

Colorectal Cancer in Egypt: Clinical, Life-Style, and Socio-Demographic Risk Factors

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ABSTRACT

Background: Colorectal cancer (CRC) is cancer of the colon and rectum. It arises from the mucosa that lining the colon, rectum or both.

Aim of the study: Determination of the clinical, lifestyle, and sociodemographic risk factors of colorectal cancer in Egypt

Patients and Methods: A hospital-based, case-control study design was performed. 160 cases with CRC and 100 healthy subjects were recruited in this study. An endoscopic, radiological and pathological methods and clinical examinations had been done for the collection of data.

Results: The most significant risk factors for medical and family were obesity, DM, bowel habit change, inflammatory bowel disease (IBD), precancerous colonic lesions, no NSAIDs use, no HRT use, cholecystectomy, and family history of CRC (ORs=2.12, 2.13, 1.97, 4.91, 5.46, 3.69, 6.3, 3.84, and 8.88; respectively).

Conclusion: The most important risk factors of CRC were obesity, DM, IBD, precancerous colonic lesions, and family history of CRC. Risk factors of CRC are commonly controllable.

Keywords: Colorectal Cancer; Life-Style; Clinical; Socio-Demographic; Risk factor.

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INTRODUCTION

CRC is a type of cancer that affects the colon and rectum. The mucosa of the colon, rectum, or both are the commonest site of origin.¹

CRC affects people of all races and ethnicities. It is the third most often recognized cancer in the world, behind lung and breast cancer. In developed regions and countries, such as Europe, North America, and Australia, the greatest rates (6%) are seen. In developing areas, such as Africa and South Central Asia, the rate was lower. In 2008, over 1.200.000 new CRC patients were diagnosed worldwide, with 608,700 deaths, so that it is the 4th most reported reason for cancer death, reporting about 8.0 % of all cancer deaths (1). In the United States, CRC is the 4th more reported cancer.

In Egypt, the estimated rate of CRC is 6.5 % of all malignant tumors, CRC became the sixth most commonly recorded tumor in the years 2002-2003, regarding the National Cancer Institute registry at Cairo University.⁵ It was 4.2 % in men and 3.8 % in females.⁶ CRC is also widespread in Egypt, with 14.0 % of all colonoscopies revealing the presence of the disease.⁷

A population-based study in Garbiah, Egypt has reported higher the rates of colorectal cancer in cases aged 40 years and younger. This rate was slightly higher than rate of the same age groups in the US.⁸

CRC affects both men and women.² It is the 3rd most reported cancer in males and the 2nd most common cancer in females. In Egypt, a low rate of CRC (6.9/100,000 for men and 5.1/100,000 for women) were recorded by the Middle East Cancer Consortium in the duration of 1997-2011. Also, a lower rate was recorded from Garbiah Cancer Registry in Egypt for duration from 2000-2002 age-standardized incidence rates (ASRs) were 6.5/100,000 for men and 4.2/100,000 for women.

High socioeconomic status (SES) is also related to an elevated risk of the development of colorectal cancer. It is predicted that CRC risk being approximately 30.0% increase in the lowest in comparison with the highest SES quintile.

There is also evidence that lifestyle can increase the risk of cancer and that changing one's lifestyle can significantly reduce the cancer burden.¹²

Quitting smoking, increasing physical activity, losing weight, improving diet, and restricting alcohol