Public Awareness of Colorectal Cancer: Knowledge, Attitudes and Practice

Ekram Ben Sauod[1@]**, Mohammed Eshgaifa**[2]**, Khaled Alarbiy**[2]**, Ahmed Bulmseadah**[2]**, Abdul Malik Adel Abdul Malik**[2]**, Wijdan Madi**[2]**, Farag Elfallah**[2]**, Areej Al Gatoni**[2]**, Khadija Altwaty**[2] **and Hashem Ali**[2]

[1]Department of Family and Community Medicine, Faculty of Medicine, Benghazi University.
[2]Medical Students and Internship Doctors, Benghazi, Libya.

ABSTRACT

Colorectal cancer (CRC) is one of the most common malignant tumors worldwide. Early detection of colorectal and breast cancer is critical in cancer control and prevention. There are two major components of early detection of cancer: education to promote early diagnosis and screening. Recognizing possible warning signs and symptoms of CRC, and taking prompt actions leads to early diagnosis. The study aimed to assess the awareness among Libyan people towards colon cancer including their knowledge about symptoms, warning signs, risk factors and early detection and screening, and also to explore the attitude regarding CRC prevention.

A descriptive cross-sectional study was conducted in Benghazi during December 2017- February 2018. A Convenient sample of 500 subjects was included in the survey, a verbal agreement to collect the data was asked to answer questions by direct interview using a questionnaire. A score technique was chosen as suitable method to identify the level of awareness regarding colorectal cancer.

The study subjects were 500 Libyan adult; 50% were males. The mean age was 42.49± 13.78. Mass media was a source of information among 57% of them. Also 57.6% of them knew the signs and symptoms of colorectal cancer correctly, 61.8% of participants heard about screening of cancer and 63% of them they avoid risk factors of colorectal cancer.

The level of awareness was an average. Efforts toward increasing awareness that cancer is treatable with a potential for cure if diagnosis early, are necessary. Periodic health educational programs to increase awareness of possible warning signs of colon cancer among general public can impact on the disease because early detection and diagnosis can help save lives.

INTRODUCTION

Colorectal cancer CRC is one of the most common malignant tumors worldwide.[1-4] The overall mortality from CRC is 60%, which represents the second leading cause of cancer death in western societies.[1,2] Although CRC is relatively rare in the developing world, the condition becomes increasingly common over the age of 50. CRC was found to be the leading malignancy in Libyan males and the second most prevalent among females after breast cancer.[5,6] Diets with high in red meat and fat such as beef, pork or lamb or processed meat (such as bacon, sausage, hot dogs) lead to an increased risk for colon cancer. Other risk factors including smoking, overweight or obese, people who aren't physically active, People who drink alcohol in excess, personal or family histories of colorectal cancer and personal histories of inflammatory bowel disease also increase the risk for colon cancer.[1,2,7]

Cancer control efforts and resources especially in developing countries should place more emphasis on cancer prevention, and to improve the prognosis for cancer patients in developed countries emphasis is now placed on public education and screening and on the fact that early diagnosis can save lives.[1,7] Secondary prevention aims to detect and remove lesions at an early or pre-malignant stage.

Several potential methods exist: Widespread screening by regular annual fecal occult blood (FOB) testing reduces colorectal cancer mortality and increases the proportion of early cancers detected.

These tests currently lack sensitivity and specificity and need to be improved. FOB Screening should occur in the general population after age 50.[1,2] Colonoscopy remains the gold standard, which is the most effective screening method, but is expensive and carries risks; many countries lack the resources to offer this form of screening. Flexible Sigmoidoscopy is an alternative option and has been shown to reduce overall colorectal cancer mortality by approximately 35% (70% for cases arising in the recto sigmoid).[1,2,8] It is recommended in the USA every 5 years in all persons over the age of 50.[1,2] So Proper surveillance programs need to be in place and healthcare policy should be adjusted to take into account the more prevalent and pressing cancers in society.[9]

The study conducted to assess the awareness among Libyan people towards colon cancer including their knowledge about symptoms, warning signs, risk factors and early detection by screening, and to explore the attitude regarding CRC prevention.

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MATERIALS AND METHODS

A descriptive, cross- sectional study was conducted in Benghazi during the period December 2017- February 2018. Data was collected by direct interview using a questionnaire. A survey questionnaire covered demographic data, knowledge, attitude and practice of people regarding CRC. Inclusion criteria: Age group between 18-65 years and non health personnel. A convenient sample of 500 subjects was selected from the community at different organizations, schools, companies, administrators in the universities and health centers in Benghazi city. A score technique was chosen as suitable method to identify the level of awareness regarding colon cancer, eight questions, six of these questions given 1 mark and two questions given 2 marks to be the total of ten marks. Categorized score as: deficient (poor), intermediate (average), optimum (good). 1- 4 marks as deficient (poor) < 50, 5- 7 marks as intermediate (average) 50-80% and 8-10 marks considered as optimum (good) >80 %. The subjects responded to the questionnaire without any outside interference, where a score was given to each correct answer. The highest the score represents a higher or better level of awareness regarding to CRC among responders. Data were analyzed by statistical program (SPSS) version 17, simple statistical parameters such as mean and standard deviation were calculated. Verbal agreement from participants was obtained.

