

## **Point-by-Point Responses to the Reviewers' Comments**

**Manuscript ID:** 55627

Manuscript Title: Acceptance on Colorectal Cancer Screening Upper Age Limit in South Korea

### **Reviewer #1**

**1.” KNCC recommended CRC screening till 80 years? Usually the upper age limit is 75! The life expectancy at birth in Korean population is the explanation?”**

Answer: Thank you so much for your comment. To the best of our knowledge, the recommendation is based on the material below. We have provided a brief explanation on the recommendation from the KNCC in the background information. (line 12-16 page 4; line 31, page 4 – line 6 page 5)

The recommendation from the NCC on the upper age limit for CRC screening (80 years) is based on consensus statements on the National Screening Guidelines for colorectal cancer developed by a multi-society expert committee in Korea<sup>[1]</sup>. The committee had carefully reviewed the screening ages of selected guidelines, wherein the screening ages were 50-75 years for routine screening and 75-85 years depending on individual conditions described in the US Preventive Services Task Force Recommendation Statement (2008)<sup>[2]</sup>; 45-80 years for FOBT screening and 50-74 years for colonoscopy in European guidelines for quality assurance in colorectal cancer screening and diagnosis (2012)<sup>[3]</sup>; and > 50 years in joint guidelines from the American Cancer Society, the US Multi-Society Task Force in Colorectal Cancer, and the American College of Radiology (2008)<sup>[4]</sup>, and Korean Guidelines for Colorectal Cancer Screening and Polyp Detection (2012)<sup>[5]</sup>. In addition, the committee also assessed screening ages in renowned RCT studies<sup>[6-10]</sup> and considered the distribution of the incidence of colorectal cancer according to age groups and life expectancy in Korea. The incidence rates of CRC in Korea increase with age until age 85 years, and the life expectancy is 79.9 years for men and 85.7 years for women. Finally, a consensus decision was made, and the age of CRC screening by fecal occult blood test was recommended from 45 to 80 years.

### **References**

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**2. “the discussions are too short! Maybe you can add in this chapter some points regarding the risk of colonoscopy (and sure of polypectomy of possible perforation) in this age.”**

Answer: Thank you for your suggestion. We have added a section regarding to the risk of colonoscopy with older age in the Discussion. Please find the added section in the revised manuscript (lines 1-16, page 9):

Page line – page line : “As a golden standard in colorectal screening, colonoscopy is increasingly used worldwide. Along with that trend, the complication is one of the major concerns of health experts. The complications are not only occurred during the procedure but also observed in the bowel preparation (eg. electrolyte imbalance and dehydration) and post-colonoscopy (eg. infection) <sup>[11]</sup>. The continuous use of colonoscopy might pose a higher threat of serious events such as bleeding, perforation and cardiovascular/pulmonary-related problems to elderly (>65 years) and very elderly (>80 years) groups, especially those who had the underlying diseases <sup>[12]</sup>. As previous studies <sup>[13, 14]</sup>, the higher colonic polyp prevalence occurred in the older patients. Consequently, the polypectomy procedures are usually recruited, which could be an additional cause of bleeding, pain, and even perforation. A systematic review and meta-analysis of Day et al demonstrated that the very elderly exposed about 70% of exceeding risk of overall colonoscopy complication, about 60% of exceeding risk of perforation in comparison with the younger patients, and having up to 14-time higher risk of bowel perforations <sup>[15]</sup>. However, with the careful assessment of the patient’s overall health condition and age, the risk of colonoscopy-related adverse event is still relatively low for almost age groups <sup>[12]</sup>. Thus, the implementation of CRC screening at an older age should be carefully assessed in both contexts of colonoscopy as a primary and fecal blood test with colonoscopy follow-up, where the benefits should outweigh harms”

**References**

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### **3. “small typing errors aOR – a OR in some places”**

Answer: Thank you for your careful review and comment. We have checked the manuscript and revised all errors.

## **Replies to Editorial Office's comments**

We are thankful for the careful review by the Editorial Office. Following your suggestions, we have modified the manuscript, and details thereon are listed below.

### **(1) Science Editor:**

*1 “Scientific quality: The manuscript describes an observational study of the colorectal cancer screening. The topic is within the scope of the WJG. (1) Classification: Grade B; (2) Summary of the Peer-Review Report: Reviewer# 02441106 thinks this is an interesting paper. It is an interesting point of view on the extension of CRC screening. However, there are some points need to be addressed. The discussions are quite short and no evaluation of the risk/benefit that appear with the prolongation of CRC screening is presented. The risk of performing colonoscopy after 80 years old (including polypectomy when is necessary) should be discussed. The questions raised by the reviewers should be answered; and (3) Format: There are 3 tables and 1 figure. A total of 23 references are cited, including 9 references published in the last 3 years. There are 3 self-citations.”*

Answer: We have addressed all of the reviewer's questions and comments in the revised manuscript. Please see the detailed information in our [replies to the Reviewer's comments](#).

*2. “Language evaluation: Classification: Grade A. A language editing certificate issued by Editing Synthese was provided.”*

*3 “Academic norms and rules: The authors provided the Biostatistics Review Certificate, the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement, the Institutional Review Board Approval Form, and informed consent. The STROBE form should be added the page numbers. No academic misconduct was found in the CrossCheck detection and Bing search.”*

Answer: We have added the page numbers in the STROBE form. Please see the detailed information in our updated STROBE form.

*4. “Supplementary comments: This is an unsolicited manuscript. The study was supported by the National Cancer Center, Korea. The topic has not previously been published in the WJG. The corresponding author has not published articles in the BPG.”*

*5. “Issues raised: (1) I found the authors did not provide the approved grant application form(s). Please upload the approved grant application form(s) or funding agency copy of any approval document(s); (2) I found the authors did not provide the original figures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor; (3) I found the authors did not write the “article highlight” section. Please write the “article highlights” section at the end of the main text”*

Answer: We have uploaded the approved grant application forms in Korean. Please see the detailed information in our funding document. Further, we have replaced the previous figure with the original one, which was prepared in PowerPoint. Finally, we have added the “article highlight” section in the revised manuscript (Please see pages 11-12).

*6. “Re-Review: Not required. 7 Recommendation: Conditionally accepted.”*

*(2) Editorial Office Director: I have checked the comments written by the science editor.*

*(3) Company Editor-in-Chief: I have reviewed the Peer-Review Report, the full text of the manuscript, the relevant ethics documents, and the English Language Certificate, all of which have met the basic publishing requirements of the World Journal of Gastroenterology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office’s comments and the Criteria for Manuscript Revision by Authors.*

Answer: Thank you so much for your consideration. We have revised the manuscript based on the comments from both the Editor and the Editorial Office. All questions and comments have been addressed in the revised manuscript.