Colorectal cancer in Egypt

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Despite comparatively lower incidence rates of colorectal cancer than in industrialized countries, a rising trend in the incidence of colorectal cancer has been observed in some countries of the Eastern Mediterranean Region.

Egypt: ASR 5.6 World ASR: 17.2





Mortality to Incidence Rate MIR = 0.7 Egypt: ASR 3.7 World ASR: 8.3

Incidence Relative Ratios

Egypt ASR
1.2
3.6
3.5

THE ROLE OF DIETARY AND LIFESTYLE FACTORS

IN THE DEVELOPMENT OF COLORECTAL CANCER:

CASE CONTROL STUDY IN MINIA, EGYPT

Eman Mohamed Mahfouz1, Refaat Raouf Sadek1, Wafaa Mohamed Abdel- Latief2, Fadia Abdel-Hamed Mosallem1

and Ebtesam Esmail Hassan1

- The most significant dietary and lifestyle CRC risk factors were higher consumption of red meat (OR = 57.1), preserved food (OR = 39.4),
- artificial sweeteners (OR = 20.8), fast foods (OR = 12.8), soft drinks (OR = 4.6), spicy foods (OR =4.2), processed meat (OR = 2.4), and smoking (OR = 8.8). The most significant protective factors were physical activity (OR = 0.001), calcium rich diet (OR = 0.08), higher consumption of fruits and vegetables.

Currently most cases of colorectal cancer in EGYPT are diagnosed in advanced stages. Despite evidence that screening can reduce colorectal cancer incidence and mortality, it is underutilized and offered to only a small proportion of target populations in our country.

Early Detection



El-Bolkainy et al, J Egyptian Nat Cancer Inst 2006 215 surgical patients

Early diagnosis is based on improved public and professional awareness of signs and symptoms of cancer. So, in EGYPT early diagnosis requires education of the public to improve cancer awareness, training of health care professionals, availability, affordability and good access to diagnostic and staging investigations, treatment services and follow-up care in public health services.

Early Detection

Policy statement and recommended actions for early detection of breast, cervical, colorectal, oral and prostate cancers in the Eastern Mediterranean Region

Egypt

Cancer	ASR			
Breast	49.5			
Prostate	7.8			
Colorectal	5.6			
Oral Cavity	2.4			
Cervix	2.3			
World Health Organization				

Lifestyle, Occupational, and Reproductive Factors and Risk of Colorectal Cancer

An-Chi Lo, M.P.H.1 • Amr S. Soliman, M.D., Ph.D.1 • Hussein M. Khaled, M.D.2 Ahmed Aboelyazid, M.D.3 • Joel K. Greenson, M.D. 2010

A history of pesticide exposure and more frequently eating food directly from farms were significantly associated with a higher risk of colorectal carcinoma Agricultural and industrial exposures were associated with increased risk of colorectal carcinoma, whereas prolonged lactation and increased parity were inversely associated with colorectal carcinoma in women.

• A Comparative Study of Rectal and Colonic Carcinoma: Demographic, Pathologic and TNM Staging Analysis TAREK N. EL-BOLKAINY, M.D.; MONA A. SAKR, M.D.; AKRAM A. NOUH, M.D. and NILLY H. ALI EL-DIN, M.D.*

The Departments of Pathology and Epidemiology & Biostatistics*, The National Cancer Institute, Cairo University.er.

• **Concluded that** Egyptian patients with rectal carcinoma are younger than those with colonic carcinoma. Otherwise, patients with rectal carcinoma are similar to colonic carcinoma with regard to sex distribution, histological types and TNM stages.

Colonic Cancer



Colon	CR	ASR	%
3	3.1	4.7	2.63
Ŷ	2.5	3.8	2.28

Rectal Cancer



Rectum	CR	ASR	%
3	1	1.3	0.84
Ŷ	0.8	1.1	0.72

•Age distribution, polyps and rectal cancer in the Egyptian populationbased cancer registry

Darlene Veruttipong, Amr S Soliman, Samuel F Gilbert, Taylor S Blachley, Ahmed Hablas, Mohamed Ramadan, Laura S Rozek, Ibrahim A Seifeldein 2013.

Over the 9 year-period, 1364 colorectal cancer cases were included. The disease incidence under age 40 years was relatively high (1.3/105) while the incidence in the age groups 40 and over was very low (12.0/105, 19.4/105 and 21.2/105 in the age groups 40-59 years, 60-69 years and > 70 years,

respectively).

The vast majority of tumors (97.2%) had no polyps and 37.2% of the patients presented with primary lesions in the rectum. Colorectal cancer was more common in patients from urban (55%) than rural (45%) areas. The registry data of Egypt shows a slightly higher incidence of colorectal cancer than the United States in subjects under age 40 years.

National Cancer Control Plan of Egypt (2016-2020) has been developed in response to the increasing burden of cancer and the high need for coordinated multi-sectoral action.

In Egypt, there are many obstacles that face the attainment of effective care, better diagnosis and early detection of cancer.

One of the main obstacles is the inadequate education of health care providers and the public as well in addition to the financial constraints.

Egyptian National Cancer Control Program

- 1. Registry
- 2. Prevention
- 3. Early diagnosis
- 4. Management
- 5. Palliative care
- 6. Research



Causes of Increase in Cancer Cases 2013-

- 400000
- 300000
- 200000
- 100000
- 0



Population structure
Population growth
Baseline cases

Forecasted CRC incidence up to 2050



The distribution of medical centers and trained medical professionals delivering cancer services shows great pattern of inequality being concentrated in Cairo and the big cities

At the same time, a great opportunity in Egypt is having over 5000 PHC centers distributed all over the country covering rural and urban areas and can play the key role in the control of chronic diseases including cancer as a part of integrated non-communicable diseases control policy evolved by WHO.

Recommended actions:

Conduct a situation analysis for planning.
 Consider colorectal cancer screening.
 Implement an early detection program.
 conduct regular monitoring and evaluation.

