

Six Months Survey Study on Wrong Eating and Living Routine of Patients with Food Related Malignancy

(Original Research Article)

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Received 28 April 2022

Accepted 09 May 2022

Abstract:

This work considers as a part of food related malignancy studies. The present study offers an indication of degree of bowel malignancy prevalence in Ttipoli and Misurata, Libya from 2004 to 2014 to spot the part of wrong dietary routine and living way in developing bowel malignancy. 265 males and 203 females aged (25-85) years were diagnosed with bowel malignancy. A Face-to-face survey study was performed on 100 Libyan patients (51 men and 49 women) from 1 January to 30 June 2015. The data proves that incidence of bowel tumour is increasing over the time. Men are almost 13.2 % more likely than women to develop bowel tumour. There was a statistically significant association between males and females for getting bowel tumour ($P= 0.039$). This indicates that bowel tumour can affect both gender, but men are more likely to develop bowel malignancy than women. The results showed that the disease mostly occurs in men above 50 years old and in women above 30 years old. A six months survey study gets that 24% cases had family history. Women had family history to develop tumour than men. Moreover, results provide that more than half of patients are likely to drink 1 litter of water per day. Also, men tend to drink more water and consume red meat than women. All patients did not do exercise and had irregular sleeping time and all interviewed men were frequently smokers. Well nutrition with sports may encourage health strength of patients with bowel tumour.

Key Words: Food Related Malignancy, Bowel Tumour, Wrong Dietary Routine, Living Way, Misurata, Tripoli.

Introduction

No living and eating way faithfully are capable to defend from getting food related tumors, but several foodstuffs aid promoting health, maintaining the immune system and keeping the danger of tumor as little as possible (Dyer, 2014). Well nourishment is a course in which a correct food is consumed for expansion and replaces tissues (Varmus, 2013). Consequently, having a quantity of fruits, vegetables, fibers and antioxidants may remain a healthy body and diminish malignancy danger (Tantamango-Bartley at el, 2013). Theses food constitutes assist patients diagnosed with tumor acquire the true diet to fight the disease (Varmus, 2013).

Also, fruits and vegetables contain great quantity of vitamins, minerals and antioxidants, which supply a healthy weight and may reduce the danger of bowel tumor (Better Health Chanel, 2014; Tantamango-Bartley at el, 2013), particularly in the start of the disease. Generally, the healing options include surgery, radiation and chemotherapy (El Mistiri at el, 2013). This disease regards as a significant sickness in Libya (El Mistiri at el, 2013) and may stand for the second cause of fatality (Singh and Al-Sudani, 2001).

World Health Organization (WHO) reported that unwell nutrition may in charge for several malignancies linked to intestine and digestive system disorders such as colon, stomach, liver, mouth and pharynx tumors. Also, they noticed an affiliation between tumor dangers and other factors such as terrible diet customs, smoking, and proportion of animal to plant food consumed, nutrition quality, cooking techniques and living way (Tantamango-Bartley at el, 2013). Patients diagnosed with Digestive system malignancy at prior stages had a well again probability to survive from the tumor (Canadian Brest Cancer Foundation, 2013).

But, the poor dealing with medical and nutritional care in North Africa develops the death speeds (Ermiah at el, 2012). This work is to offer a general idea about bowel malignancy size in Tripoli and Misurata, Libya from 2004 to 2014, and to spot the role of wrong dietary customs in developing bowel malignancy.

Methodology

Face-to-Face Survey Study

A face-to-face interview was carried out on 100 Libyan patients aged 25-85 years (51 males and 49 females) at National cancer Institute in Misurata and Central Tripoli Hospital from 1 January to 30 June 2015. Data was collected on a form (questionnaire) during the interview with each patient.

A structured-administered questionnaire form was used to obtain information about living way and dietary program. The time of interview was 15 minutes. Each patient individually

interviewed. All patients with bowel malignancy were informed about the research aim. No patient refused our aim for this study. Participant's confidentiality and secrecy were insured by using codes instead of names for any personal identifier of the participants. Participants were asked to report their dietary customs and living routine through one year prior to getting hurt bowel malignancy.

The inquiries were just focused on family history, living ways such as consuming red meat, fast foods (restaurant foods, fried potato and junk foods), and drinking water and consuming fruits and vegetables; and exercise, walking , sports , activities , sleeping time, number of meals, and smoking status.

