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FEASIBILITY STUDY OF REGISTRY SYSTEM FOR CARDIAC PROBLEMS IN PREGNANT WOMEN: A CASE STUDY IN NORTH WEST OF IRAN

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ABSTRACT

Introduction: Registration of cardiac problems in pregnancy is conducted in 45 countries at 115 centers across the world. There is no such registry system in Iran. The aim of this study was to investigate information feasibility of establish such system in northwest Iran.

Methods: As a preliminary phase for establishing registry of heart disease in pregnant women, a total of 89 hospitalized cases were identified as cardiac problems in pregnant women between 2006 and 2013 at the Madani Heart Hospital in northwest Iran. Availability of core data elements extracted from the ROPAC registry system was investigated in the related patient records.

Results: Findings from the study revealed the well-documented type of heart disease in pregnant women (100 %). About ninety two percent of cases had two or more than two diagnoses. Rheumatic Mitral Valve diseases (20%) were predominant among chronic rheumatic heart diseases. Congenital malformation of cardiac septa was the common congenital diseases of circulatory system (12%)., Heart failure was reported in 8% of cases. About 5 % of cases had diagnosis of hypertensive heart disease during their hospitalization. Medication data including those used before and during pregnancy was also accessible from patient records in all cases. Availability of data on age during pregnancy was 100 %. Information on weeks of gestation could be found in 78% of patient records. Median for gestational age was 26 weeks. Type of patient admission to hospital were documented in 94 % of cases and 76 % of them were admitted urgently. Data on pregnancy, child birth and puerperium were scarce and the existing data were not informative. In fact, such data were only available for cases whose babies were delivered in the Heart hospital.

Conclusion: Availability of demographic, diagnostic and therapeutic data was promising for establishing the registry system. In order to access data on maternal and fetal outcomes as well as prepregnancy data, it is inevitable to match and link the records from the heart hospital with those in the obstetric hospital, as well as their pre-pregnancy care record. Developing a web-based electronic registry system can facilitate the process of linkage. This will be pursued in the next phase of the study. **KEYWORDS:** Cardiac problems, pregnancy, registry

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