

ABSTRACT

BACKGROUND: Mecklenburg Hospital provides a comprehensive package of promotive, preventive, curative and rehabilitative reproductive health services for women which are not available in primary health care clinics and community health centres. These services require special equipment (such as cardiotocograph machine) and personnel (such as medical doctors) that are not available in these health facilities. The availability of medical equipment is one of the crucial components of effective maternal health services. Specific life saving medical equipment must be available for routine and emergency management of maternal and neonatal complications. This study is undertaken since no formal study has been done to systematically study the availability and related cost of medical equipment in a district Hospital maternity ward.

AIM: To determine the availability and related cost of medical equipment used in the maternity ward at Mecklenburg Hospital.

METHODOLOGY: A cross sectional study design was used to review past records over a period of one year (April 2008 to March 2009). Information was extracted from the hospital information system and no primary data was collected. The setting of the study was in maternity ward of Mecklenburg Hospital in Limpopo Province. Data was collected on various variables linked to availability and cost of medical equipment and, related consumables in a maternity ward.

RESULTS: Majority of the capital equipment in the maternity unit was still relatively new. The Unit is non-compliant with all the lists (WHO, District Health Service Package and NCCEMD) for vacuum extraction. In addition, the Unit do not have equipment needed for steam steriliser and ICU beds as recommended by WHO. In terms of the District Health Service Package list, additional exceptions were equipment needed for forceps deliveries. There was a single ultrasound machine, 5 CTG machines and a single operating theatre available for use. With respect to consumables needed for the operation of the equipment, the mean number of days to receive the order was 7.4 days (Standard deviation 4.6 days and range 1 to 12 days). The study calculated the total asset value of capital (R 767,303.66) and minor (R 146,164.50) medical equipments based on purchase price. The total cost of these consumables for the study period was R1052.76 (R 87.73/ month). Although 10 Procurement meetings were held during the study period, no additional capital

medical equipment was procured. There were a total of 2405 deliveries, no maternal deaths, 46 stillbirths and 17 neonatal deaths recorded during this study period.

CONCLUSION: The study highlighted that the Unit was overall compliant with WHO list as well as national guidelines (NCCEMD and DHSP lists). The study also identified gaps which would require more detailed and prospective study to improve the services and clinical outcomes in the Unit. The results of the study will provide insight into areas, which were not researched in the past. The findings will be presented to both District and Provincial Health Departments and hopefully similar studies would be conducted in other level 1 district hospital maternity wards with similar challenges.