka who is giving daily Health education to the parents who attend RCH services, on the right side Fortunatha Peter who is weighing the child.



Mr Japhet Kazilo attending patient at RCH.

3.4 HIV/AIDS control program

In 2023, we have continued to improve services for patients living with HIV (PLHIV). The Government, in collaboration with MDH (Management and Development for Health) who continued to support the provision of CTC services and with EGPAF who currently deals with Tb patients and child growth development and care at our hospital, has supported an increase of staffs at the CTC clinic, and has contributed to the hospital's budget especially in activities related to CTC. Due to ongoing efforts to educate the community about this disease, the number of new HIV infected patients has decreased. In the year 2023 home based care (HBC) visits to patients living with HIV were ended because the implementing and financing partner (MDH) no longer fully supports the HBC workers. Therefore, there was a delay in submission of monthly report and slow activities to follow up missed patients.

Table No 33: Trend in VCT

| | 2023 | | | 2022 | | | 2021 | | |
|--------------------------|------|------|-------|------|------|-------|------|------|-------|
| | Fem | Male | Total | Fem | Male | Total | Fem | Male | Total |
| (New) Clients counselled | 15 | 22 | 27 | 72 | 60 | 132 | 457 | 505 | 962 |
| Re-attendance | 157 | 188 | 345 | 211 | 238 | 449 | 75 | 51 | 126 |
| Tested | 172 | 210 | 382 | 283 | 298 | 581 | 532 | 556 | 1,088 |
| HIV positive | 0 | 0 | 0 | 4 | 2 | 6 | 3 | 3 | 6 |

The CTC Department has separated adult clinics from children. Pediatric CTC clinics is held on every first and last Saturdays of the month, where children will come from home with their care giver or parents for checkup and drug (ART) collection.



Hospital staff and children with their care giver attending the CTC clinic.

Table No 34: Trend in CTC patients

| | 2023 | 2022 | 2021 |
|-----------------------------|-------------|-------------|-------------|
| Number of enrolled patients | 79 | 113 | 161 |
| Patients on ART | 1,963 | 1,989 | 1,978 |

Table No 35: Trend in home-based care visits

| | 2023 | 2022 | 2021 |
|----------|-------------|-------------|-------------|
| Visits | 0 | 0 | 2,839 |
| HIV/AIDS | 0 | 0 | 1,831 |

Table No 36: Trend in PMTCT

| | 2023 | 2022 | 2021 |
|-----------------------------|-------------|-------------|-------------|
| Pregnant mothers tested RCH | 763 | 820 | 901 |
| Mothers HIV positive RCH | 5 | 1 | 1 |

Table No 37: Trend in PITC

| | 2023 | | 2022 | | 2021 | |
|---------------------------------|-------------|----------|-------------|----------|-------------|----------|
| | F | M | F | M | F | M |
| Patients tested | 2620 | 2224 | 2,238 | 2561 | 4088 | 1363 |
| Patients tested positive | 47 | 48 | 65 | 65 | 101 | 79 |

C: SUPPORTIVE SERVICES

3.5 Medical records and statistics

The Hospital is using the INAYA system for keeping medical records, making data records more secure and easily accessible. The communication from one unit to another is through INAYA starting from the registration of patients to the point of medication. With INAYA the work has been simplified and the accuracy of data has been improved together with accurate details of health commodities utilization. The use of electronic records has eliminated the need for paper files, making data records more secure and easily accessible. In addition, the fast and easy registration of patients has made it possible to quickly and efficiently retrieve information, ultimately improving patient outcomes.

3.6 Technical department and transport

The technical and transport department of the hospital provide a significant role in the running of the hospital; However, the department faced several challenges in the year 2023. Damage to the hospital instruments and equipment was experienced, which was mainly due to the old age of the equipment and lack of Planned Preventive Maintenance services. Due to the lack of funds and a biomedical engineer within the hospital the hospital had to pay biomedical engineers from other areas. In addition, the department also faced challenges with the hospital's vehicles since these are old and costly to operate. Also, the hospital is searching for donors who can support us to procurement of ambulance.

CHAPTER FOUR: PROJECTS FOR 2024

We are excited to share our plans for the upcoming year as we continue to expand and enhance our healthcare services. Our goal is to provide the highest quality care to our patients and their families, and we believe that the following projects will help us achieve that goal.

List of the proposed projects:

- Construction of a Neonatal Intensive Care Unit (NICU) and Pediatric Intensive Care Unit (PICU) to provide critical care for newborn infants and children who require specialized medical attention.
- Improvement of the Eye Clinic by equipping it with modern equipment like slit lamp with applanation tonometry, Ophthalmoscope, display ophthalmic frame and Trial frame, to provide high quality treatment for patients with eye diseases.
- Procurement of an ambulance

CHAPTER FIVE: IN APPRECIATION OF OUR DONORS AND FRIENDS OF NDALA

The journey of Ndala Hospital is a testament to the power of collective effort and shared visions. We have been blessed by the generosity of numerous organizations and individuals who have selflessly contributed to our mission of providing quality healthcare services. This chapter extends our heartfelt appreciation to our esteemed donors and friends who have made a significant difference in the lives of our patients and staff members.