RESULTS

The study subjects were 500 adult Libyans; 250 males and 250 females. The mean age was 42.49± 13.78. There were 24.3% employers, 20% house wives and 15.7% were teachers. Most of participants (83%) were had secondary level of education or higher and the entire Participants residency from Benghazi (Table 1).

Table 1: Demographic characteristics of respondents, Benghazi 2017.

Characteristics/Parameters	Details	No.	%
Age	18- 37years	193	38.6
	38-57years	237	47.4
	≤58years	70	14
Gender	*Male*	250	50
	Female	250	50
Occupation	*Businessman*	65	13
	Engineer	36	7.1
	Student	52	10.4
	Teacher	78	15.7
	House wife	100	20
	Employer	121	24.3
	Others or retired	48	9.5
Level of education	*Primary*	85	17
	Secondary	172	34.3
	College	243	48.7
Participants residency from Benghazi		500	100%

Fifty seven percent of the participants had heard about colorectal cancer, sources of information were mass media followed by relatives and friends then books and magazine and only 7.2% from health workers (Table 2).

Table 2: Source of information about colon cancer among study population.

Source of information	%	No.
Mass media	285	57
Relative and friends	190	38
Books and Magazine	70	14
Health workers	36	7.2
Previous experiences	55	11
Not remember or no answer	177	35.4

The study revealed that the majority of respondents had knowledge about two or more than two of signs and symptoms of colon cancer, and few could correctly identify one of the signs and symptoms of CRC. Most of study subjects they said the risk factors for CRC is not known, while the respondents answered correctly knew that canned food and spicy food and environmental pollution are a common risk factors for colon cancer followed by genetic factors, smoking, alcohol or drugs and inflammatory bowel disease, stress and aging (Table 3).

Table 3: Public knowledge regarding to the signs / Symptoms and risk factors of colon cancer.

Knowledge (correct answer)		No.	%
Signs /Symptoms	Correct answer of two or more than two of S/S	288	57.6
Risk factors of cancer colon	Genetic causes	140	28
	Inflammatory bowel disease	103	21
	Food	290	58
	Stress	100	20
	Alcohol, smoking, drugs	141	2.28
	Aging	68	813
	Environment	203	40.6
	Not known	312	46.2
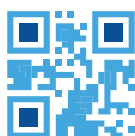
Nearly half of participates answer colon cancer can be detected early by periodic Colonoscopy/ Sigmoidoscopy (Table 4).

Table 4: Attitude of participants regarding prevention of cancer colon.

Attitude	Answer				Don't know	
	YES		NO			
	No.	%	No.	%	No.	%
Can cancer colon be prevented?	218	43.6	282	56.4	0	0
Have you ever heard of colon cancer screening?	309	61.8	101	20.2	90	18
Can colon cancer detected early by Periodic colonoscopy/ Sigmoidoscopy?	243	48.6	57	11.4	200	40

Figure (1) demonstrates the respondents practice regarding avoidance of carcinogenic factors. Most of them answered sometimes and few respondents said they usually avoid the carcinogenic risk factors.
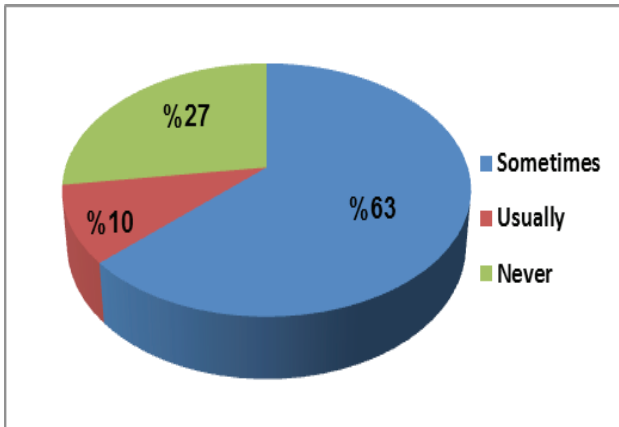

Figure 1: Distribution according of participants' practice of avoidance of carcinogenic risk factors.

Vast majority of participant's knowledge regarding colorectal cancer was an average level (Table 5).

