

NEO FOR NAMIBIA HELPING BABIES SURVIVE

KMI

TEAM

- Prof. Thomas M. Berger, MD
- Isaak Boois

A more detailed report
can be downloaded from
www.neo-for-namibia.org

MISSION REPORT 2025-1 SHORT VERSION

March 29 to April 23, 2025

Mission goals

- To bring a variety of consumables required to use equipment donated by NEO FOR NAMIBIA – Helping Babies Survive
- To install ultrasonic oxygen sensors into the MTTs Dolphin® bCPAP devices
- To (re)train local health care professionals, focusing on neonatal respiratory support, antibiotic stewardship, and fluid & nutrition management
- To discuss logistics of our NGO's largest donation yet with local health care professionals

NEO FOR NAMIBIA
HELPING BABIES SURVIVE

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Hospitals visited

- Rundu Intermediate Hospital
- Katima State Hospital

Impressive cloud formations on the flight from Johannesburg to Windhoek (left); on approaching Hosea Kutako International Airport, Windhoek presented itself surrounded by green mountains, an unusual sight (right).



Rundu Intermediate Hospital

Prof. Thomas M. Berger and Isaak Boois were warmly welcomed by the medical staff, including the new Medical Superintendent, Dr. Theresia Shivera, the Pediatric specialists (Dr. Isha Kamara, Dr. Geraldine Beukes, Dr. Johannes Helaria) and Medical Officers working in the Department of Pediatrics. They all expressed their gratitude and interest in further collaboration with NEO FOR NAMIBIA – Helping Babies Survive.

The Prem Unit at Rundu Intermediate Hospital continues to be busy, and often the patient rooms in Block A are crowded. The noise level is usually high (voices, babies crying, various alarms from incubators, CPAP devices and pulse oximeters). Consequently, space for Kangaroo Mother Care (KMC) is lacking. Similarly, there is not enough storage room for consumables and equipment that is not in use.

Crowded patient rooms in Block A of the Prem Unit at Rundu Intermediate Hospital (top: ICU room II with admission bay; middle: ICU room I with ventilators; bottom: IMC room I).

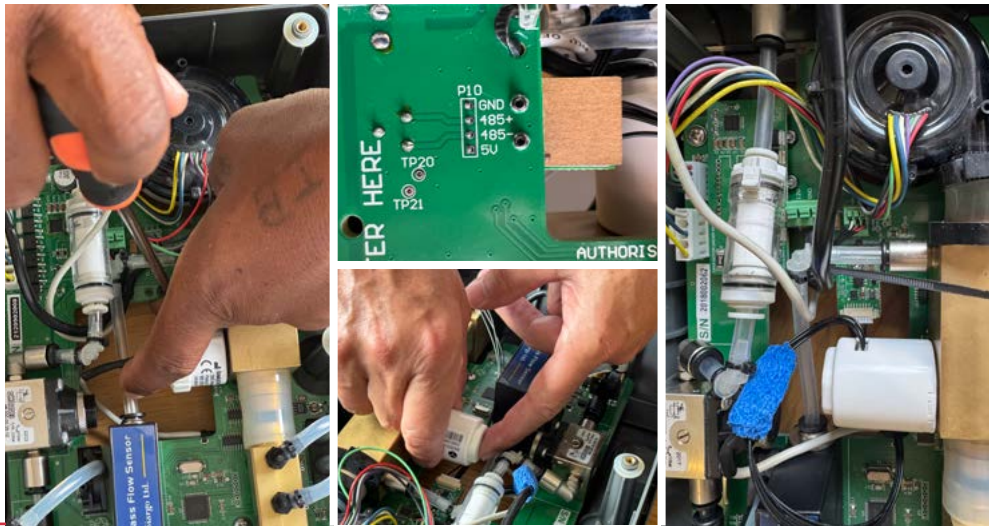


When the light intensity of the donated MTTs Colibri® phototherapy units was measured, only one of eight reached the strength required for intense phototherapy. Fortunately, the recommended cleaning of various contacts rendered all units fully functional again.

MTTS Colibri® phototherapy units (left) and MTTs light meter (right): the latter allows to measure light intensity (example shown: 31 $\mu\text{W}/\text{cm}^2/\text{nm}$ from above, 42 $\mu\text{W}/\text{cm}^2/\text{nm}$ from below (e.g. bilirubin blanket), total 73 $\mu\text{W}/\text{cm}^2/\text{nm}$) to determine whether the unit can still be used for phototherapy.

