

NEO FOR NAMIBIA HELPING BABIES SURVIVE



TEAM

- Thomas M. Berger, MD
Pediatrician and Neonatologist

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

MISSION REPORT 2020-1 SHORT VERSION

November 5 to December 5, 2020

Mission goals

- To analyze progress, sustainability and quality of care at Rundu State Hospital
- To train Mrs. Eleotelia Hamutenya to prospectively collect data
- To review progress made at Katima Hospital since December 2019
- To meet with officials of the MHSS to discuss future collaborations

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Hospitals visited

- Rundu State Hospital
- Katima Hospital
- Windhoek Central Hospital
- Katutura Hospital

Sunset at the Kavango: this river does not have an outlet to the Atlantic Ocean; instead, it flows into the Okavango Delta where it seeps away.



On the gravel road leading from the Kaisosi River Lodge to the Rundu State Hospital (approximately 8 km): laughing kids playing with their wire toy cars.



11 Wallaby® warming tables



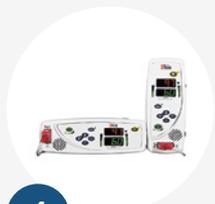
6 Colibri® LED PTx units



2 MTTs Dolphin® CPAP device



2 Leyte Medical video laryngoscopes



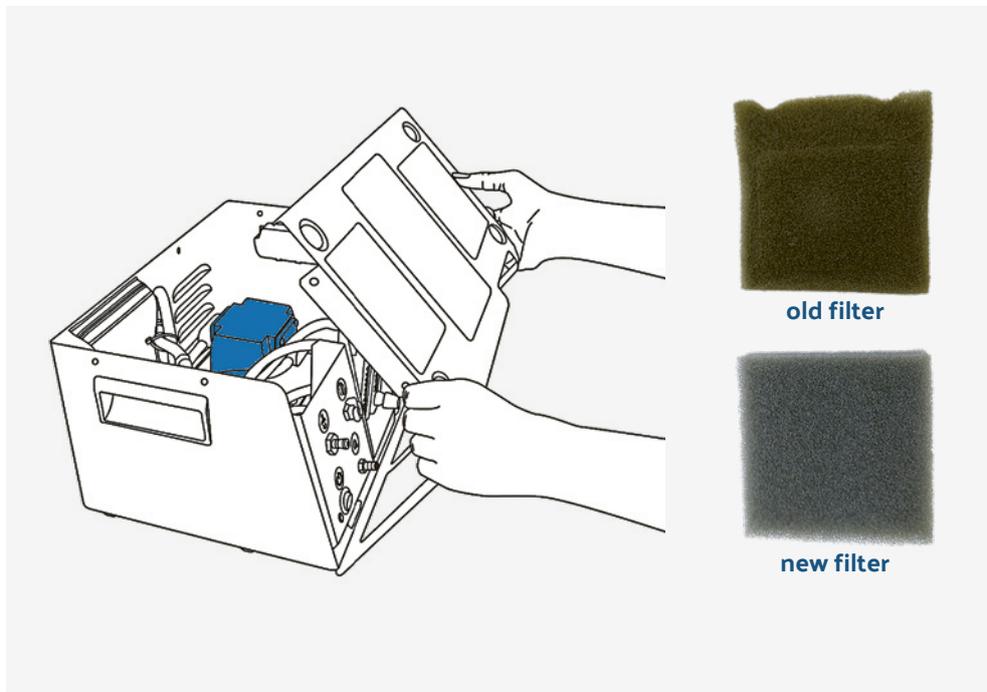
4 Masimo® pulse oximeters

Equipment

Due to the Corona pandemic, Sabine and Thomas Berger had not been able to travel to Namibia in April 2020 as planned. Therefore, they tried to support their local friends and colleagues by organizing the supply of urgently needed equipment and consumables. Provision of the latter had become even more unreliable following the lockdown.

Equipment donated by NEO FOR NAMIBIA – Helping Babies Survive in 2020. These donations were delivered to Rundu State Hospital, Katima Hospital, and, at the specific request of the Ministry of Health and Social Services, also to Windhoek Central Hospital.

The Pumani® bubbleCPAP device (left) has an integrated pump (blue) to generate air flow; air enters the device on the bottom, and dust is eliminated by simple filters (right) before it is directed into the machine's internal tubing system.



Teaching sessions

Due to time constraints, there were no formal teaching sessions this time. However, during rounds and whenever there was a small time slot, Prof. Berger tried to discuss various topics with doctors and nurses in small groups.

