

CHAPTER IV

OUTCOME MEASUREMENTS

There are some outcomes in which we are interested. That is not all, but we select the most important outcomes that can answer the research questions. At the same time, we observe some more outcomes that are expected being significant between two groups, postdate group and term group. The outcomes of this study are of two kinds of variable, independent variable and dependent variable. The outcome measurement is presenting as follow.

Dependent variables

These are the most important outcomes that we need to measure accurately.

The birth weight

The birth weight was measured after first care by weighing scale, which was set at zero every morning before use. The weighing scale showed a precision when it was compared to two another weighing scales. All of the infants were weighed in the same manner which was observed by researcher.

The placental dysfunction syndrome

The criteria to diagnose the placental dysfunction syndrome were the Clifford classification, which have used in the world as the standard criteria (Appendices). The newborn infants have been examined by researcher after they had been weighed. Before the researcher measured the studied newborn infants he had examined 20 infants as the pretest in order to improve his technique to be more skillful and to reduce the variation.

Apgar score

The Apgar score method was devised to describe the condition of the neonates at birth. A total score of 10 is optimum, although seldom attained at 1 minute, a total score of 3 or less is usually indicative of infants in poor condition. The most important use of this method is to allow someone who was not present at delivery to reconstruct a picture of what the baby was like.

The Apgar score have been measured at the 1 minute by researcher. The 1 minute Apgar score gives the best impressions of the neonate's condition at birth and correlates with acid - base status of the neonate. Apgar score was also classified into 2 categories that were high and low score. Apgar score that is higher than 6 have been considered as the high score or good condition. Apgar score

that is equal to 6 or less have been considered as the low Apgar score or birth asphyxia.

Fetal growth retardation and large for date

Up to now, there have not yet been the research about the birth weight distribution of Vietnamese population. Therefore, we have used the birth weight distribution of Thai population (Appendices) as the criteria to diagnose the fetal growth retardation and large for date.

Independent variables

Amniotic colour change

This outcome has been observed at the time of amniotic membrane rupture by midwives or obstetricians. The amniotic colour has been routinely described in detail in the obstetrical record. This outcome has been collected from the obstetrical record by researcher.

Method of delivery

The method of delivery has been classified into 2 types. Whenever the obstetrician indicated the intervention that was due to the fetal distress, that case

has been considered as the group one, intervention due to fetal distress. The others such as normal delivery and intervention due to other. This outcome has been also collected from the obstetrical record by researcher.

The parity

The parity has been also divided into 2 groups, primiparae and multiparae. The primiparae was the pregnant woman that this delivery was the first time. In contrast, the multiparae was the pregnant woman that this delivery was not the first time. This variable was collected by direct interview before delivery.

The prenatal care

The subjects have been considered as the subject with prenatal care and without prenatal care. Prenatal care means that the pregnant women come to examine or to consult any where such as tertiary hospital, a district hospital, communal health center or private clinic. This variable was also collected by direct interview before delivery.

Ultrasound

The subjects have been considered as the subjects with ultrasound and without ultrasound. The result of ultrasound was mainly collected from the obstetric record and prenatal record. The subjects with ultrasound mean that they have been examined by ultrasound anywhere during this pregnancy. The subjects without ultrasound is the one who have not been examined by ultrasound during this pregnancy. This variable was also collected by direct interview or recorded from the obstetric and prenatal care records.

Living place

The living place of the subjects has been categorized as the rural area and urban area. Living in the urban area is the one who live in the cities, the towns. Living in the rural area is the one who lives outside the cities, the towns, in the country side.

Occupation

The occupation of the subjects has been divided into 5 groups that were the officers, the workers, the farmers, the housewives, the one who do their own business.



Education

The education of the subjects has been divided into 4 groups as follow:

Illiteracy: The one does not know reading and writing.

Primary school: The one used to learn in the primary school only (grade 1 - 5).

Secondary school: The one used to learn in the secondary school only (grade 6 - 9).

High school: The one used to learn in the high school only (grade 10 - 12).

University: The one used to learn in the undergraduate school, the graduate school, the postgraduate course.

The gestational age

The gestational age has been measured by weeks lasted from the first day of last normal menstrual period to delivery date, it is called the weekly gestational age. The subjects have been asked directly by researcher about the first day of L.N.M.P.

+ 266 days - 272 days of gestation was considered as 38 weeks of gestation.

+ 273 days - 279 days of gestation was considered as 39 weeks of gestation.

+ 280 days - 286 days of gestation was considered as 40 weeks.

+ 287 days - 293 days of gestation was considered as 41 weeks.

+ 294 days - 300 days of gestation was considered as 42 weeks.

+ 301 days - 307 days of gestation was considered as 43 weeks.

