CHAPTER I
INTRODUCTION

A. Background of Research

Preclinical Clerkship is a form of clinical skill training program to prepare an undergraduate dentistry student to conduct clinical clerkship. The Clinical Clerkship itself is a professional requirement, which all candidate of dentist must perform before they conduct professional practice. All students must take the training which takes place in the Faculty of Dentistry of Universitas Muhammadiyah Surakarta. Every student must complete a number of requirements listed in the guidebook in order to pass the program. However, the number of students have grown and so is the number of patients that attend the clinic. There are three main activities which must be performed by student: discussing and presenting journal that have been prepared by the lecturer, observing lecturer demonstrating treatment for every cases which become the requirement of preclinical clerkship, making a report for every case which is demonstrated by a lecturer. In each case, every group of student must invite a patient who poses the required diseases.

Preclinical clerkship activity is held for 6 weeks, form Monday to Saturday. Every group of students must complete the given requirements in the given range of time. In each day, there are two shift, morning, and daylight. They could invite a patient more than once if the patient poses more than one of required disease. In the old procedure of last period of preclinical clerkship, when a new patient came to the clinic a laboratory assistant make a record for him in a

form of paper record. For every new patient the laboratory assistant generates a medical record number that will help him to locate the map of each patient when the same patient came again.

When a registered patient that was invited by each of groups come to the clinic, a representative of the group ask the laboratory assistant to find the patient's map, then the student will find available teaching dentist to treat the patient. When the doctor treat the patient, every students of the group observe him, ask a certain thing that they do not already know, answer some questions from the teaching dentist, record instruments and consumable that are ordered by the doctor into the patient's medical record, take that record to the laboratory assistant and bring back the required instruments and consumable, then the student also record what kind of treatment the doctor has been given to the patient's medical record.

At the end of the shift, the laboratory assistant receives the map from every group then he writes a medical billing for the patient based on the patient's medical record. Then at the end of period, the laboratory assistant also makes a general report for dentist about their revenue which was equal for every /dentist then creates a summary report to head of laboratory about pass or fail of student.

Even though all of these tasks only performed once in one semester, the burden the laboratory assistant has at one time is still quite large. There is a need to reduce the workload that is caused by this repetitive task. One way to solve this is by developing an electronic medical record that could make the retrieval of patient's electronic medical record and generating the required reports faster.

According to Misses Ana, this system is also expected to solve duplicated map in the case of patient forgets his medical record number also it could generate report for each dentist about their own revenue based on what they have done.

B. Problem Statement

Based on the reason of background of study above, the author states some problems, such as:

1. How to solve duplicated patient's medical record map?
2. How to efficiently generate medical report?

C. Problem Limitation

Considering from limited ability of the author, this study has some problem limitation to achieve the goals. Problem limitation is as follows:

1. The identified objects are patients, dental instruments and consumable, dental student, and teaching dentist at faculty of dentistry UMS.
2. The author does not create a web-based application to display the records of medical related data, but using the desktop-based application.
3. In this paper, the author only develop an EMR-like system, not an EHR, An EMR contains the medical and treatment history of the patients in one organization. While EHRs are designed to reach out beyond the health organization that originally collects and compiles the information (Garets & Davis, 2005).
4. This system only designed to meet the requirements specified by faculty of dentistry UMS, since Health Ministry of Indonesia in its act they published

that is Permenkes no. 269/MENKES/PER/III/2008 about Rekam Medis, Pasal 2 ayat 2 just stated "penyelenggaraan rekam medis dengan menggunakan teknologi informasi diatur lebih lanjut dalam peraturan tersendiri", however this act does not give further details about electronic medical record. As this system is developed for use in Indonesia, the requirements specified by Health Information Technology for Economic and Clinical Health (HITECH) Act of United State of America do not apply.

D. **Purpose of Research**

The purpose of this research is to create information system to manage preclinical clerkship activities from registration to reporting in the Faculty of Dentistry, Universitas Muhammadiyah Surakarta.

E. **Benefit of Research**

The expected benefits of these researches are preclinical clerkship administration is easier, faster retrieval of patient's medical record, faster generation of report.

F. **Writing Systematical**

Writing Systematical is created to facilitate essay arrangement processing. Writing Systematical to be used is:

CHAPTER I INTRODUCTION

This chapter contains the background of research, problem statement, problem limitation, purpose of research, benefit of research.

CHAPTER II LITERATURE

This chapter contains some study of researches and fundamental theories that are used for complete this essay.

CHAPTER III METHOD OF RESEARCH

This chapter contains about the object being studied and some activity to study for object.

CHAPTER IV RESULT AND ANALYSIS

This chapter contains about the design of system, result of testing program and its analysis.

CHAPTER V CLOSURE

This chapter contains conclusion and suggestion of all activity of research.