Chanya Sethaput, B.A., M.A., Ph.D.

Buppha Sirirassamee, B.Sc., M.A., Ph.D.

Birth Weight In Phrae Province

Wilai Chaimongkol

Characteristics Of Mothers Influence Infants'

Master of Arts (Population and Social Research)

Date of Graduation 20 may B.E.2536 (1993)

Thesis Supervisory Committee

Thesis Title

Name

Degree

## ABSTRACT

The purpose of this study is to analyse the relationship between the three aspects of mother's characteristics and infant's birth weight. Three aspects of mother's charactertics are: (1) demographic, social and economic factors i.c. age, education level, occupation (during pregnancy), economic status, number of gravida, and space of gravida: (2) health behavioral factors i.c. amount of food taken during pregnancy, age of pregnancy at the first antenatal care, number of antenatal care, history of abortion and history of delivery low infant birth weight and (3) biological factors are weight increase during pregnancy, hematocrit and placenta weight. The data was collected by interviewing 500 postpartum mothers and by using antenatal care and delivery reccords in 7 hospitals under Ministry of Public Health in Phrae Province during November 1 - December 29, 1992.

For data analysis, a set of statistical indicators such as Chi-Square Test, Multiple Correlation and Multiple Regression

Analysis were employed to study the relationship between variables.

Regarding the relationship between demographic, social and economic factors and health behavioral factors, It is found that there are some statistical associations significantly among variables, that are the mother, sage and abortion history and history of low infant's birth weight delivery, education level and age of pregnancy at the first antenatal care, occupation and number of gravida, space of gravida and abortion history, number of gravida and abortion history.

For the relationship between health behavioral factors and biological factors, the result shows that the amount of food taken during pregnancy is associated with weight increase during pregnancy.

Considering the relationship between these independent variables (3 aspects) and infants birth weight, the study reveals that factors which are related to infant's birth weight are mother's education level, family's economic status, number of gravida, amount of food taken during pregnancy, abortion history, history of delivery low infant birth weight, weight incress during being pregnancy and placenta weight. Using stepwise multiple regression analysis, the factor affecting infant's birth weight, which can forecast infant's birth weight best are amount of food taken during pregnancy and weight increase during pregnancy (R=0.61210).

From this study we can say that the characteristics of mothers who are at higher risk of giving low infant birth weight are the mothers who are low educated, labour, poor, and have the first gravida, low infant birth weight delivery experience, taken equal or less amount of food during pregnancy andgain weight during pregnancy less than 10 kilograms. Therefore these type of mothers should be taken into special consideration during antenatal cares.