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Al-Quds University

Evaluation of the Quality of Cardiac Care Services at the European Gaza Hospital

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Dedication

To the soul of my father,to my mother, my wifeand my sons and daughters, for their, encouragement and support all the way.

To everyone who contributed to make this study a reality, thank you.

Abed Al-Latif Al Haj

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Abed Al-Latif Al Haj

Declaration

I certify that this thesis submitted for the degree of master is the result of my own research, except where otherwise acknowledges, and that this thesis (or any part of the same) has not been submitted for higher degree to any other university or institution.

Signature:

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Date: 16/12/2015

Abstract

The aim of this study is to examine the current status of cardiac care services in European Gaza Hospital inorder to determine the quality of these services. The sample of the study consisted of all physicians, surgeons, and nurses working in both cardiac surgery and cardiac catheterization lab., their total number was 40. Also, 100 patients (80 from cath. lab., and 20 from cardiac surgery) were included in the study to measure their level of satisfaction.For data collection, the researcher used checklist for the availability of items in three major indicators (structure, process, and outcome), and to measure patients satisfaction, 18 items questionnaire developed by the researcher was used, and patients records were used for further data collection. Validity and reliability of the questionnaire was tested via a pilot study on 30 patients. For data analysis, the researcher used SPSS program, version 20, including frequencies, percentage, correlations, mean scores, and (t) test. The results showed that the structure of both departments was appropriate to offer quality cardiac care services, as both departments are closed together with one door in between.The structure meet the criteria of Agency for Accreditation for Cardiovascular Excellence. Both departments have well-trained staff in cardiac care with training and experience from different hospitals (Turkey, Belgium, Romania, Qatar, Spain, and Jordan). Process indicator reflected high quality care, but there was a weakness in introducing staff to the patients. The number of nurses working in ICU post cardiac surgery was inadequate (9 nurses / 5 beds). The majority of equipment and supplies are available, but sometimes there was a shortage in availability of stents and catheterizations wires and guides. Outcome indicators reflected quality care and the mortality rate was in accordance with global standards. The results also showed high level of patients' satisfaction, and there were statistically insignificant differences in patients' satisfaction related to gender and age of patients. In addition, there were insignificant differences in satisfaction between patients from cardiac surgery and patients from cardiac cath. The results indicated the linkage between structure and process indicators and the outcome indicators, and that patients satisfaction could be a measure of quality service in health facilities. The study concluded that special attention should be emphasized by stakeholders and decision makers to maintain and improve the quality standards in cardiac care services in the Gaza Strip.

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List of abbreviations

AEC	Angiotensin Enzyme Converter
AHA	American Heart Association
CAD	Coronary artery Disease
CABG	Coronary Artery Bypass Grafting
CDC	Center for Disease Control and Prevention
CCL	Cardiac Catheterization Lab.
CFHC	California Family Health Council
CHD	Coronary Heart Disease
CVD	Cardiovascular disease
CS	Cardiac Surgery
EGH	European Gaza Hospital
GS	Gaza Strip
ICCU	Intensive Coronary Care Unit
MOH	Ministry of Health
NGOs	Non-governmental Organizations
PCBS	Palestinian Center Bureau of Statistics
PCI	Percutaneous Coronary Intervention
PHC	Primary Health Care
SPSS	Statistical Package for Social Sciences
UNRWA	United Nations Relief and Work Agency for the Palestinian Refugees
WHO	World Health Organization
WB	West Bank

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Chapter One

1.1 Introduction

Cardiovascular diseases(CVDs)are a class of diseases that involve the heart or blood vessels, it include coronary artery disease(CAD),arrhythmias ,heart infectionsand heart defects including congenital heart defects (Centers for Disease Control and Prevention CDC, 2009). CAD is a common form of CVD sanditis the major source of morbidity and mortality in the developing and developed countries. It is caused by a the rosele rosis which restricts blood flow to the heart and when the blood flow is completely cutoff ,the result is heart attack(Sakakura, 2013; CDC,2009).CVDs are among the most common leading causes of morbidity and mortality all over the world and are considered as one of the serious life threatening diseases (Braunwald, 2005). An estimated 17.3 million people died from CVDs in 2008, representing 30% of all global deaths, of these deaths, an estimated 7.3 million were due to coronary heart disease and 6.2 million were due to stroke, and the number of deaths will increase to reach 23.3 million by 2030 (WHO, 2011; Mathers and Loncar, 2006). In addition, more than 80% of all CVD deaths occurred in developing countries with low and middle income (WHO, 2009).

In Palestine, cardiac disease (ischemic, rheumatic, pulmonary, and other heart disease) was reported to be the number one cause of death, accounting for 21% of all deaths in 2005, increased to 25.4% in 2010, 22.4% in 2011, and 31.2% in 2012 (MOH,2000, 2010, 2011, 2012).

In the Gaza Strip, patients who sustain a heart attack are treated medically in Intensive Coronary Care Units (ICCU) in Al Shifa hospital, Nasser hospital, Al Aqsa hospital, and Kamal Odwan hospital. By the establishment of the Palestinian National Authority (PNA),

several interventional procedures started at Al Shifa hospital with Coronary Artery Bypass Grafting (CABG) by Egyptian missions. The first cardiac surgical center was opened officially in 2010 at Al Shifa hospital, another center was opened at European Gaza Hospital (EGH) in 2012. The first cardiac catheterization center was opened at EGH on November 2006 with diagnostic procedures only, and the first interventional cardiac catheterization was on November 2008. Nowadays, a well-equipped cardiac center is established at EGH, including cardiac catheterization Lab., cardiac surgery center with 5 beds of intensive care for immediate post-op management of patients who undergo cardiac surgery. Both centers are working under full responsibility of qualified Palestinian teams. Improving the quality of health care services is an important goal for successful health institution, and to do that, assessment and evaluation of health care services is the best way to define strengths and weaknesses of these services. In this regard, previous literature reported lack of documentation about major disease and their treatment, lack of systematic outcome assessment, variations in providing care for similar patients, and lack of formal monitoring systems (Schuster, 1998; Chassin and*Galvin*, 1998; President's Advisory Commission on Consumer Protection and Quality First, 2000; Mainz, 2001).

With the expansion of cardiac catheterization laboratories and the increase in the complexity of procedures, it is essential to have an active quality assurance / quality improvement (QA/QI) system in place regardless of the laboratory setting (Bashore et al., 2012), and the first scientific forum on assessment of quality of care and outcomes research in cardiovascular disease was held in 1999 (American Heart Association – AHA, 2000).

To evaluate the quality of health services in any health facility, it is important to assess three indicators; structural indicatorswhich describe the resources used by a health system or organization to deliver its services, process indicators which asses what the health