

Chapter one

Introduction

1.1 Introduction

The provision of high quality health care is the goal of all medical services. In the case of diagnostic radiological facilities, patient selection, the conduct of examination, and the interpretation of the results can all have an impact on the achievement of this goal. With respect to the conduct of examination, it has been increasingly recognized that quality assurance programs directed at equipment and operator performance can be of great value in improving the diagnostic information content, reducing radiation exposure, reducing medical cost, and improving departmental management. Quality assurance programs thus contribute to the provision of high quality health care.

Quality assurance program may be defined as an organized effort by the staff operating facility to ensure that the diagnostic images produced by the facility are of sufficiently high quality so that they consistently provide adequate diagnostic information at the lowest possible cost and with the least possible exposure of the patient to radiation.

Quality assurance programs designed to ensure the radiology equipment can yield the desired information, include both quality control techniques and quality administration procedures, quality control techniques are used to test the component of the radiological system to verify that the equipment is operating satisfactorily. Quality administration procedures encompass management action designed to verify that the quality control monitoring techniques are performed

regularly and properly, that the results of these techniques are evaluated promptly and accurately, and that the necessary corrective measures are taken in response to these result. Quality administration procedures include the assignment of responsibility for quality assurance action, the establishment of standards of quality for equipment in the facility, the provision of adequate training and selection of appropriate equipment for each examination.

The question of the appropriateness of the equipment should be considered at the time it is ordered and installed.

1.2 Problem of study

The quality assurance program important for image quality and reduction of radiation dose to the patients, most of x-ray department not implemented the quality assurance

1.3 Objectives:

The purpose of this study to investigate the importance of implementation of quality assurance in conventional diagnostic radiology.

1.4 Important of study

Implementation of Quality assurance in X-ray departments, reduce radiation dose.

1.5 Thesis layout

This study falls into five chapters, Chapter one, which is an introduction , objectives of the study, Chapter two Literature review and theoretical background, Chapter three material and method , Chapter fours results and Chapter five discussions, conclusion , recommendations, then references, appendix.