

# A Reflection on the Biopsychosocial Factors of a Colorectal Cancer Patient



**Josh Matthews** Year 4 Medical Student, University of Central Lancashire School of Medicine. [jmatthews17@uclan.ac.uk](mailto:jmatthews17@uclan.ac.uk)

## Introduction

During my critical care placement, I had a conversation with a 68-year-old gentleman who had colorectal cancer (CRC). For this reflection, I will refer to this patient as “Frank”. When I met Frank, he was recovering after surgery for the reversal of a loop ileostomy. Frank was diagnosed with colorectal cancer in 2021 after being hospitalised for a bowel obstruction. He underwent surgery and subsequent chemo and radiotherapy for 5 months until he was declared cancer-free.

Frank was very pleasant to talk to and was elated that his surgery had gone well and that he no longer needed a stoma bag. He spoke to me at length about his cancer journey. He was very open about his struggles with anxiety and depression through his treatment and had high praise for his oncology team, whom he credits for improving his outlook on the disease. He also told me about the impact of his treatment on his day-to-day activities and the sacrifices that he and his family had to endure. I also asked Frank about some of the risk factors that could have led to his diagnosis, such as his long-term smoking habit and poor diet of red meats and processed foods.

Frank stood out to me as a patient because of his positive attitude about his disease and outlook on life. I have an interest in pursuing Oncology, which has a misplaced perception of being a “depressing speciality”. Getting to talk to Frank strongly disproves that perception for me. Oncology is a growing, innovative field and as new treatments make cancer an increasingly chronic illness, I feel it is important as a clinician to address the long-term mental health challenges of anxiety and depression that may arise. It is also essential that clinicians address public health aspects such as the risk factors of poor diet and smoking and the uptake of screening for more positive future patient outcomes<sup>1</sup>.

## Psychology

Positive outlook and upbeat perspective of one’s disease are very important for a cancer patient. Frank didn’t always have this attitude and he admitted that he very often suffered anxiety and depression, especially related to uncertainty about the progression of the disease and the lifestyle changes caused by cancer.

Frank had to retire early from a job he loved and had to give up his favourite hobby of nature walks. Frank also found his intensive chemotherapy regimens mentally and physically draining. Post-surgery, coping was difficult with the stoma bag that limited his activities which in his opinion was “one of the worst parts” of his cancer



treatment. Accidents with public embarrassment gave him “social anxiety” and he became selective with social events.

Throughout the cancer journey, he felt very supported by his oncology team and praised their efforts. I met Frank in the critical care unit on the second post-op day as he was recovering from his surgery to close the stoma. This was a major milestone in his cancer journey as it marked a relative return to normalcy. The treating team including

myself were very pleased with the successful outcome of his surgery. He felt that going through the course of treatment with a relatively good understanding of the illness greatly helped him to cope. Further, learning how well he was responding improved his positive attitude.

Cancer patients are more likely to have an external locus of control and perceive “powerful others” such as the medical team, to be responsible for their health which can have an association with depression. Thus, people with a high internal locus of control can better cope<sup>2,3</sup>. Frank had a positive therapeutic relationship with his oncology team and felt very involved and informed through clinical decisions. I reflected that this might have given him a high internal locus of control with good coping skills. As a clinician, patients must be informed and involved in the decisions of cancer treatment. A patient-centred approach serves to nurture an internal locus of control, reducing the risk of depression and anxiety and making the cancer journey more bearable<sup>4</sup>.

The occurrence of depression and anxiety are variable among CRC patients. A literature review of 15 studies found a prevalence of depression in CRC patients ranging from 1% to 57%, 11 of which had the concurrence of anxiety, ranging from 1.0% to 47.2%<sup>5</sup>. Three studies also concluded that older patients were associated with higher levels of depression. Mental health concerns of depression and anxiety have an association with higher mortality among cancer patients<sup>5</sup>. Hence it is important to address these concerns.

An equally important aspect of cancer treatment that I feel is overlooked is cancer’s implication on the mental health of caregivers. Frank informed me that his wife became severely depressed and withdrawn, proving that depression preys not only on cancer patients but on family members as well. A study found that a 67% majority of cancer caregivers had high depression scores<sup>6</sup>. Older caregivers, women, and the spouse of the patient such as Frank’s wife were also more likely to experience cancer depression<sup>6</sup>. Cancer is a burden that the whole family has to bear and they may have individual ways of coping<sup>7</sup>.

CBT has been well studied as a beneficial therapy option for cancer patients for not only reducing post-treatment fatigue, distress and pain but also improving feelings of depression, helplessness, hopelessness and overall improving quality of life<sup>8</sup>. Support groups are also an important psychosocial intervention for both patients and their families. They allow patients to learn practical coping skills during treatments in addition to providing emotional support through the sharing of similar experiences<sup>9</sup>. Frank was in contact with a CRC support group and feels that learning from the shared experiences of others helped him cope with his depression. Following the successful outcome of his surgery, Frank feels obliged to impart his own experiences to help other patients.