Table 5: Participant's knowledge score regarding colorectal cancer in Benghazi.

Participant›s knowledge score	No.	%
Poor	53	10.6
Average	338	67.6
Good	109	21.8

DISCUSSION

Worldwide, the majority of colorectal cancers continue to occur in industrialized countries, although incidence rates are rapidly rising in less-developed nations as they increasingly adopt features of a Western lifestyle.[10] WHO report stated that among men and women in both industrialized and developing countries lung, colorectal and stomach cancer are among the five common cancers worldwide.[11]

Knowledge regarding sign and symptom in current study was average, compared with study conducted by Elzouki in (2010)[9] at Benghazi, concluded that a small proportion of Libyans were aware of the warning signals of cancer, widely publicized by cancer society's in western - countries.[9]

A previous study conducted in Benghazi in 2010, reported that smoking was the most common etiology identified by the general public, followed by environmental pollution industrial chemicals and preservatives in canned foods and that there is marked emotional reaction associated with diagnosis of cancer.[9] All subjects were asked whether they had heard the phrase warning signals of cancer, then they were asked to name symptoms or physical signs that should warn the person to see the physician for a check- up.[9] However, cancer awareness rates are remarkably lower than those reported from Gulf countries. Main reasons of low incidence of colorectal cancer in these countries could be due to the dietary factors, which is intake of more fruit and vegetables while, the increase in CRC rates is alarming in Saudi Arabia.[12] There is an increase in the incidence of CRC in Benghazi according to the cancer registry in Benghazi.[4,7,8]

Attia A, et al. (2010)[4] stated that according to the pattern of CRC in Eastern of Libya, the majority of operated patients in including patients operated outside Libya, staging of CRC was difficult. This could be because most of cases presented with advanced stage and the cause of could be due to lack of knowledge about CRC, this is to some extant is controversial to present results which recorded an average knowledge about CRC.[4]

However, most of the interviewed people have a positive attitude towards avoidance of carcinogenic risk factors of CRC which play a crucial role in prevention of cancer. The population survey in UK revealed low awareness of several CRC signs and risk factors and emphasizes the importance of continuing public education, particularly about the link between lifestyle behaviors and CRC. In UK around 110 people are diagnosed with bowel cancer every day. The comparison of the UK patients' outcomes in bowel cancer with those of other European countries shows that further improvements need to be made in relation to early diagnosis, access to treatment and funding of cancer services.[13]

WHO reported that millions of lives could be saved each year if countries made use of existing knowledge and the best cost-effective methods to prevent and treat cancer. In far too many cases, primary prevention early detection and palliative care are neglected in favor of treatment- oriented approaches regardless of whether they are actually cost-effective or whether they improve patients' quality of life. There is also lack of public support, cultural and religious factors, limited access to medicines like oral morphine.[11]

A telephone survey research conducted in USA described
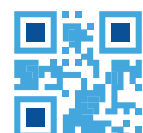
the association of awareness and knowledge with participation in (CRC) screening. Respondents (n =1302) had heard of CRC screening and exhibited high levels of CRC awareness and knowledge; only 74% had ever been screened.[14] A study in Spain found stated that high participation rates are of utmost importance for the success of any screening campaign. Efforts are needed to figure out modifiable and non-modifiable factors impacting adherence in each specific population. Knowledge of modifiable factors is gaining special interest in order to design specific interventions. Educational interventions (one-to-one or group interventions), reminders encouraging screening, and interventions based on reduction of structural barriers and out-of-pocket costs seem to be the most effective patient level interventions for increasing participation rates. Unfortunately, despite the efficacy of CRC screening in reducing incidence and mortality rates, screening uptake remains behind that of other screening-amenable cancers and rates continue to be low worldwide.[15] Whereas Saudi study that reported a deficiency of knowledge with regard to CRC screening that is unrelated to age or gender. The endoscopic modality was usually chosen by individuals who were aware of CRC screening. However, the fear of undergoing this investigation, for the same reason, would likely make them decide to choose less invasive testing, using barium enema or a CT of the abdomen.[16]

CONCLUSION

Overall, the study concluded that respondents (n =500) had heard of colon cancer. The score was 50-80% an intermediate (average) level of awareness regarding to colorectal cancer. Sigmoidoscopy is a very useful diagnostic tool in the colon cancer at an earlier stage which will permit adequate and prompt treatment.

RECOMMENDATIONS

Comprehensive cancer health education; primary and secondary cancer prevention programs in Libya should be commenced to increase awareness general public. Screening colonoscopy should be for all patients with of high risk of CRC. Finally we recommend further large KAP studies (knowledge, attitudes and practice) of CRC, with studies on the relationship between score knowledge and demographic characteristics.

ACKNOWLEDGMENTS

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