



**Readmission rate and risk factors for neonatal hyperbilirubinemia, at Tygerberg, a South African tertiary hospital: A prospective cohort study**

Leonidas Ndayisaba<sup>1\*</sup>, Jean-Paul Milambo<sup>1</sup>, Abiola Olowoyeye<sup>1</sup>, Ka Wing Cho<sup>1</sup> and Charles Okwundu<sup>2</sup>

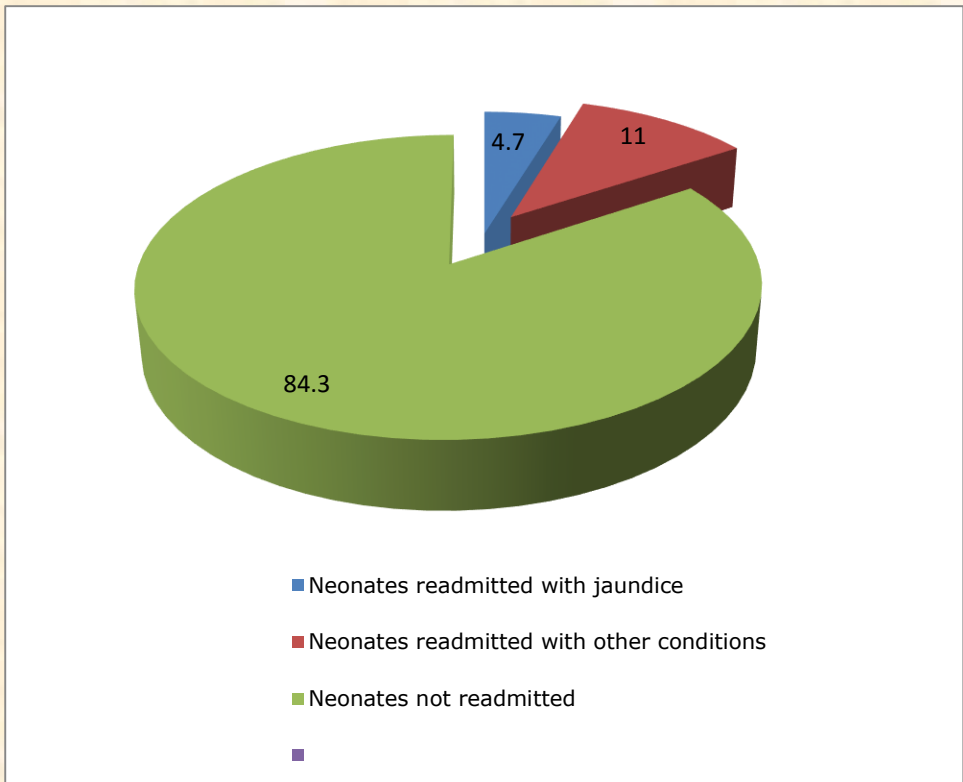
GSH-ICU, Stellenbosch Community Health<sup>(1\*)</sup>, University of Stellenbosch Community Health<sup>(1)</sup>, Children's Hospital Los Angeles<sup>(1)</sup>, Neonatal Tygerberg Hospital and Stellenbosch University (CEBHC) <sup>(2)</sup>

**Abstract**

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**Figure 1: Jaundiced baby admitted in Neonate ICU**



**Figure 2: Readmission rate for neonatal hyperbilirubinaemia in Tygerberg Hospital**

**Background:** Jaundice is a common condition that requires medical attention in neonates. It is as a result of the accumulation of unconjugated bilirubin in the blood. Neonates who presented with jaundice after 3-4days of life require closer scrutiny to avoid a rapid rise in the serum bilirubin levels, leading to neonate death or unwell conditions. We aimed to evaluate the proportion of newborns who were readmitted for jaundice and some risk factors related with readmission for jaundice after discharge.

**Methods:** A prospective cohort study of healthy newborns discharged from the postnatal ward at Tygerberg Hospital was conducted from November 2014 to April 2015. A total of 1,150 mother/neonate pairs were enrolled; of which only 972 completed follow-up and had complete data for analysis. Mothers were followed-up telephonically 7 to 10 days after discharge from the hospital.

**Results:** Of those discharged, 106(11%) were considered as readmission. Forty-six (4.7%) readmitted for neonatal jaundice while 60(6.17%) were treated for other conditions (gastro-enteritis, lower and upper respiratory diseases) as shown in Figure 2. After adjusting for other predictor variables, our study revealed that, mothers with a previous history of neonate with jaundice were 55.61(95% CI: 21-147) times more likely to be readmitted with their babies for jaundice as compared to those with no previous history.

**Conclusion:** Almost 5% of neonates discharged from Tygerberg Hospital were readmitted with jaundice. These findings indicate a need to carefully assess and properly manage newborns before being discharged to their home after delivery and ensure proper follow.

**References:**  
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**2.**[https://www.google.co.za/search?q=jaundice+babies+in+neonate+at+Tygerberg+Hospital&biw=1366&bih=623&source=Inms&tbm=isch&sa=X&ved=0ahUKEwj8KAoYXOAhWJJsAKHWIPDmgQ\\_AUIBigB&dpr=1#tbm=isch&q=jaundice+neonate+at+Tygerberg+Hospital&imgsrc=M8\\_QLHKfFy2HUM%3A](https://www.google.co.za/search?q=jaundice+babies+in+neonate+at+Tygerberg+Hospital&biw=1366&bih=623&source=Inms&tbm=isch&sa=X&ved=0ahUKEwj8KAoYXOAhWJJsAKHWIPDmgQ_AUIBigB&dpr=1#tbm=isch&q=jaundice+neonate+at+Tygerberg+Hospital&imgsrc=M8_QLHKfFy2HUM%3A).Accessed 2016/07/21.