Statistical Analysis

Bowel tumour statistics were recorded from Misurata National Cancer Institute Registry and collected from Tripoli and Misurata, Libya . Approximately, 265 men and 203 women were diagnosed with bowel malignancy throughout 2004 to 2014. Descriptive statistics was analyzed using IBM SPSS Statistics Software (version 20.0, SPSS, Inc., Chicago, Illinois, USA).

The Pearson Chi-square test was used to evaluate the significance of the association between men and women being diagnosed with bowel tumour. In all tests, $\alpha < 0.05$ was regarded statistically significant. All confidence intervals (CIs) were calculated at the 95% level of statistical significance. Statistical analyses, percentage formulas of bowel tumour patients and graphs were produced by 2020 Microsoft Excel program.

Results and Discussion

Bowel Malignancy Patient Gender

The present study gives details about distribution of 265 males and 203 females diagnosed with bowel tumour in Tripoli and Misurata, Libya over ten years. The approximate percentage of men and women diagnosed with bowel malignancy was 56.6% and 43.4%, respectively.

The outcomes show that men are about 13.2 % more likely than women to develop tumour through the period from 2004 to 2014. Our finding specified that there was a statistically significant association between males and females for getting bowel tumour ($P= 0.039$). This implied that bowel tumour can affect both gender, but men are likely to develop malignancy than women.

This may designate to dissimilarity in some cultural status including smoking, drinking manners and job exposures (McCann, 2000). The total percentage of patients with bowel tumour in Tripoli and Misurata, Libya from 2004 to 2014 is shown in Fig.1.

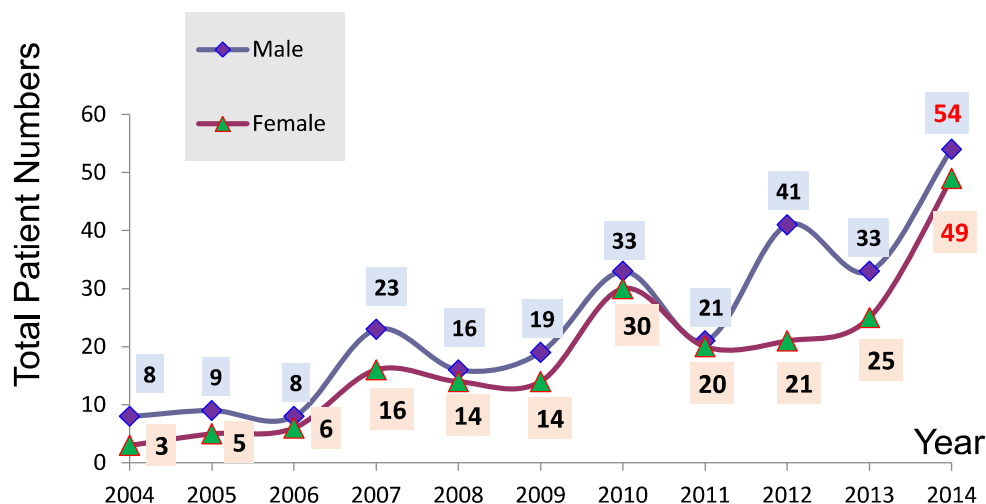


Fig. 1- Bowel Malignancy in Ttipoli and Misurata, Libya through Ten Years.

One of the significant finding in this study is the percentage of intestine malignancy had been increased overall ten years in Ttipoli and Misurata, mainly in the year 2014. The increase in tumor occurrence speeds may propose that there has been no advance made in malignancy manages in Western Libya. Surroundings may affect intestine malignancy and perhaps associated with various reasons, including huge stress (Singh and Al-Sudani, 2001), cigarette smoking and nutritional customs (Tantamango-Bartley at el, 2013). As well, wrong Living way and unwell diet routine represent as a threat factors for bowel malignancy (El Mistiri at el, 2013). Tumor prevention system should reduce the supposed number of new cases and build up the quality of living for those diagnosed with bowel malignancy (Canadian Brest Cancer Foundation, 2013).