With the support of Steffen Reschwamm, medical engineer from MTTs Vietnam, new ultrasonic oxygen sensors were installed into six of the donated MTTs Dolphin® bCPAP devices.

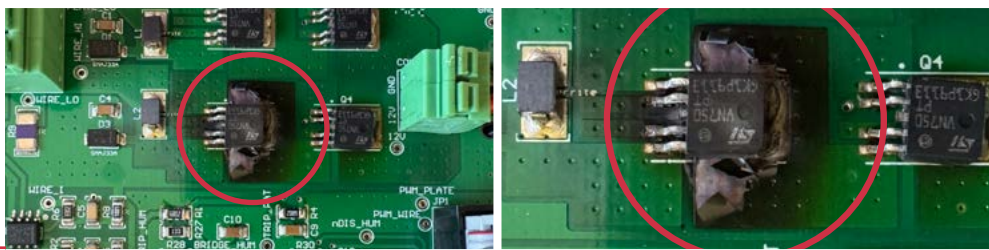
Installation of new ultrasonic oxygen sensors (part I): after removal of the old electrochemical oxygen sensor, a sensor adapter board is positioned on a supporting substrate (left) and its pins are pushed down (middle top); the new sensor is rotated into its socket (middle bottom) and the sensor cable is plugged in (right).



Installation of new ultrasonic oxygen sensors (part II): the process is completed with a software update.

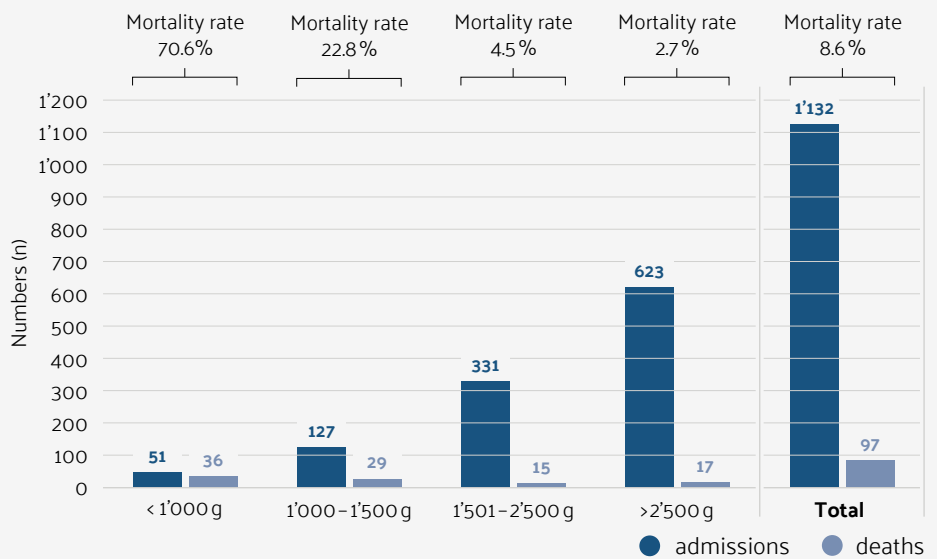


With the help of Steffen Reschwamm, the cause for the malfunctioning of the MTTs Dolphin® bCPAP unit Nr. 7 could be identified: the heater control board was damaged (circle) and will have to be replaced.



From January 1, 2024, to December 31, 2024, a total of 6'170 babies were born alive at Rundu Intermediate Hospital. Over the same period, there were 1'132 admissions to the Prem Unit. Of these, 937 were inborn (admission rate of 15.2% for babies born at Rundu Intermediate Hospital). To better understand the observed overall mortality rate, birthweight-specific data was analyzed.

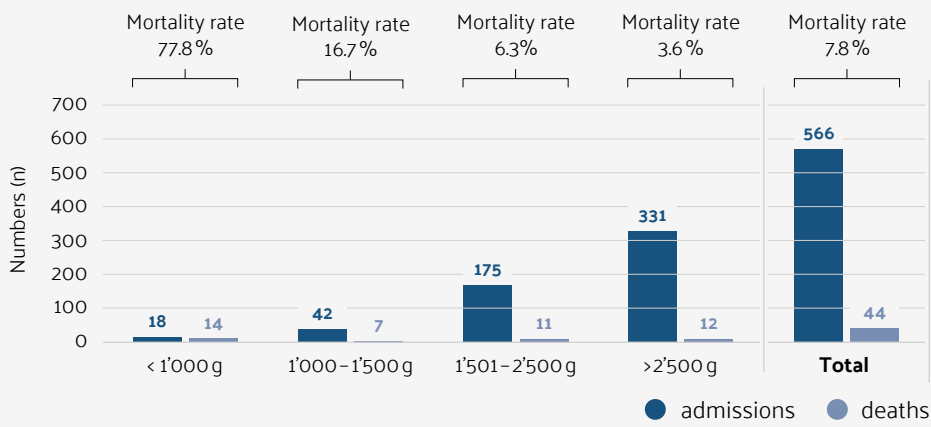
Rundu Intermediate Hospital: Prem Unit statistics (January 1, 2024, to December 31, 2024): as could be expected, mortality rates correlated strongly with birthweight (i.e., degree of prematurity).