In my future clinical practice, I am determined to communicate plainly with my patients, making sure they feel involved and informed of their treatment plan, giving them a sense of control over their disease, and alleviating any anxieties they may have. I will monitor their mental health with questionnaires at their follow-ups and signpost patients and their families to resources such as support groups, and biopsychosocial interventions such as CBT<sup>10</sup>.

## Public Health

Screening for colorectal cancer is necessary for early detection and has been known to significantly reduce morbidity and mortality<sup>11</sup>. Convincing the population about the importance of a screening test is one strategy to increase compliance<sup>12</sup>. Unfortunately, Frank did not participate in the NHS screening program, which he greatly regrets.

Frank chose not to participate in screening as he felt that he was not at significant risk for cancer. He had no history or family history of cancer and believed that aside from his smoking and COPD, he was living a healthy life with a balanced diet and regular exercise. Reflecting on his perspective, I realised the health literacy gap between a physician and the general public that needs to be addressed<sup>11</sup>. Frank’s perception of screening has changed since his diagnosis, and he now agrees that older people with similar risk factors as him should do the recommended screening. Regular screening with the faecal occult blood test (FOBT) can reduce the risk of dying from CRC by 16% and is offered biennially to adults aged 60-69<sup>13</sup>. A study that examined non-uptake in the NHS faecal occult blood test screening programme found similar reasons to Frank’s in the study population such as a perceived good judgement of health and other reasons including the inconvenience and stigma of collecting a faecal sample, the detachment from usual healthcare settings and the implications of learning the results<sup>13</sup>.

Despite his previous perceptions, Frank clearly had the risk factors for colorectal cancer. Frank is a long-term smoker, to the point where he doesn’t remember when he started smoking and the average number of cigarettes he uses. When I asked him, Frank was indifferent about quitting smoking, citing that it would be difficult to end a day-to-day aspect of his life. Frank did not attribute his CRC risk to his smoking habit but instead to possible occupational exposure to cement dust. This surprised me as smoking is commonly known to be a risk factor for CRC, having been linked to an estimated 7% of CRC in the UK<sup>1</sup>. It shows a lack of knowledgeability that cannot be necessarily blamed on Frank but rather a divide between doctors and patients on the perception of risk factors. Perhaps if Frank was better educated by healthcare professionals on his risk for CRC, he may have taken actions to reduce his risk and sought out screening. A study that examined the influence of health literacy on colorectal cancer screening found that patients with limited health literacy were more likely to have more perceived barriers to CRC screening and less knowledge about CRC in general<sup>11</sup>.

Frank’s diet of mostly processed foods, red meats and a lack of a fibre rich diet is also a risk factor for colorectal cancer, which he mostly attributes to his on-the-go lifestyle as a cross country cement truck driver. An estimated 30% of CRC cases in the UK are linked to a low fibre diet while 13% are linked to eating processed and red meat<sup>1</sup>. A prospective study in the UK found that alcohol, processed meats, and red meats were associated with an increased risk of colorectal cancer and that fibre-rich foods such as bread and cereals were associated with a decreased risk<sup>14</sup>. The study also suggested that reducing meat intake below the current recommendations of less than 90 grams a day could further reduce risk<sup>14</sup>.

I feel that clinicians should be doing more to educate patients so that they can be encouraged to pursue screening and alleviate the stigmas associated with it. This is critically important as the incidence of CRC is increasing in younger populations which may warrant the expansion of screening<sup>15</sup>. Increasing health literacy in the public can remove some of the perceived barriers to screening and allow them to take action to reduce risk factors<sup>11</sup>. In my future practice, I intend to promote cancer prevention health literacy by talking to patients and families using simple language in any opportune primary and tertiary care settings. This will encourage families to reiterate the information and share their experiences with their communities thus further raising awareness. Physicians can also be active in local communities by conducting health fairs, talking at schools, or facilitating informational support groups<sup>9,16</sup>. I would like to be involved in these activities when I practice.

## Conclusion

Getting the chance to talk to Frank about his condition gave me insight into the biopsychosocial aspects of a patient's cancer journey and its significance for achieving positive outcomes. A deeper understanding of these aspects matured my outlook not only as a practitioner but also as a compassionate, empathetic individual, that can approach the innately human struggle with cancer.

Frank's honesty about his mental health struggles made me realise that as a future practitioner, I should encourage and ensure that my cancer patients have access to effective interventions such as CBT to address mental health issues like depression and anxiety and referral to the mental health team for counselling or treatment. I also realised the mental health toll cancer takes on family caregivers and the importance of ensuring their well-being for the functioning of the family unit. In my future practice, I will endeavour to signpost patients and family members to all available resources including support groups and biopsychosocial interventions.