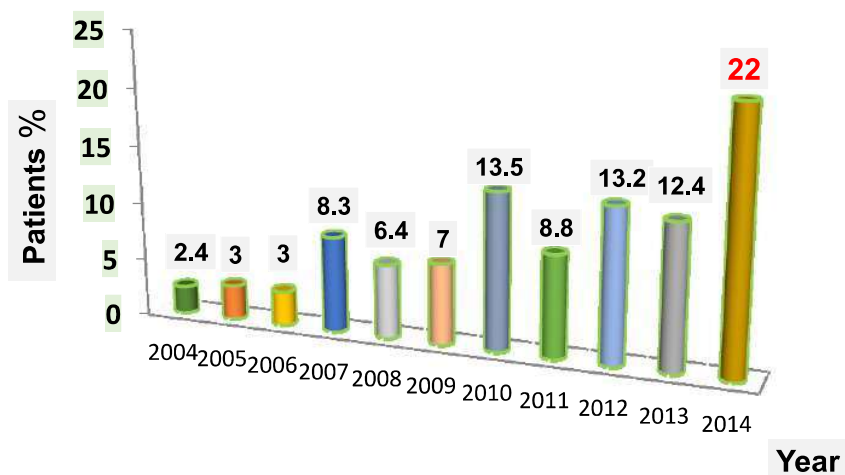


Fig.2- Percentage of Bowel Tumor in Ttipoli and Misurata, Libya during Ten Years.

Nutritional Customs and Bowel Malignancy

The face-to-face survey study was achieved on about 100 interviewed patients diagnosed with intestine tumor (51 males and 49 females) aged 25 to 85 years (Fig. 3). The weight of interviewed patients was from 45 to 71 Kg.

Data showed that bowel tumor typically taking places in men over 50 years old and in women on top of 30 years old. The most affected age was in men in the age group of 50-69 years and in females aged 30-59 years.

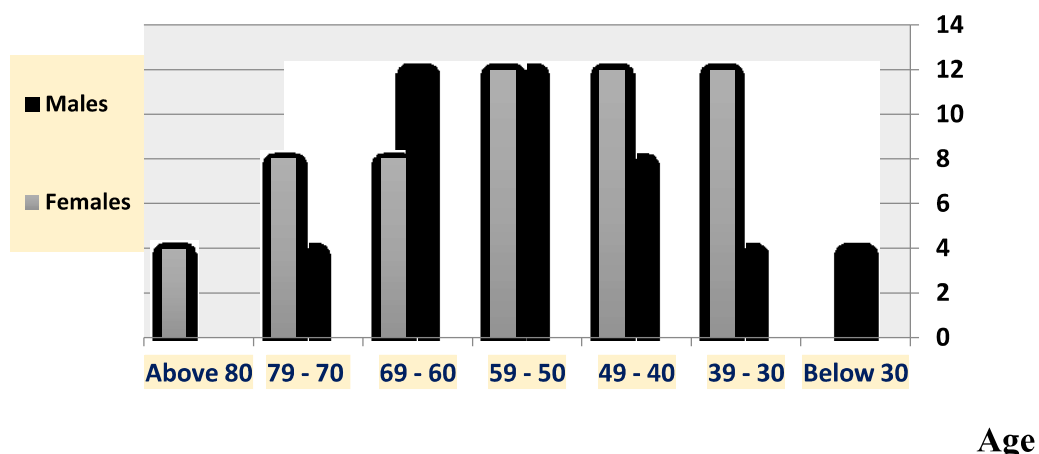


Fig. 3- The Age Groups of Interviewed Patients Diagnosed with Bowel Malignancy at National cancer Institute in Misurata and Central Tripoli Hospital, Tripoli, Libya (n= 100).

Along with 100 interviewed patients with bowel tumor, 35 % of men were eating loads of red meat, fast foods and fried potatoes. And 22% of women rarely consumed fruits and vegetables whilst, 19% had family history (Fig. 4).

Data provided that women had more family history to develop tumor than men. Researchers in the past reported that diet may influence on one third of all malignancy patients (Tantamango-Bartley et al, 2013). Moreover, there is an apparent involvement between living way, dietary customs and tumor hurt (Philips, 1975).

The continuous use of red meats (in particular fast foods) such as beef and lamb, processed meats and saturated fats may raise the danger of bowel malignancy. On the other hand, foods containing high-fibers such as whole grains, raw vegetables and fruits may guard from malignancy harm because they are logically low in fat and rich in antioxidants and anti-cancer constituents (Pippin, 2014). This specified that vegan foodstuffs may preserve against bowel malignancy.

