

Thesis Title            The Comparison of Pregnancy Outcomes between High-Risk and Low-Risk Pregnancy in Saraburi Hospital

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Date of Graduation    12 November B.E. 2534 (1991)

#### ABSTRACT

Poor pregnancy outcomes i.e. maternal and perinatal mortality and morbidity still prevails in Thai society especially in the rural areas. Those who are anticipated to have poor pregnancy outcomes are identified by certain characteristics which are called risk factors. In Saraburi Hospital, the screening of high-risk pregnancy by using criteria set by Ministry of Public Health has been done since 1988-1989.

The purpose of this retrospective study was to find out the risk factors of high-risk pregnancy in Saraburi Hospital and to compare the bio-social characteristics, prenatal care and pregnancy outcomes (abnormal delivery, low birth-weight and stillbirth) between high-risk and low-risk pregnancy. Data were collected from hospital records of

pregnant women who had delivered at Saraburi Hospital during January 1, 1988 to December 31, 1989. The study group consisted of 227 high-risk mothers and the control group consisted of 454 low-risk mothers. The control group was chosen by systematically sampled from 6275 low-risk mothers during the same period. Chi-square test, z-test and odds ratio were applied at ninety-five percent significant level for data analysis.

The result revealed that 76.2 percent of high-risk pregnant women had obstetric complication which were previous cesarean section (41.9%), primigravida (28.2%) and maternal diseases such as hypertension (3.5%) and anemia (2.6%).

Most of the high-risk pregnant women were 20-34 years old (54.6%), multiparity (67.4%), singleton pregnancy (98.2%), hard working women (labourer and farmer) (70.0%) and living in rural area (61.7%). Fifty-nine percent of pregnant women attended antenatal clinic for the first time in the second-trimester and fifty-six percent attended more than three visits. Fifty-three percent of high-risk pregnant women had inadequate prenatal care. Age, parity, type of pregnancy and living area were significantly different between high-risk and low-risk pregnant women. But the details of getting prenatal care (first visit, number of visits and adequacy of prenatal care) were not different between both groups.

Most of high-risk pregnant women delivered by cesarean section (54.6%) and had fetal birth-weight between 3000 grams to 3499 grams (38.8%) and livebirth (96.9%). When comparing the pregnancy outcomes the high-risk pregnant women had higher incidence of abnormal delivery,

low birth-weight and stillbirth at 16.4, 3.1 and 7.2 times more than that of the low-risk pregnant women. The difference was still significant when comparison was made between both groups who has inadequate prenatal care.

Among those having adequate prenatal care, the high-risk pregnant women still had significantly higher rate of abnormal delivery and low birth weight infants, but the rate of stillbirth were not significantly different from low-risk groups. These findings show the effects of adequate prenatal care on outcomes of pregnancy.

The results of this study can be used in improving the management of high-risk pregnancy clinic in Saraburi Hospital. The screening of high-risk pregnant women by risk factors set up by Ministry of Public Health was useful and could discriminate women of different risks. The usefulness of adequate prenatal care should be advertised and advocated to all pregnant women especially the high-risk group to improve their pregnancy outcomes.