## **Summary**

The CAD is the leading cause of death in the US in both men and women. This disease happens when the arteries that supply blood to heart muscle become hardened and narrowed. The serious complications of CAD are angina pectoris, unstable angina, myocardial infarction, causing permanent heart damage, and sudden cardiac death as the result of arrhythmias(*DMD*. 2009).

Patients admitted to CICU tend to have specialized health care needs, and often require continuing monitoring. These units need highly efficient health care providers, including nursing personnel. Nurses working in these units require highly technical preparations in order to enable them to meet the patient's needs, and life threatening situations. A standard of nursing care is especially needed in these units in order to guarantee a high level of quality care (Youssef, 2009).

The outcomes are the measurement criteria of the effectiveness of the care given, that is to say, the overall condition of the patient. Hence, outcome standards are used to evaluate patient care. Since outcomes are the results obtained through the completion of a process, therefore, well-defined structure and process standards greatly increase the likelihood of achieving desired outcomes. However, if the structure and process are correct but client outcome does not meet the

standard, and then care is not satisfactory (Blumenthal, & Michos, 2009).

The aim of this study is to develop nursing care standards for patients with coronary artery disease at the selected setting through; designing nursing care standards based on reviewing related literature, examining the proposed standards validity based on experts point of view, determining the applicability of the proposed standards based on actual observation of its usage by nurses, and determining the effect of nursing care standards on patient's outcome.

The standards of nursing care were designed by the researcher; structures, process and outcome indicators based on literature review, it consists of 136 main items of the structures standards, and 452 main items of standards of practices and 10 items of outcome indicators standards. The study was conducted at CICU at sohag university hospitals.

Three groups of subjects were included in the study, namely experts, staff nurses and patients admitted in the previously mentioned setting.

*Experts:* The group of experts consisted of nurse educators from nursing educational institutions Cairo University and physicians, head nurse mangers from sohag university hospital and Assuit University hospital. The jury group was selected for testing the face and content validity of the proposed NCSs. The

total number of jury group was 35 members (5 Cairo university, 5 Assiut university and 25 sohag university. They consisted of three categories:

Staff nurses: A convenience sample of all available nurses who have been working in the study setting at the time of the study were included. They were 34 nurses. As regards qualification of the study sample, majority of the nurses had diploma from schools of nursing.

**Patients:** A total study subjects of one hundred and fifty adult male and female patients were selected from the above mentioned setting, according to the following criteria:

- Newly diagnosed adult patients with CAD; (AMI and angina pectoris) aged ranged from 18 to 65 years.
- Free from other chronic diseases such as diabetes mellitus, liver cirrhosis, cancer, post open heart surgery, chronic obstructive pulmonary disease or renal diseases, and arthritis diseases.

Four data collection tools were used in the different phases of this study: (experts opinionnair sheet, nurses questionnaire sheet, observational checklists, and patient outcome sheet).

*Validity* was tested though a jury of 11 experts who composed of five professors, four assistant professor and two

lecturers. The experts reviewed the tools for clarity, relevance, comprehensiveness, simplicity and applicability, minor modification were done.

**Testing reliability** of proposed tools was done by Cronbach alpha test.

A pilot study was carried out on 10% of the study subjects, who were excluded from the main study. The pilot study was done to ensure clarity, applicability, feasibility of conduction of the study tools, and time needed for each tool to be filled in. some modifications were done according to the pilot study findings. Some questions and items were omitted, added or rephrased, and then the final forms were developed. Expert advice was sough to ensure module content validity.

## The present study finding the following:

The study finding revealed that, the majority of jury group agreed upon the general form (face and content validity) of the NCS, the jury agreement ranged between (82.00% to 100%).

Furthermore, the findings revealed that majority of staff nurses agreed upon the importance of all designed NCSs ranged between (76.47% and 100%), with highly statistically significant difference regarding post structured applications (P<0.001\*\*) and the majority of staff nurses at CICU performed

all designed NCSs ranged between (75.42% and 90.9%). Furthermore, regarding the nursing outcome indicators and patients outcome represented highly statistically significant difference between both groups study and control P<0.001.

## In the light of the study finding, it is concluded that:

The statistically significant difference between CICU structural attributes, nurses performance and outcome indicators post the designed NCS applications, have statistically significant positive which effect on patients outcome in the study group including their length of hospital stay and complications.

## The recommendations based on the results:

- Procedure manuals, policies, guideline, protocols for caring of patient with CAD, should be available in each CICU in adequate number and in both Arabic and English language.
- All opportunities available for improving staff nurses knowledge regarding caring of patients with CAD at CICU as workshops, seminars, conference, and in-service education program should be utilized.
- The appropriate equipment and supplies necessary to adopt safe practice regarding caring of patients with CAD must be accessible for all nurses at CICU at all times.