

NEO FOR NAMIBIA HELPING BABIES SURVIVE



TEAM

- Sabine Berger, RN
- Thomas M. Berger, MD

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

MISSION REPORT 2019-3 SHORT VERSION

November 16 to December 18, 2019

Mission goals

- To document the quality of care at Rundu State Hospital by updating statistical data from the Prem Unit
- To introduce a new CPAP device (MTTS Dolphin®) at Rundu State Hospital
- To work hand-in-hand with the local health care professionals
- To train visiting teams from Onandjokwe and Katima

NEO FOR NAMIBIA
HELPING BABIES SURVIVE

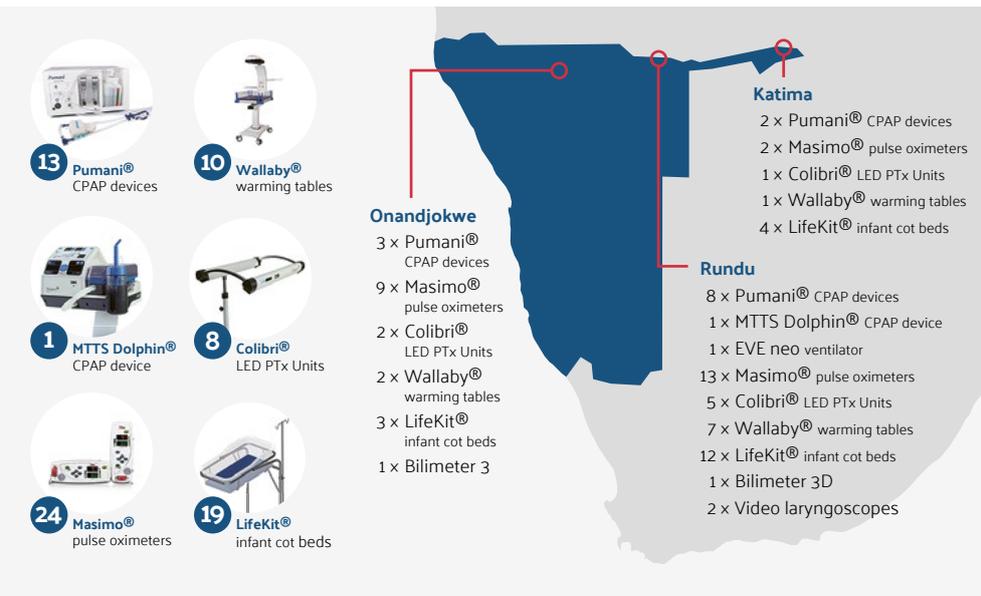
www.neo-for-namibia.org



Hospitals visited

- Rundu State Hospital
- Katima Hospital

Driving up north along the South Atlantic Ocean: amazing landscapes in the Skeleton Coast National Park.



Equipment

Once again, we would like to highlight the fact that the equipment donated by NEO FOR NAMIBIA – Helping Babies Survive has stood the test of time. Thorough instruction on its use and careful handling are key to guarantee durability. A steady supply of consumables must be ensured and requires adequate financing.

Overview of equipment donated by NEO FOR NAMIBIA – Helping Babies Survive (2017 – 2019).



Extremely low birth weight infant supported with bubble CPAP: without this type of respiratory support, the mortality rate of such patients would approach 100%.



Sabine Berger working at the bedside: successful use of CPAP requires good strategies and, above all, skilled nurses.

Teaching sessions

Invasive mechanical ventilation of neonates was introduced at Rundu State Hospital in July 2019. During refresher training sessions, we were pleased to note that most nurses and doctors were quite familiar with the EVE neo ventilator.

While the Pumani® bubble CPAP device has greatly improved survival chances of infants with respiratory distress, the machine has two major flaws. First, the inspiratory gas mixture is neither heated nor humidified, and, second, the Hudson-type prongs used as the patient interface interfere with patient positioning.

Dr. Ashipala, Dr. Mapanga and Dr. Banza (front to back) attentively follow the EVE neo ventilator refresher training.



Prof. Thomas M. Berger and Dr. Kundai Mapanga studying the setup of the new MTTs Dolphin® bubble CPAP machine: this device uses heated and humidified gas and its patient interface allows prone positioning.



Sabine Berger soothing the first MTTs Dolphin® bubble CPAP patient at Rundu State Hospital.



