

ORIGINAL RESEARCH

Risk Factors Associated with Premature Birth at a District Hospital in Bisho, Eastern Cape.

Stacey-Leigh Lillian Pullen¹

¹Dietetics Department, Nelson Mandela University, South Africa

¹Corresponding Author: staceyleighpullen@gmail.com

Abstract

Introduction and background: At least 23 000 new-born babies in South Africa die annually, 45% due to preterm-related complications or the lack of proper healthcare. Prematurity is the leading cause of death in children under five years old with at least 2.5 million preterm infants dying globally each year. What is more, is that greater disparity in mortality is being seen between rich and poor countries. Knowledge of the contributing and causative factors of prematurity within a community can help address modifiable risk factors and create vigilance and awareness around the non-modifiable risk factors leading to preterm birth.

Aims and objectives: The aim of the study was to identify which risk factors are associated with prematurity at Bisho Hospital, a district hospital in central Eastern Cape, South Africa. The objectives of the study were to identify which risk factors between the full-term and preterm group were more prevalent and therefore associated with prematurity.

Methodology: A descriptive quantitative correlation study design was used, where premature as well as full-term infants were included in the study. Data was collected by means of a questionnaire. All accessible medical notes of both the mother and infant were used as well. The questionnaire was used to establish which risk factors were most prevalent during the pregnancies of women in each group and whether these risk factors were significant contributors to prematurity.

Results: A sample of 130 mothers, 50 from the preterm group and 80 from the full-term group were included in the study. Of the 51 questions and various risk factors investigated, only four risk factors showed to have statistical significance in its association with prematurity. These were: a positive HIV status ($p=0.022$), a poor maternal nutritional status ($p=0.031$), mothers living far distances from their local clinic (0.041-0.024) and mothers having previously delivered a pre-term baby ($p=0.009$). In addition to this, mothers who smoked during pregnancy and who had a previous TB diagnosis, was associated with delivering smaller birth weight babies of 580g and 537g less, respectively.

Conclusion: The results of this study enlightened the study population on the causes of prematurity, specific to its catchment area. Modifiable risk factors have since been addressed at facility level, with more mothers with a poor nutritional status being referred for nutritional support. Non-modifiable risk factors are in the process of being addressed through the involvement of primary health care facilities to ensure timeous referrals of those at-risk patients as identified within the study. This study has also inspired the continued research on the management of premature infants at District Hospitals, with hopes to improve and optimise management and reduce pre-term related deaths and disability.

Key Words: Preterm birth; poor maternal nutritional status; district hospital; Eastern Cape; South Africa