**THESIS ABSTRACTS**

**Studying the Birth Outcome in Tikrit Teaching Hospital**
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This thesis conducted in Tikrit University, Iraq, 2008.

**Background**: A successful birth outcome is defined as the birth of a healthy baby to a healthy mother. While relatively low in industrialized world, maternal and fetal morbidity and mortality and neonatal deaths occur disproportionately in developing countries.

**Aim of the Study**: To assess birth outcome and identify some risk factors affecting it for achieving favorable birth outcome in Tikrit Teaching Hospital.

**Objectives of the study**: The study was conducted to:

1. Describe the sociodemographic background for the study subjects including maternal age, occupation, education, and smoking habit and their effect on birth outcome.
2. Recognize the extent and the factors which determine the perinatal mortality and morbidity.
3. Measure the frequency of birth outcome among delivered pregnant mothers in Tikrit Teaching Hospital.
4. Identify the effect of antenatal care, residency and mode of delivery on birth outcome.
5. Assess the effect of parity, birth spacing and medical and family history on birth outcome.
6. Find out the effect of fetal factors (including: number of fetuses, and their gender) on the birth outcome.
7. Recognize the benefit of Apgar score and its relationship with birth weight and birth outcome.

**Study design**: The current work represents a cross sectional study, which included (714) pregnant women who gave birth in the delivery room in Tikrit Teaching Hospital in Tikrit city, for the period extended from the first of February to the end of July (2007). This study was carried out in an attempt to study the birth outcome in Tikrit Teaching Hospital.

A direct interview was done with every included delivered mother and a physical examination was conducted only for their newborn babies.

**Results**: The outcome of (714) deliveries was evaluated and to be set as either favorable or unfavorable, it was found that the frequency of favorable outcome was 512 (71.7%), while those who have unfavorable outcome (defined as having one or more of the following conditions: stillbirth, preterm, birth asphyxia, gross congenital anomaly, birth trauma or low birth weight), was 202 (28.3%).

It was found that the most unfavorable birth outcome was the birth asphyxia which compromised (15.5%) of the conditions. Caput succedaneum was the most encountered birth trauma in the study sample (7%). The results showed that women from rural areas have more unfavorable outcome than those from urban areas (31%), (22.3%) respectively. Those who have regular antenatal care have better birth outcome than those who have irregular antenatal care or those...
who never attended any antenatal care facility. Instrumental delivery had more favorable outcome which accounted for (88.9%), but from Caesarean section, elective type was associated with better birth outcome. (90.9%) of them had favorable birth outcome. It was shown that the maternal age (<19 and ≥ 35 years), low educational level, increased parity, narrow birth spacing, smoking, mother's work were factors that contribute to the unfavorable outcome. Multiple pregnancies had high significant relation with unfavorable birth outcome, (67.7%) of them was unfavorable. It was found that female gender had more favorable outcome, as there were (77.9%) of them showed favorable birth outcome.

There were only (2.2%) of the neonates who had low Apgar score at 10 minutes (≤3). Very low birth weight was significantly associated with low Apgar score. The study found that 45(60.8%) of mothers with chronic medical illnesses had unfavorable birth outcome and 57(81.4%) of family history with inherited disease had unfavorable outcome.

Conclusions:
1. Frequency of favorable birth outcome is more than unfavorable outcome in Tikrit Teaching Hospital which was (71.7%).
2. Birth asphyxia was the commonest form of unfavorable birth outcome, and formed (15.5%) most external birth trauma encountered was caput succedaneum (81%) and most common gross congenital anomaly was club foot (43%).
3. There is no statistical significance between maternal work status and birth outcome.
4. More favorable birth outcome was found among babies delivered by instrumental mode of delivery which comprised (88.9%). According to C/S, elective mode was associated with more favorable birth outcome and formed (90.9%) than the emergency type.
5. Male gender can be a contributing factor for developing unfavorable birth outcome.
6. Low Apgar scoring had more unfavorable outcome (69.4%) and seen mostly among low birth weight newborns.
7. Teenager mother, smoker mother, lack of antenatal care, rural residency, increased parity, and multiple pregnancy are maternal factors which can lead to unfavorable birth outcome.

The study concluded that there was still a relatively high percentage of unfavorable birth outcome. Social as well as maternal and fetal factors play an important role in determining the destiny of the pregnancy.

Recommendations
In the light of the present study results, the following recommendations are suggested:
1: Explanation to general public the appropriate age for pregnancy and the impact of teenage pregnancy, and delayed child bearing on fetal outcomes. Targeting these age groups for ANC will help to improve birth outcomes.
2: Improving maternity services in the rural areas.
3: Expanding the use of available ANC services. Emphasize should be on the quality of care by ensuring that there are enough trained human resources, basic facilities and drugs.

4: Improving the intensive care facilities in the maternity ward especially for those women who deliver by emergency mode of C/S.

5: Conducting a proper health education programme to all pregnant women in Iraq by using different forms of media to achieve this purpose. Health education activities should highlight the current risk factors in Salahadin community and the possible way to avoid them.

6: Improving the postnatal care, especially the NCU, by supplying new incubators, new equipments and investigations such as Blood Gas Analysis.

7: Proper training programme of medical staff emphasizing on the proper ways of neonatal care.

8: Encouraging women to take better care of themselves and to assert their right for better living conditions, nutrition and health care which are inevitable steps for improving women’s health in general and birth outcome in particular.

9: Further studies in future have to be done for a better understanding and management of this critical health problem.

Aalborg Academy of Science
College of Medicine
Master Program in Nutrition

Program Category: Medicine
College: MEDICINE
Program Level: M Sci
Teaching Methods: Full- time or Part- time.
Program Starting Date: open
Teaching Language: English.
Program Duration: Full-time 2 years; Part –time: 3 years.
Application Date: open
Credit Hours: 36
Program Code: AAS-COM-NUTMSC
Program Degree: M Sc in Nutrition.

Program Rationale

The Middle East region is in nutrition transition with increasing incidence of nutrition related chronic diseases while nutritional deficiencies persist. In addition, the peoples of the region are increasingly targeted and influenced by nutrition information from a variety of sources of varying accuracy. Within this context it is essential to have a cadre of professionals with a clear understanding of the scientific bases of nutrition and its application at the individual, community and national levels. The Masters of Sciences in Nutrition program will provide students with a comprehensive core knowledge of nutrition and an awareness of the interface with other disciplines, to equip them with the necessary range of skills to address the nutrition needs of the region.

Entry Requirement:
Candidates for the M Sc in Nutrition must hold a Bachelor degree in medicine, or biology.