Maternal Mortality in Women with Sickle Cell Disease

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Background: Sickle cell disease (SCD) is a major health problem encountered in the Kingdom of Bahrain; it is associated with high maternal morbidity and mortality.

Objective: To determine the immediate cause/s of maternal mortality.

Design: A Retrospective Study.

Setting: Health Information Directory, Ministry of Health.

Method: All reported maternal deaths in Bahrain from 1977 to 2012 were included in the study. Personal characteristics, pregnancy outcome and the main cause of death were compared between women with and without SCD.

Result: Hundred twenty-two maternal deaths were reported in Bahrain between 1977 to 2012; 37 (30%) had SCD. The study showed a significant decline in overall Maternal Mortality Rate (MMR). The OR of maternal mortality by SCD was 117. The most important causes of maternal mortality in SCD were embolism 13 (35%), sepsis 9 (24%), hemorrhage 6 (16%) and acute chest syndrome 5 (13.5%). In the non-SCD group, the leading cause of death was embolism 18 (21%), hypertensive disorders 18 (21%), followed by infection 14 (16.5%), hemorrhage 14 (16.5%) and heart disease 10 (11.8%).

Conclusion: Sickle cell disease is the leading cause of maternal death in Bahrain. A significant decline in MMR in Bahrain over the years has been revealed, but unfortunately there was no substantial reduction amongst SCD mothers.

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