+ 308 days - 314 days of gestation was considered as 44 weeks.

+ 315 days - 321 days of gestation was considered as 45 weeks.

+ 322 days - 328 days of gestation was considered as 46 weeks.

+ 329 days - 335 days of gestation was considered as 47 weeks.

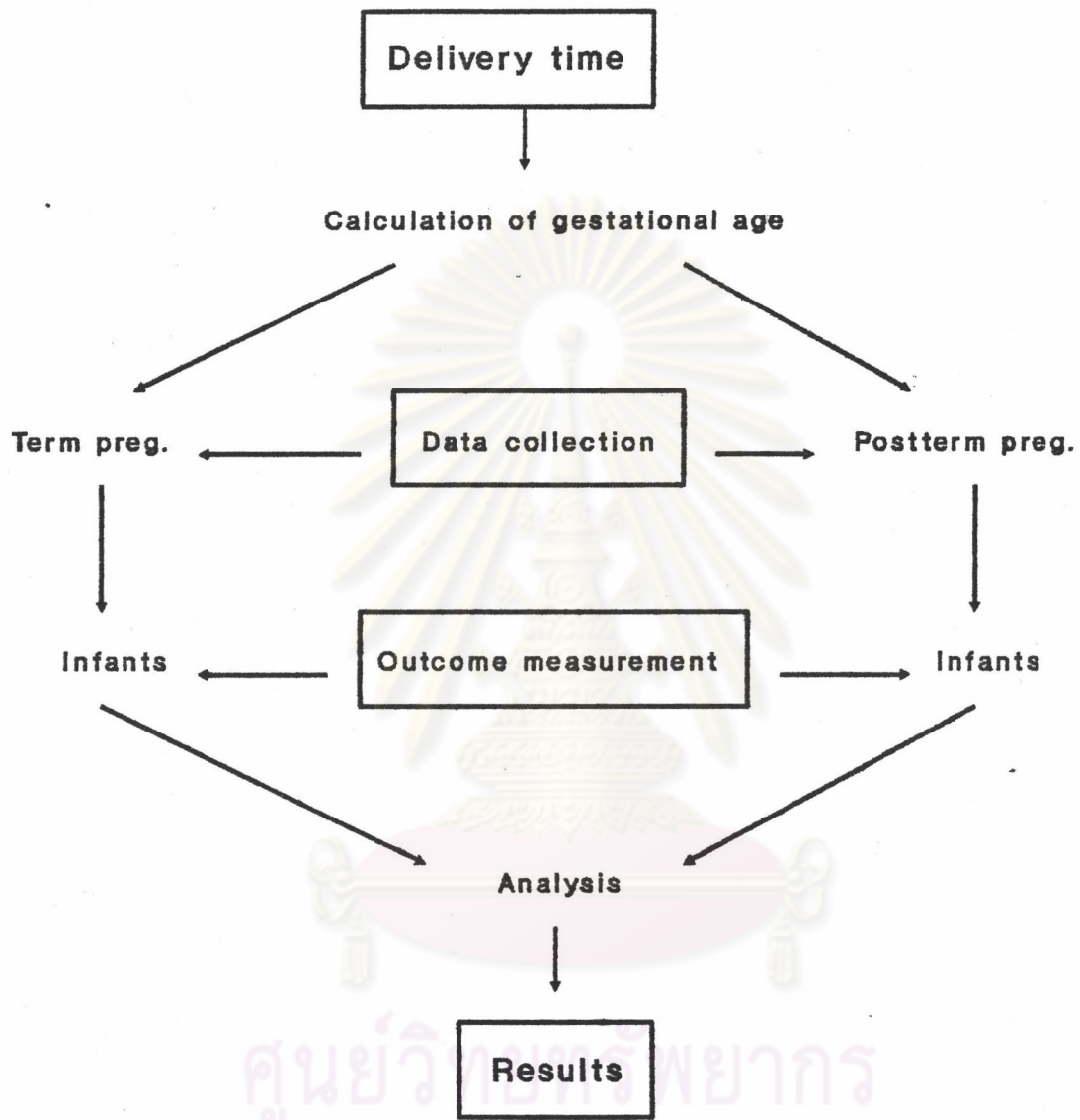
The age of subject

The age of the pregnant women has been considered as the continuous data and also as the dichotomous data. Otherwise, their age have been measured as the yearly age and categorized as to whether they are older than 35 years old or not. As we known that the age of mother may affect on the fetal growth. In other words, the mothers who are

older than 35 years old may get more risk of the unfavorable fetal outcomes. So we need to avoid that confounder by using the cut of point of 35 years old to classify them.



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย



ศูนย์วิทยุพยากร
จุฬาลงกรณ์มหาวิทยาลัย

Figure 1. Diagram of study