

CHAPTER III

RESEARCH METHODOLOGY

This chapter is concerned with the methodology which was used to conduct the study. The research design, the sample and data collection procedures, instrumentation, and data analysis procedures are also described.

RESEARCH DESIGN

A descriptive, cross-sectional design was used to study the selected factors affecting anticipated turnover among professional nurses in Chulalongkorn Hospital during Dec-Jan 1991. A survey strategy using a questionnaire with known, acceptable psychometric properties was implemented.

POPULATION

1. Target population

The target population for this study is all the professional nurses employed in Chulalongkorn Hospital. Approximately 1,021 nurses are member of this population.

2. Sample population

The representative sample of this population will be selected in a stratified random sampling.

3. Inclusion and Exclusion Criteria

All professional nurses who are working in Chulalongkorn Hospital will be included in this study.

DESCRIPTIVE RESEARCH
DIAGRAM OF THE STUDY DESIGN

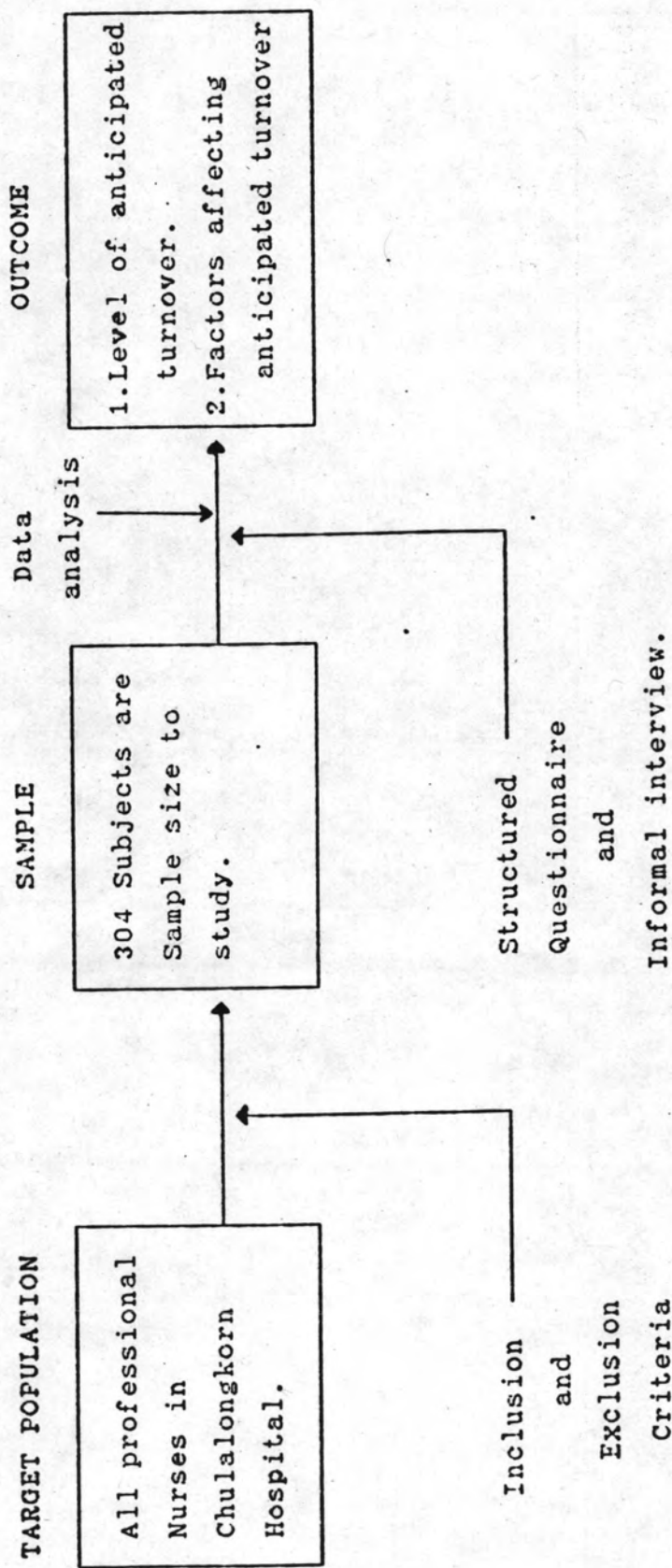


FIGURE I I I



Professional nurses who take a leave for any reason during a period of the study will be excluded from this study.

4. Justification of Sample Size

This study is designed to answer the primary question which is the rate of the factors affecting the anticipated turnover. So the equation used in sample size calculation is (Sittiamorn Chirt, 1987)

$$N = Z^2 PQ/A^2$$

From the equation, the value of N is dependent on the factors as follows

Z = the Confidence intervals and is equal to 1.96 for 95%

Confidence levels (Z = 1.96)

PQ = represents variance for this discrete data (P = Probability of Success, Q = 1-P)

The previous studies reported in range 11-36% and the average at 23%;
P = 0.23

A = represents clinical acceptable error is used 5%

The value of N can be calculated by substitute in the equation:

$$\begin{aligned} N &= Z^2 PQ/A^2 \\ &= 1.96^2 \times 0.23 (1-0.23)/(0.05)^2 \\ &= 272.13 \sim 273 \end{aligned}$$

The sample size from these equation is 273 and be expected 10% of samples who will drop out from this study. The samples will be recruited to equal to the calculated sample from the equation divided by 0.9. Then the sample is $303.3 \sim 304$ subjects.

SAMPLING TECHNIQUE

1. The sample size of professional nurses are selected by stratified sampling technique.

1.1 The first stage : Each department in Chulalongkorn Hospital was considered to study.

1.2 The second stage : There are units(wards) under each department that was considered to be selected by purposive sampling technique. The number of sample population were randomly selected from each unit depending on the proportion of sample population.

2. The sample size of professional nurses

The total number of the sample population are 304 cases illustrate in table 1.

TABLE I The number of sample classify by department.

DEPARTMENT	NO. OF UNITS	NO. OF SAMPLE
Emergency	3	11
Medical	10	76
Surgery	4	59
Operating	8	34
Critical(ICU)	4	59
Gynecology/obstetrical	7	33
Pedriatic	3	45
Out patient	5	16
TOTAL	44	304