CPAP – a success story

From January 1, 2019 to November 30, 2019, 28.5% of all patients admitted to the Prem Unit at Rundu State Hospital were treated with bubble CPAP.

Obviously, this form of respiratory support has become a routine intervention, and a “use CPAP early” approach has been adopted.

CPAP registry data – August 2017 to December 2019

Total number of patients recorded	377
Median birth weight, g (range)	1790 (600–4700)
CPAP days (median, range)	1294
Median duration of CPAP support (range)	2 (1–20) days
Survival rate	78% (n=295)



Pumani® CPAP device

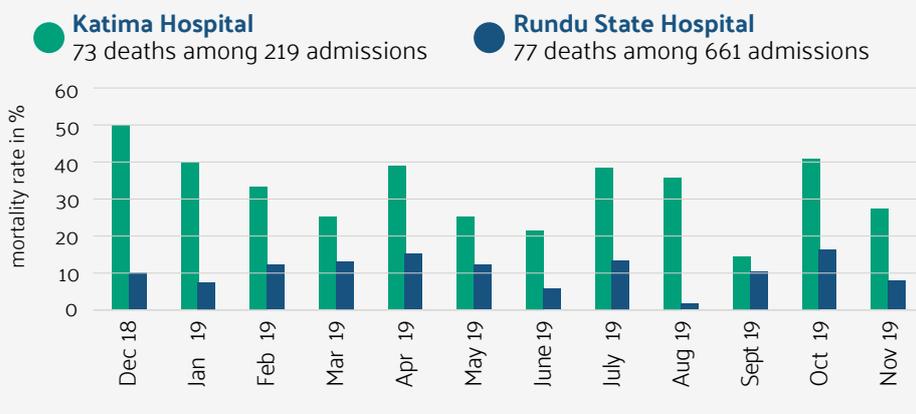


Katima Hospital

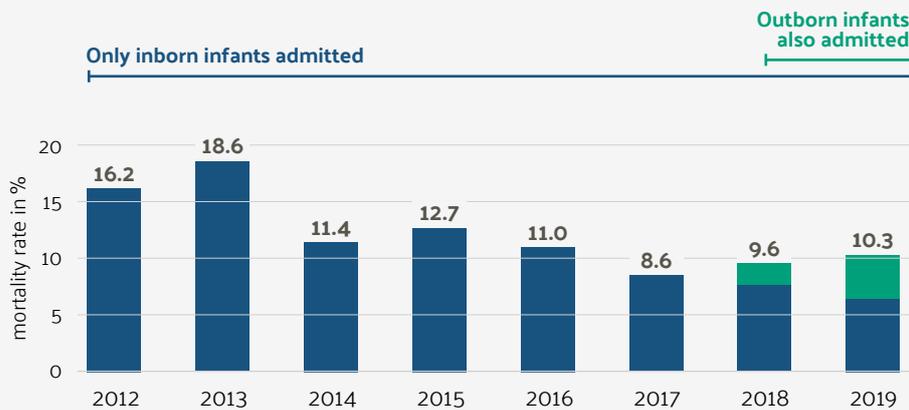
Katima Mulilo is situated in the Caprivi strip and is the capital of the Zambezi Region, Namibia's far northeast extension into central Southern Africa.

At Katima Regional Hospital, there are about 300 deliveries per month, and the Cesarean section rate is 10%. The Neonatal Ward is nested within the labor & delivery ward but lacks most of the equipment needed to care for sick babies.

Currently, the level of neonatal care available at Katima Hospital is very low: respiratory support with unblended face mask oxygen without monitoring.



From December 1, 2018 to November 30, 2019, there were 219 admissions to the Neonatal Unit in Katima. Of these, 73 infants died, resulting in a staggering mortality rate of 33% (this is three times the mortality rate of patients admitted to the Prem Unit at Rundu State Hospital over the same time period).



Impact analysis - update

At Rundu State Hospital, markedly improved mortality rates of inborn infants have been sustained at around 8% for the years 2017 – 2019, down from an average of 14% for the years 2012 – 2016.

Mortality rates of infants admitted to the Prem Unit at Rundu State Hospital from 2012 – 2019 (note: since September 2018 outborn infants have also been admitted to the Prem Unit).

Donate and help babies survive

neo-for-namibia.org/donate

Luzerner Kantonalbank
 Postfach, 6002 Luzern, Switzerland
 BIC/SWIFT LUKBCH2260A
 IBAN CH75 0077 8206 2817 2200 1