

Newborn follow-up post discharge from Tygerberg Hospital, a South Africa tertiary hospital: A prospective observational cohort study

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Background: In many part of the world, healthy newborns are discharged home early after delivery. Many studies have shown that follow-up visits post-discharge help to reduce morbidity and mortality in newborn. Various options for post-discharge follow- up include home visits, clinic visit, or possibly by telephone calls. In this study we aimed to evaluate the proportion of mothers who took their newborns for follow- up after discharge from the post-natal wards at Tygerberg Hospital and to identify the barriers to follow-up for mothers who did not return for follow up within 7 days after discharge.

Methods: We approached all mothers who were being discharge from the postnatal ward at Tygerberg Hospital for potential participation in the study from November 2014 to April 2015. We recruited a total of 1150 mothers and newborns after assessing eligibility criteria. The mothers were followed up telephonically about 7 to 10 days after discharge from the hospital. A total of 972 participants completed follow-up and had completed data for analysis.

Results: Among 972 mothers who were interviewed during, 78.19 %(95% CI: 75 to 80) returned with their newborns for follow-up and about and 21.19 (95% CI: 19 to 24) did not. Some of the barriers identified for not returning to follow-up include: lack of money for transportation, lack of information about need for follow-up, “no need for follow-up because baby is healthy”, long

queues at the clinics, and maternal illness. Among those who answered to our calls, 105(11.0%) of the infants were readmitted after discharge and jaundice was the most common reason for readmission (4.7%). Regression analyses showed that mothers without income were 2.57 (95%CI: 1.35 – 4.99) time more likely not to bring their newborns for follow up as compared to those with income. For every additional 1 hours of length of stay, the risk of not returning for follow up increased by 0,7%. Also, mothers who had hypertension during pregnancy and delivery were 4.28 (95% CI: 1.52 -12.06) time more likely not to bring their newborns for follow-up as compared to those without hypertension.

Conclusion: Up 20 percent of mothers who deliver at Tygerberg Hospital, Cape Town, do not return with their newborns for follow-up during the first seven days of life. Various socioeconomic factors have been identified that contributes to not returning for follow-up in the first week of life after discharge from hospital. Mothers need to be informed about the need and importance for follow-up with their newborns after discharge from the well-baby nursery. Also, home visits by nurses could be an option to help to increase post discharge follow-up care for newborn babies who are discharged early from health care institutions in the Western Cape whose mothers do not have income or means of transportation.