It was a true pleasure to teach new interns. They proved to be a highly motivated group of young physicians. Given the fact that only a fraction of medical students can be accommodated at the University of Namibia (UNAM) Medical School, many had to travel abroad to study medicine (i.e., Russia, Ukraine, China, Cuba).

Medical interns: Hileni Haingura (A), Penehafo Matheus (B), Martha N. Frans (C), Alexander Maya (D), Hilén Haihambo (E), Raphael Haingura (E).

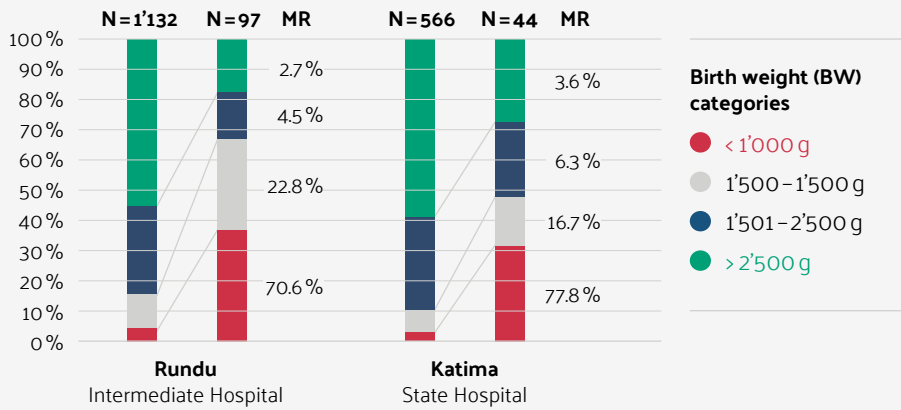




Katima State Hospital

Over the past five years, the Neonatal Unit at Katima State Hospital has made enormous progress. NEO FOR NAMIBIA – Helping Babies Survive had first visited the unit in December 2019.

Neonatal Unit statistics from Katima State Hospital (January 1, 2024, to December 31, 2024): analysis of birthweight-specific mortality rates.



Reduction in mortality rate of infants admitted to the Neonatal Unit (2019: 33%, 2024: 7.8%) has been impressive and sustained. It is noteworthy that the level of neonatal care provided at Katima State Hospital is now similar to the level of neonatal care provided at Rundu Intermediate Hospital.

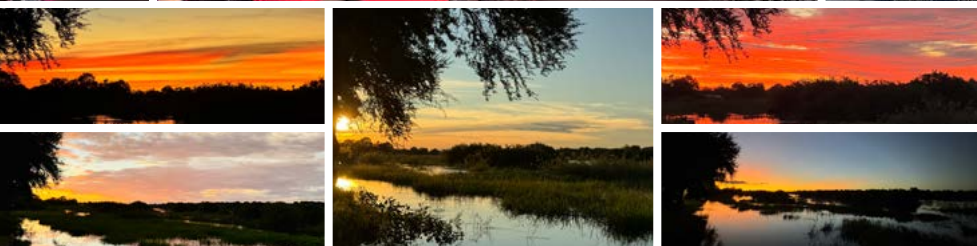
BW-specific contributions to the total number of admissions and the total number of deaths: comparison between Rundu Intermediate Hospital (left) and Katima State Hospital (right).



Impressions from the 23rd mission

On their journey, Prof. Thomas M. Berger and Isaak Boois were once again deeply impressed by the African scenery and the people they met.

At David's place (woodcarver, 50 km north of the Mururani Veterinary Control Gate): as promised, the team brought food and bought some of David's work.



Sunsets at Kaisosi River lodge overlooking the Kavango river that separates Namibia from Angola: each one seems unique!

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