RELATIONSHIP BETWEEN ANEMIA IN PREGNANCY AND POSTPARTUM HEMORRHAGE: A CASE STUDY AT UTHAI THANI HOSPITAL UTHAI THANI PROVINCE – THAILAND

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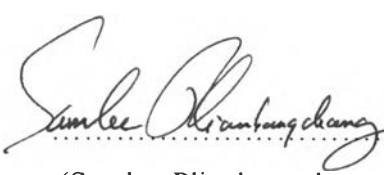

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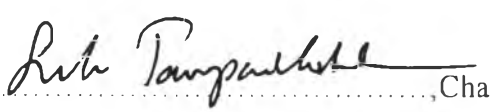

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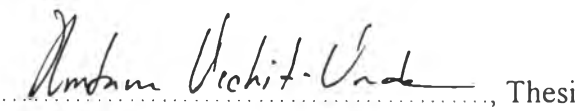

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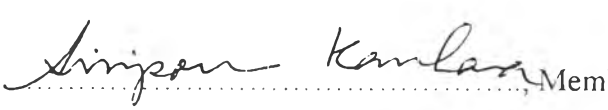

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ABSTRACT

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Maternal death is a major health issue worldwide. Life – threatening complications of pregnancy are responsible for nearly three-quarters of maternal deaths, and hemorrhage alone accounts for 25 percent of those maternal deaths. One of most common health problems during pregnancy is anemia. The main objective of this study was to examine the relationship between anemia in pregnancy and postpartum hemorrhage. The research employed a case-control study and the study was conducted at Uthai thani Hospital in Uthai thani province, Thailand.

A total of 250 subjects were selected. "Cases" were subjects with postpartum hemorrhage history, which was defined as amount of blood loss more than 500 ml, and the "controls" were subjects without postpartum hemorrhage history. "Cases" were matched with "controls" according to time of delivery in month and year. Fifty subjects were selected as "cases" group and 200 subjects as "controls" group. Hematocrit level during the third trimester of pregnancy was reviewed together with fourteen others information from the medical records. Anemia in pregnancy was considered as Hematocrit level less than 33% in the blood. Descriptive statistics, bivariate correlation, chi-square test, T-test and conditional multiple logistic regressions were performed in data analysis.

Generally, the characteristics of the subjects, which was comprised of age, educational level, occupation, gravidity, place of ANC, frequency of ANC, parity, type of labor, duration of labor, oxytocics drug administration, baby weight, profession of attendant and complications were different between "cases" and "controls" group. There were some significant positive and negative correlations between the variables. There were three factors significantly affecting the occurrence of postpartum hemorrhage at p-value = 0.05: age (OR=5.5), education (OR=3.3) and anemia (OR=3). Parity (OR=2) was significant at p-value = 0.1.

Anemia in pregnancy is one of predisposing factors of postpartum hemorrhage. The risk to experience postpartum hemorrhage among anemic pregnant women was 3 times as high as among non-anemic pregnant women. Proper diet and iron supplementation for pregnant women, and encouraging the use of family planning methods were strongly recommended.

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Bangkok, March, 2003

The Author.

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LIST OF ABREVIATIONS

ANC: Ante Natal Care

CPH: College of Public Health

CI: Confident Interval

Hb: Hemoglobin

Hct: Hematocrit

OBGYN: Obstetrics and Gynecology

MMR: Maternal Mortality Ratio

PIH: Pregnancy Induced Hypertension

PPH: Postpartum Hemorrhage

SD: Standard Deviation

SEARO: South East Asia Regional Office

SOGC: Society of Obstetricians and Gynecologists of Canada

SPSS: Statistics Package for the Social Sciences

UN: United Nations

UNICEF: United Nations Children's Fund

WHO: World Health Organization