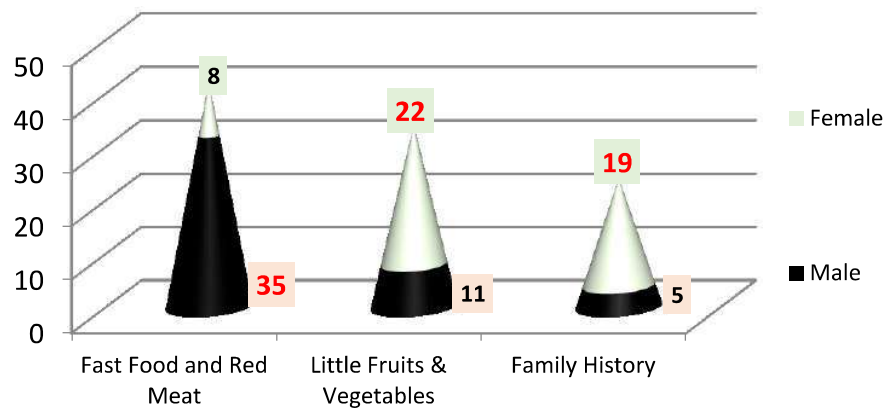


Fig. 4- Several Reasons of Bowel Malignancy

Besides, this work illustrated that more than half of patients were likely to drink 1 liter of water per day. Also, 12% of patients drink 2 liter of water every day (Fig. 5). Also, 3% of women drink one cup of water daily and another 3% of women drink 2 liter per day. This indicates that during the day, men tend to drink more water than women. Patients with bowel tumor in the early stage should drink 1 to 2 liters of water every day and consume various fresh vegetables and fruits without peel such as carrots, tomatoes, citrus fruits, apples, grapes and strawberries (ASCO, 2015; Campbell and Media, 2015; Dyer, 2014; Jaret, 2015). Also, this study sets that all interviewed men were frequently smokers. An earlier work documented that most Libyan men were cigarette smokers (Tantamango-Bartley et al, 2013). Also, all the interviewed cases did not do exercise and had irregular sleeping.

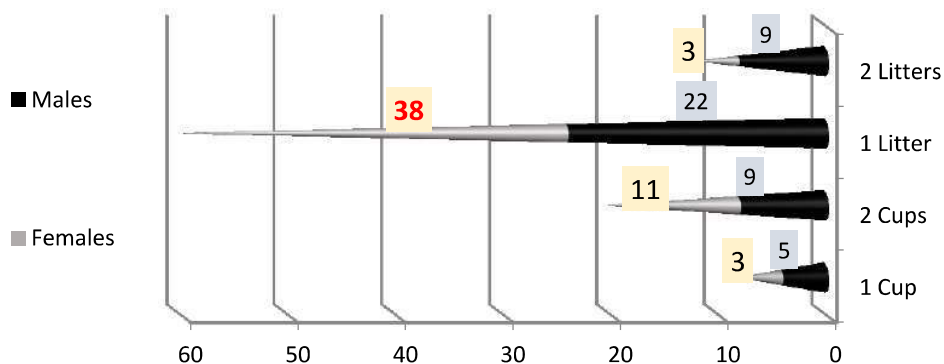


Fig. 5- Numbers of Water Intake Every Day

A number of vital guidelines including doing exercise with a well diet program, keep away from cigarette smoking (especially after food), pass up alcohol consumption and having breakfast may defend from bowel malignancy (Ghalaita at el, 2014). Also, medical treatment instructions must pay more attention in the beginning of bowel tumors (Ermiah at el, 2012). Additionally, patients with bowel malignancy should stop eating high fat diet including fried foods, margarine; and processed meats such as curing, salting, smoking meats, some sausages and burgers. They should frequently eat cooked vegetables, poultry (without skin) and fish. Also, patients should live away from community stress (ASCO, 2015; Campbell and Media, 2015; Dyer, 2014; Jaret, 2015).

