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Evaluation of Colorectal Cancer Management in the Gaza Strip

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Evaluation of Colorectal Cancer Management in the Gaza Strip

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Dedication

Every challenging work needs self-efforts as well as guidance of those who were very close to our heart. My humble effort I dedicate to my sweet and loving father and mother who always give me an endless source of power and encouragement.

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Dalia T. El-Wehedi

Declaration

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

Signed: ……

Dalia Talaat El-Wehedi

Date:

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Abstract

Colorectal cancer (CRC) is the leading cancer among men in Gaza Strip (GS) and it is considered the second common cancer after breast cancer for both sexes combined. The evaluation of the services and facilities used for the management of colorectal cancer is essential for monitoring the health care system effectiveness in managing and preventing CRC. This is a triangulated study was conducted to evaluate the services that are provided to CRC patients who were diagnosed in the period 2016-2017. The study is a triangulated study, which is composed of both quantitative and qualitative components. The quantitative data was represented by cross sectional study by using four checklists that identified the number of the available beds and rooms for patients, available health care human resources, diagnostic equipment and exploring the completeness of cancer patients' medical files. For the qualitative data, it included interviews with key informants as well focus groups with colorectal cancer patients.

The results of the study showed that there are shortages in the health care staff and weakness of training, inappropriate infrastructure of oncology buildings, rooms and beds and deficiencies in necessary equipment and supplies. Moreover, the prevention and screening services for colorectal cancer are totally absent in MOH strategies. In addition, colorectal cancer diagnostic services are facing many barriers that lead to the delay in the diagnosis of the disease. There are obvious shortages in some facilities, which are necessary for diagnosis as fecal occult blood tests, colonoscopies, tumor marker test, Gamma Camera, Linear accelerator, MRI and CT scanners, augmented by poor awareness of patients, physician and health system role. Treatment of colorectal cancer disease faces many obstacles that decrease the quality of care such as frequent unpredictable shortage in the essential chemotherapy medications, lack of oncology specialized surgical human resources and the absence of radiotherapy treatment. This is joined by the absence of palliative care and poor psychological support to the colorectal cancer patients and their families.

The information system, which is represented by cancer registry, research and colorectal cancer patients' medical files show a lot of gaps and serious defects that affect the quality of the provided services to colorectal cancer patients. All the gaps and weaknesses in the provided care are accompanied by the deep dissatisfaction of the colorectal cancer patients.

The weaknesses and gaps in the strategy and services used for colorectal cancer management in Gaza Strip include the administrative planning to implementation issues. The gaps are related to political, financial and administrative issues that are reflected on the quality of the service provided to the CRC patients.

The study recommends the enhancement of prevention and screening programs for colorectal cancer disease, improving the contact between the variable sectors providing the management care of colorectal cancer disease, providing all the needed infrastructures and essential medications used in the management of the colorectal cancer patients. Also starting a comprehensive psychological care for the colorectal cancer patients and improving the contact between the health care provider and the colorectal cancer patients and finally starting a deep provision of the information system that represented by establishing auditing system for the medical files, improving the cancer registry system and enhancing the research.

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List of Abbreviation

AC	Adjuvant chemotherapy
ACS	American Cancer Society
ASGE	American Society for Gastrointestinal Endoscopy
BMI	Body Mass Index
CA 19-9	Carbohydrate Antigen 19-9
CEA	Carcinoma Embryonic Antigen
CI	Confidence Interval
CRC	Colorectal cancer
CT	Computed tomography
EPAGE I/II	American Society for Gastrointestinal Endoscopy I/II
ERUS	Endo-rectal Ultrasound
FC	Flexible Colonoscopy
FOBt	Fecal Occult Blood test
FS	Flexible Sigmoidoscopy
GPs	General Practitioners
GS	Gaza Strip
HIS	Health Information System
IAEA	International Atomic Energy Agency
ICD	International Classification of Disease
MOH	Ministry Of Health
MRI	Magnetic Resonance Imaging
NCCP	National Cancer Control Program
NCD	Non- Communicable Diseases
NGOs	Non-Governmental Organizations
OECD	Organization for Economic Cooperation and Development
OR	Odd's Ratio
PA	Physical activity

PCO	Patient Centered Outcome
PCRF	Palestine Children's Relief Fund
PCSB	Palestinian Central Bureau of Statistics
PET scan	Positron Emission Tomography scan
RCR	Royal College of Radiologists
SPSS	Statistical Package for Social Science
UNRWA	United Nations Relief and Work Agency for Palestine Refugees
US	Ultrasound
USAID	United States Agency of International Development
WHO	World Health Organization

Chapter One

Introduction

1.1 Overview

Cancer is a terrifying generic name that can affect anyone in any time in any part of the body, which is unfortunately considered nowadays the major cause of morbidity and mortality worldwide. There are 8.8 million deaths yearly from all types of cancer worldwide, which represents one of each six deaths (WHO, 2015). Colorectal Cancer (CRC) is considered the third most common cancer and the fourth leading cause of cancer related deaths worldwide (Favoriti et al., 2016). The CRC incidence and mortality rates vary according the country developmental index, as in low income countries the incidence and mortality rates increasing rapidly and decreasing or stabilizing rates in high income countries, in 2030 the CRC cases worldwide will increased by 60% to more than 2.2 million new cases and 1.1 million deaths（Arnold et al., 2016). The early diagnosis and treatment of CRC will increase the chances for survival, as being late in diagnosing or controlling the CRC will result in the progression of cancer and finally to disability and death (WHO, 2017[a]).

In Palestine, the burden of cancer in the mortality rate is large, as it constitutes the second major cause of death after the cardiovascular diseases. Colorectal cancer is considered the second cause of cancer related deaths after breast cancer in both sexes, which shows that there is an observed increment in the incidence of CRC as the second most common cancer after the lung cancer in males is the CRC (Ministry of Health, 2015). As recently, Ministry of Health (MOH) reported the CRC as the leading cancer in males, which represents 15.5% of all male cancers.

Worldwide variation in colorectal cancer incidence and outcomes may be due in part to the disparities in access to health care and services. Any defect in the health care system can prevent the optimal care at any point on the patient's pathway has the potential to have an adverse impact on patient outcomes (New Zealand Ministry of Health, 2011). For that, the management of colorectal cancer should be a multidisciplinary approach involving all the health system components, and should be guided by a precise staging and histopathology. For this reason, all CRC patients should be effectively treated by a team consisting of pathologists, radiologists, surgeons, oncologists, and colorectal nurse specialists (Leslie & Steele, 2002).