NEO FOR NAMIBIA HELPING BABIES SURVIVE

TEAM

- Thomas M. Berger, RN
- Sarah Noemi Knoll, MD

MISSION REPORT 2021-1 SHORT VERSION

April 16 to May 16, 2021

Mission goals

• To introduce the first neonatology fellow (Sarah Noemi Knoll, MD) from the University Children's Hospital in Basel, Switzerland to neonatology in a resource-limited setting

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- To review progress made at Katima Hospital following our first two visits in December 2019 and December 2020
- To visit hospitals in the Hardap region (Mariental and Rehoboth) for baseline assessments and training of local health care professionals

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

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Hospitals visited

- Rundu State Hospital
- Katima Hospital
- Mariental Hospital
- Rehoboth Hospital



Overall, the team travelled more than 4'000 km on the 11th mission of NEO FOR NAMIBIA – Helping Babies Survive.





Living quarters of the mothers whose babies had been admitted to the Prem Unit at Rundu State Hospital.



Neonatology unit at Katima Hospital: Sarah Knoll, MD, instructs a nurse during ward rounds.



Equipment

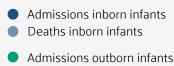
As usual, various pieces of equipment and consumables were brought along by the team members, including 6 Masimo® Rad-8 pulse oximeters (Katima: 2, Katutura: 4), 280 pulse oximetry sensors (Rundu: 100, Katima: 80 (30 of which were donations of used ones), Katutura: 100), and 1 Bilimeter with consumables (Katima: 1).

Equipment brought to Rundu, Katima and Katutura Hospitals on our 11th mission.

Statistics - Rundu

The Prem Unit at Rundu State Hospital was very busy. From December 2020 to April 2021, there was an average of 89 admissions per month (range, 73–111).

Inevitably, given the restricted space available, physicians and nurses had to improvise to admit all the sick babies. During peak periods, the Prem Unit had to accommodate up to 35 babies at the same time.



Deaths outborn infants

100 88 90 80 80 70 66 64 58 60 50 40 30 23 20 18 20 15 11 8 10 6 4 3 3 3 0 December 2020 January 2021 February 2021 March 2021 April 2021

Mortality rates

Inborn infants

Outborn infants

7.9%

14.9%

Number of admissions and number of deaths in the Prem Unit at Rundu State Hospital from December 1, 2020, to April 30, 2021; note the higher mortality rates of outborn infants (14.9%) compared to inborn infants (7.9%).

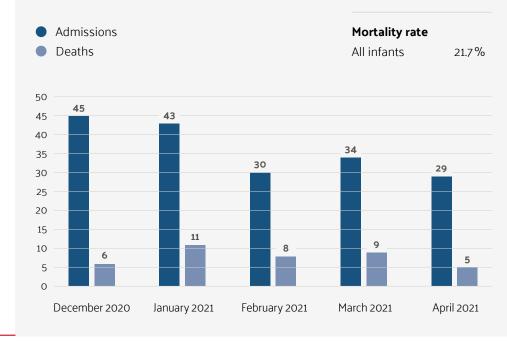


While the mortality rates of infants with a birth weight of >1000 g have improved significantly with surfactant replacement therapy and CPAP support, the mortality rates of extremely low birth weight infants remains very high.

Statistics - Katima

From December 2020 to April 2021, there was an average of 36 admissions per month (range 28–45). Following an initial decline from around 33% in 2019 to 20.4% (we first visited the hospital in December 2019), the mortality rate remained high at 21.7% over the most recent 5-month-period.

Number of admissions and number of deaths in the neonatology unit at Katima Hospital from December 1, 2020, to April 30, 2021; mortality rates remain high (average 21.7%, range 13.3%–26.7%).



		deaths 🧒	
		survivors 🚓	

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****	****	****	
mild	moderate	severe	
HIE Sarnat I	HIE Sarnat II	HIE Sarnat III	

HIE epidemic (Rundu)

Unfortunately, many babies – both inborn and outborn – were admitted to the Prem Unit at Rundu State Hospital with a diagnosis of hypoxic-ischemic encephalopathy (HIE).

Between February 2020 and January 2021, 134 patients had been admitted with a diagnosis of either HIE I, HIE II, HIE III, HIE not specified or birth asphyxia. While there were no deaths among babies with a diagnosis of HIE I, HIE not specified and birth asphyxia, the mortality rate of HIE II – III patients was 32% (24 out of 75).

Incidence and mortality of infants with hypoxic ischemic encephalopathy (HIE) at Rundu State Hospital from February 1, 2020, to January 24, 2021 (Note that the HIE I group also includes «HIE not specified» and «birth asphyxia»)

Desperately needed: New incubators

Before returning to Switzerland, the NEO FOR NAMIBIA – Helping Babies Survive team was able to visit the neonatology unit at Katutura Hospital. Donation of urgently needed equipment was more than welcome.

Most pieces of equipment in this unit are in a very poor condition. Improving neonatal care at this facility will require significant investments.

NEO FOR NAMIBIA – Helping Babies Survive would be interested to support such efforts, provided that sufficient funding can be obtained.

Incubators at Katutura Hospital in Windhoek are virtually falling apart; replacement with simple and robust equipment is urgently needed.

Donate and help babies survive

neo-for-namibia.org/donate

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