Conclusion

Bowel malignancy disease affects more men than women due to the dissimilarity in several civilizing and dietary customs including smoking, number of times of drinking water every day, type of diet and nature of job. The incidence of bowel tumor is increasing over the time in Misurata and Tripoli, Libya. Men are about 13.2 % more likely than women to develop bowel malignancy. The most affected age was in males above 50 years old and in women above 30 years old. Among 100 interviewed patients, 35 % of men were eating a lot of red meat, fast foods and fried potatoes, and only 5% of them had family history. In comparison, 22 % of women rarely ate fruits and vegetables and 19% of them had family history. Also, men tend to drink water daily more than women. Our proof proposes that terrible diet routine and wrong living way including eating less amount of fruits and vegetables, eating high calorie fat /meat diet, eating high levels of fast foods; and smoking, job hazards and big stress may accountable for bowel malignancy occurrence. But, drinking a valuable amount of water, continuous eating of fresh fruits and vegetables without peel, cooked vegetables, whole grains, healthy fat such as avocado, olive oil and nuts may stop tumor. Additional works required for improving early discovery to reduce bowel tumor dangers.

Acknowledgment

The author acknowledges the office of National Statistics in National Cancer Institute in Misurata and the staffs in Tripoli Central Hospital for providing the research facilities. Also, we thank Asia Almabruk, Huda Eljunuti for collecting data. Also, a special thank to Fatma Almalky, Hania alghzery and Halema Alagab for their efforts in collecting cancer data and their assistance.

References

1. ASCO. 2015. Cancer. Net: diet and nutrition. Available from <http://www.cancer.net/navigating-cancer-care/prevention-and-healthy-living/diet-and-nutrition>.
2. Better Health Chanel. 2014. Fact sheet: cancer and food. Deakin University, Australia. http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Cancer_and_food.

3. Campbell M, Media D. 2015. Healthy eating: 5 main food groups. Available from <http://healthyeating.sfgate.com/5-main-food-groups-3976.html>.
4. Canadian Brest Cancer Foundation. 2013. Breast cancer in Canada. Available from <http://www.cbcbf.org/Pages/default.aspx>.
5. Dyer, D. 2014. Can food reduce your risk of breast cancer?. Available from http://www.breastcancer.org/tips/nutrition/reduce_risk/reduce_risk.
6. El Mistiri, M, Pirani, M, El Sahli, N, El Mangoush, M, Attia, A, Shembesh, R, Habel, S, El Homry, F, Hamad, S, Federico, M. 2013. Cancer profile in Eastern Libya: incidence and mortality in the year 2004, *Annals. Oncol.*, 21: 1924 – 1926.
7. Ermiah, E, Abdalla, F, Buhmeida, A, Larbesh, E, Pyrhonen, S, Collan, Y. 2012. Diagnosis delay in Libyan female breast cancer. *Bio Med Central.*, 5: 2 – 8.
8. Ghalaita, A. A. B, Shanbih, F. M. H, Hussain, M. A, Rajan, A. V. 2014. Enhancing healthy lifestyle of UAE nationals in Dubai. *Discov.*, 25: 75-82.
9. Jaret P. 2015. The Food Cancer Connection. Available from http://www.eatingwell.com/nutrition_health/immunity/the_food_cancer_connection.
10. McCann, J. 2000. Gender differences in cancer that don't Make sense-or do they?. *JNCI J Natl Cancer Inst.*, 92: 1560 – 1562.
11. Pippin, J. 2014. Meat consumption and cancer risk. Physicians Committee for Responsible Medicine [PCRM], USA. Available from <http://www.pcrm.org/health/cancer-resources/diet-cancer/facts/meat-consumption-and-cancer-risk>.
12. Philips, R. 1975. Role of life-style and dietary habits in risk of cancer among seventh-day Adventists, *Cancer Res*, 35: 3513-22.
13. Singh, R , Al-Sudani, O. 2001. Cancer mortality in Benghazi, Libyan Arab Jamahiriya, 1991-96, *East. Mediter. Health J*, 7: 255-273.
14. Tantamango-Bartley, Y, Jaceldo-Siegl, K, Fan, J, Fraser, G. 2013. Vegetarian diets and the incidence of cancer in a low-risk population, *Cancer Epidem. Biomark. Prev*; 22: 286-294.
15. Varmus, H. 2013. Overview of nutrition in cancer care. National Cancer Institute [NCI], USA. <http://www.cancer.gov/cancertopics/pdq/supportivecare/nutrition/Patient/page1>.