

Health-related quality of life in rectal cancer: a topic more relevant now than ever

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Kristensen et al. present a cross-sectional study investigating health-related quality of life (HRQoL) in more than 2500 colorectal cancer survivors with colostomy in several countries¹. The investigators used four questionnaires (demographic and socioeconomic information, five anchor questions on overall impact of colostomy on daily life, colostomy impact (CI) score, and the European Organization for Research and Treatment of Cancer Quality of life Questionnaire Core30 (EORTC QLQ-C30))to assess HRQoL and results were compared with normal data of reference European populations. The most important finding was that 26 per cent of responding patients with a colostomy had impaired HRQoL. Moreover, a high CI score, financial burden from the stoma, unemployment, being single/widowed, and young age were independent risk factors for reduced stoma-related HRQoL.

As survival after rectal cancer treatment has significantly improved during the past decade thanks to improved multimodality treatment approaches and strategies with surgery, radiotherapy, and chemotherapy, HRQoL has also become an important outcome parameter. Surgical techniques have clearly improved during the past decades. The experience of the surgeon plays an important role and is also related to the number of operations and on the number of patients treated on a yearly basis. The experience and volume of the surgeon and of the whole team does indeed not only influence the outcome, survival, and complications of patients with rectal cancer, but also influence the number of permanent colostomies versus the number of sphincter-saving interventions with or without a temporary ileostomy/colostomy^{2,3}. So, certainly differences are seen within a country, but it has also been shown that quality of life, and especially HRQoL, can be different across Europe and Middle-Eastern countries. Indeed, this study shows that the presence of a colostomy can certainly contribute to a so-called north-to-south impaired HRQoL. Geographical and/or cultural explanations could not be given, based on the results presented in this paper. When the type of surgery is discussed with the patient, the decision to choose a colostomy is based on tumour-, patient-, and surgeon-related factors. It has also been shown that global differences exist in the proportion of patients receiving end stomas, based on income⁴.

In the majority of patients with rectal cancer, the choice can often be made between permanent colostomy and sphincter-saving surgery. Data from the study presented here, can guide those discussions, while highlighting the impact of placing a permanent colostomy and the potential consequences for quality of life.

This study is important, because it underscores the impact of permanent colostomy formation on long-term HRQoL. It also shows that there are differences in several countries, and that socioeconomic factors play a role. Although risk factors for impaired HRQoL as described in the study can hardly be changed, supporting patients to live with a colostomy is of paramount importance, which was also stressed in the 'patient viewpoint', published 3 years ago⁴. From previous research, we know that patients not only want to survive colorectal cancer, but avoiding a permanent stoma is equally important⁵. The added value of the present study is that it highlights the differences among countries and the socioeconomic factors (or social barriers) that can have an impact on stoma perception. Thus, HRQoL may be different according to patients' background and environment.

The authors acknowledge some limitations of the present study, such as the use of non-validated questionnaire and lack of data from non-responders. Moreover, the method of retrieving information from patients was different (web-based, pen and paper, and interview) and this could also have influenced results. There was a clear predominance of Danish patients, which could question the generalizability of the findings. Some other issues may have had an impact on measuring quality of life in this cross-sectional cohort of patients. For example, differences in access to a stoma nurse, creation of a stoma in an emergency setting, and Hartmann's resection could have impacted negatively the HRQoL.

In the future, patient-reported outcome and HRQoL will be more important drivers in surgical decision-making and therefore has to be studied even more systematically in the studies evaluating the outcome of improved treatment modalities and strategies. Moreover, questionnaires must be better validated. The use of mobile application technology will certainly increase the response rate and improve the completeness of follow-up data.

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Disclosure

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References

- 1. Kristensen HØ, Thyø A, Emmertsen KJ, Smart NJ, Pinkney T, Warwick AM et al. Surviving rectal cancer at the cost of a colostomy: a global survey of long-term HRQoL in ten countries. BJS Open 2022;**XX**:XX–XX
- 2. Richardson DP, Porter GA, Johnson PM. Surgeon knowledge contributes to the relationship between surgeon volume

- and patient outcomes in rectal cancer. Ann Surg 2013;257: 295-301
- 3. Hagemans JAW, Alberda WJ, Verstegen M, de Wilt JHW, Verhoef C, Elferink MA et al. Hospital volume and outcome in rectal cancer patients; results of a population-based study in The Netherlands. Eur J Surg Oncol 2019;45:613-619
- 4. GlobalSurg Collaborative. Global variation in anastomosis and end colostomy formation following left-sided colorectal resection. BJS Open 2019;3:403-414
- 5. Wrenn SM, Cepeda-Benito A, Ramos-Valadez DI, Cataldo PA. Patient perceptions and quality of life after colon and rectal surgery: what do patients really want? Dis Colon Rectum 2018;61:971-978