Prof. Berger discussing principles of invasive mechanical ventilation with Dr. Ashipala: using various scenarios, she was asked to adapt ventilator settings.



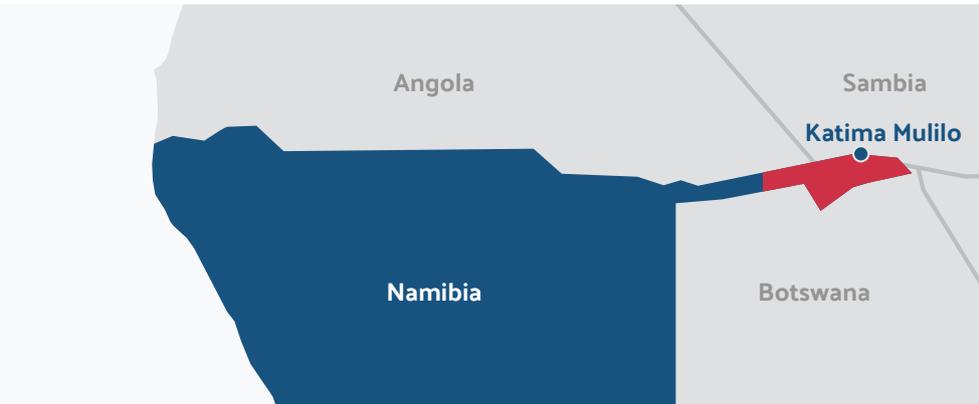
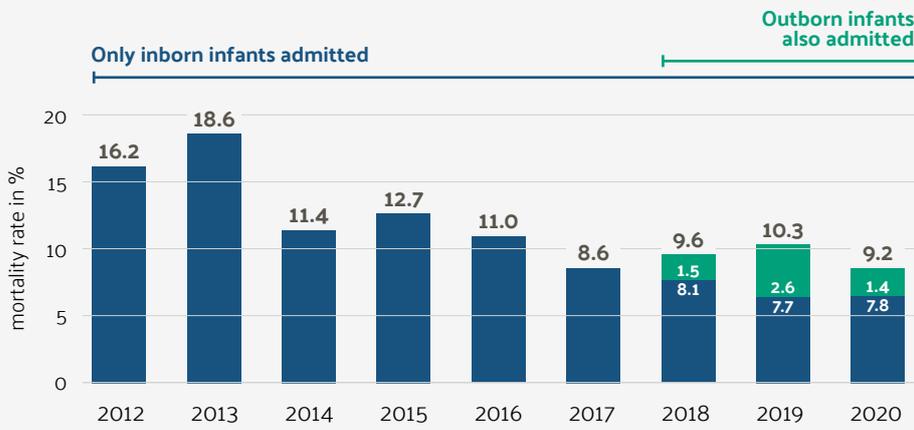
Prof. Berger took the opportunity to train Eleotelia Hamutenya during his stay in Rundu. Mrs. Hamutenya, the mother of a very preterm infant, will collect data at the Prem Unit at Rundu State Hospital. Eleotelia, welcome to the team.



Impact analysis – update

At Rundu State Hospital, markedly improved mortality rates have been sustained.

Sustained reduction of mortality rates of inborn infants admitted to the Prem Unit from an average of 14% for 2012–2016 to around 8% for 2017–2019.



Katima Hospital

The Pumani® bubbleCPAP device had been introduced at Katima Hospital in December 2019. A total of 120 babies were treated with this modality in 2020. The survival rate of these babies was 52%, higher than what would be expected with nasal cannula oxygen therapy alone. However, there is room for improvement, and additional training is urgently needed.



At Katima Hospital, infants with a birth weight less than 1000 g (left) currently have no chance of survival; however, survival rates of infants with a birth weight of more than 1000 g (right: a VLBW infant supported with CPAP) have improved significantly.

Pumani® bubble CPAP experience at Katima Hospital (2020)

| | |
|--|-----|
| Total number of admissions | 446 |
| Total number of patients treated with CPAP | 120 |
| Percentage of admitted babies treated with CPAP | 27% |
| Total number of deaths | 91 |
| Total number of deaths of babies treated with CPAP | 58 |
| Survival rate of babies put on CPAP | 52% |

CPAP registry data from Katima Hospital (January to December 2020): the main causes of death were hyaline membrane disease (n=20) and hypoxic ischemic encephalopathy (n=20). Undoubtedly, these results can be improved further.

Donate and help babies survive

neo-for-namibia.org/donate

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