Foremost, we acknowledge the immense contribution of the Tabora Foundation, under the dynamic leadership of Dr. George P.A Joosten and Dr. Rob Mooij, along with their dedicated team. The foundation has consistently sponsored multiple projects in our hospital, from providing educational resources for our staff to supporting the procurement of essential drugs for our epileptic patients. Their continuous support has been instrumental in elevating the standard of care we provide.

Our partnership with ASBN has been a cornerstone in our growth. Their financial backing has not only enabled us to undertake various projects but also facilitated the upgrading of skills for many of our staff members. Their sponsorship has been pivotal in fostering a learning environment within our hospital.

The Sonnevank Foundation, through their provision of funds, has made it possible for us to extend comprehensive care to our TB patients. This commitment is deeply appreciated.

We extend our gratitude to the Imelda Nolet Foundation for its generous financial support, which has been crucial in advancing various projects at Ndala and in promoting staff

education. The contributions have significantly improved our capacity to deliver quality healthcare.

JOCS has been a valued partner in our mission. Their financial assistance towards staff scholarships, the procurement of medical equipment, and the provision of technical support has been instrumental in improving our service delivery.

Special recognition goes to the Dr. Max Fund for their substantial support towards the treatment of our underprivileged patients. Their noble initiative has ensured that financial constraints do not hinder quality care and increased the access to health services for marginalized members of the community.

We express our appreciation to the Tabora Archdiocese Health Office for their exceptional role in supervising and coordinating health activities within the archdiocese. Their involvement has been crucial in connecting us with various organizations, including JOCS.

We are indebted to Dr. Herman's Funds for their ongoing investment in the education of Ndala staff through the Workers' Children Education Fund. Their dedication to nurturing talent is commendable.

We cannot end this chapter without expressing our deep appreciation to Mr. Bhart Van de Ploeg. His generous financial contributions have been instrumental in turning our dream of constructing a Ndala Retail Pharmacy within our hospital into a reality. His generosity has indeed left an indelible mark on the story of Ndala hospital.

Special recognition goes also to Dr. Myrrith Hulsbergen, a long-time friend and supporter of Ndala Hospital. She provided her time and knowledge to meticulously review and correct technical aspects of this annual report, therefore adding accuracy and comprehensiveness.

Finally, we pay tribute to our long-standing friends - Dr. George Joosten, Dr. Rob Mooij, Dr. Gerald Haverkamp, Dr. Myrrith Hulsbergen, and others old Dutch Doctors who worked at Ndala in the previous years, their assistance in linking the hospital with organizations and individuals willing to support Ndala has been invaluable. Their technical support, advice, and oversight of funds donated from Friends of Ndala in the Netherlands, among other organizations, have been instrumental in our growth and success.

In addition, the progress we have made and the lives we have touched have been made possible through the kindness and generosity of our donors and all friends, even those not mentioned in this report. We are immensely grateful for their support and commitment to our cause. We look forward to fostering these partnerships as we continue to strive for healthcare excellence at Ndala Hospital.

| S/N | ORGANIZATIONS & FRIENDS OF NDALA HOSPITAL |
|-----|---|
| 1 | Arnhemse Stichting Bijzondere Noden (ASBN) |
| 2 | Stichting Tabora |
| 3 | Stichting Imelda – Nolet |
| 4 | Stichting PIUS XII |
| 5 | Japan Overseas Christian Medical Cooperative Service (JOCS) |
| 6 | The Sonnevank Foundation |
| 7 | Archdiocese of Tabora, Health Department |
| 8 | Nzega District Council |
| 9 | Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) |
| 10 | Management and Development for Health (MDH) |
| 11 | Christian Social Services Commission (CSSC) |
| 12 | Dr. Max's Fund for poor patients |
| 13 | Dr. Herman's Fund for Workers children Education (WCEF) |
| 14 | Mr. Bart Van de Ploeg |
| 15 | Dr. Myrrith Hulsbergen |
| 16 | Dr. Gerald Haverkamp |
| 17 | Dr. George P.A. Joosten |
| 18 | Dr. Rob Mooij |
| 19 | Family of Dr. Wander and Dr. Erika Kars. |
| 20 | Sisters of Charity of St. Charles Borromeo (Maastricht, Nertherlands) |
| 21 | RK. Caritas St. Brigitta, Ommen Parish |
| 22 | Mr. Paulus Lips |
| | |