I would strive to cultivate a positive therapeutic relationship with my patients by building a strong rapport through clear communication skills, creating a high internal locus of control, and leading to better outcomes in mental health by reducing anxiety and depression. By practising patient-centred care, I would aspire to educate patients on cancer, its treatment and prognosis and engage them greatly in all decisions to empower them through these life-changing treatments. I realised the polarising divide in health literacy between doctors and patients and the importance of closing this gap to address the upstream public health factors involved with CRC. I also recognised the vitality of screening and early detection, the aftermath of missed screening and how by fostering health literacy, screening uptake can be encouraged, and patient outcomes improved overall. Thus, in my future practice, I will strive to enlighten patients, family members and the community on the risk factors for cancer and the benefits of all screenings in simple lay terminology and be an advocate for preventive health.

## Take-home points

- A biopsychosocial approach should be incorporated with cancer care, particularly with patients' mental health and preventative public health measures.
- Cancer patients and their caregivers can experience significant depression and anxiety over the course of treatment. It is important that clinicians support patients and caregivers by signposting them to resources such as CBT and support groups.
- Clinicians should strive to increase health literacy by educating patients on the risk factors of cancer such as smoking and diet as well as on screening to encourage uptake, thereby improving patient outcomes.



## References:

1. Cancer Research UK. Risks and causes of bowel cancer [Internet]. Cancer Research UK. 2015 [cited 2022 Mar 20]. Available from: <https://www.cancerresearchuk.org/about-cancer/bowel-cancer/risks-causes>
2. Dopelt K, Bashkin O, Asna N, et al. Health locus of control in cancer patient and oncologist decision-making: An exploratory qualitative study. Schouten B, editor. PLOS ONE. 2022;17(1):e0263086.
3. Goldzweig G, Hasson-Ohayon I, Alon S, et al. Perceived threat and depression among patients with cancer: the moderating role of health locus of control. Psychology, Health & Medicine. 2016;21(5):601-7.
4. Thomas T, Althouse A, Sigler L, et al. Stronger therapeutic alliance is associated with better quality of life among patients with advanced cancer. Psycho-Oncology [Internet]. 2021 Mar 8 [cited 2021 Aug 6];30(7):1086-94. Available from: [https://onlinelibrary.wiley.com/doi/full/10.1002/pon.5648?sam1\\_referrer](https://onlinelibrary.wiley.com/doi/full/10.1002/pon.5648?sam1_referrer)
5. Peng Y-N, Huang M-L, Kao C-H. Prevalence of depression and anxiety in colorectal cancer patients: A literature review. International Journal of Environmental Research and Public Health. 2019;16(3):411.
6. Rhee YS, Yun YH, Park S, et al. Depression in family caregivers of cancer patients: The feeling of burden as a predictor of depression. Journal of Clinical Oncology. 2008;26(36):5890-5.
7. Woźniak K, Izyccki D. Cancer: a family at risk. Menopausal Review. 2014;4(13):253-61.
8. Daniels S. Cognitive behavior therapy for patients with cancer. Journal of the advanced practitioner in oncology [Internet]. 2015;6(1):54-6. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4577033/>
9. Weis J. Support groups for cancer patients. Supportive Care in Cancer [Internet]. 2003 [cited 2019 Oct 22];11(12):763-8. Available from: <https://link.springer.com/article/10.1007/s00520-003-0536-7#Sec7>
10. Mosher CE, Winger JG, Given BA, et al. A systematic review of psychosocial interventions for colorectal cancer patients. Supportive Care in Cancer [Internet]. 2017;25(7):2349-62. Available from: <https://dx.doi.org/10.1007/s00520-017-3693-9>
11. Peterson NB, Dwyer KA, Mulvaney SA, et al. The influence of health literacy on colorectal cancer screening knowledge, beliefs and behavior. Journal of the National Medical Association [Internet]. 2007;99(10):1105-12. Available from: <https://pubmed.ncbi.nlm.nih.gov/17987913/>
12. Alberti LR, Garcia DPC, Coelho DL, et al. How to improve colon cancer screening rates. World Journal of Gastrointestinal Oncology [Internet]. 2015;7(12):484. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4678395/>
13. Palmer CK, Thomas MC, von Wagner C, et al. Reasons for non-uptake and subsequent participation in the NHS Bowel Cancer Screening Programme: a qualitative study. British Journal of Cancer. 2014;110(7):1705-11.
14. Bradbury KE, Murphy N, Key TJ. Diet and colorectal cancer in UK Biobank: a prospective study. International Journal of Epidemiology [Internet]. 2019;49(1). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7124508/>
15. Vuik FE, Nieuwenburg SA, Bardou M, et al. Increasing incidence of colorectal cancer in young adults in Europe over the last 25 years. BMJ [Internet]. 2019;68(10):1820-6. Available from: <https://gut.bmj.com/content/68/10/1820>
16. Smith SG, Osborne K, Tring S, et al. Evaluating the impact of a community-based cancer awareness roadshow on awareness, attitudes and behaviors. Preventive Medicine [Internet]. 2016;87:138-43. Available from: <https://pubmed.ncbi.nlm.nih.gov/26921657/>