Sukanya Yanunto Master of Science (Biostatistics) Degree Thesis Supervisory Committee

: A Case Study of Rajvithi Hospital

Rampai Suksawasdi Na Ayuthya, B.S. (Hons.). M.S., M.S.P.H.

Junya Pattaraarechachai, B.S., M.S., M.S.P.H., D.Sc. Manas Wongsuryrat, M.D., Thai Board of OB-GYN.

Study of Factors Related to Postpartum Hemorrhage

Date of Graduation 24 December B.E. 2535 (1992)

Thesis Title

Name

The objectives of this research are determination of factors related to postpartum hemorrhage and testing the effectiveness of new instrument which uses hematocrit change for finding out the cases of postpartum hemorrhage in Rajvithi Hospital. Study design of the first objective is historical case-control study which cases per controls are 280:560. While the second objective is prospective case-control study 45 cases for each case and control.

Univariate analysis showed that each of the following factors was related to postpartum hemorrhage : prolonged third stage of labour. placenta delivery method, pre-eclampsia, induction of labour, delivery by nursing student and doctor, tear of vaginal delivery, birth weight, gestation, delivery method, episiotomy, weight, height and gestational age. Multiple logistic regression analysis which simultaneously consider all factors at the same time revealed that prolonged third labour (RO = 41.9), pre-eclampsia (RO = 21.2), placenta delivery method (RO = 17.7), induction of labour (RO = 8.6), delivery

by nursing student (RO = 6.6), tear of vaginal delivery (RO = 5.8). birth weight (RO = 3.9) and forceps delivery by doctor (RO = 2.6) are the significant risk factors. The effectiveness of using hematocrit change as the instrument as compared to estimate blood loss is confirmed by 55.55 percent sensitivity and 66.66 percent specificity. The proportional rate of hematocrit change is significant higher than the proportional rate of estimate blood loss of delivery (p<0.0001).