



LACK OF INFORMATION ON COLORECTAL CANCER IN GENERAL PUBLIC MIGHT BE THE REASON FOR LOW RESPONSE RATES TO SCREENING PROGRAM

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Summary

Introduction: In Croatia, about 3,500 patients are diagnosed with a colorectal carcinoma annually. The National Program for Early Detection of Colon Cancer has been implemented in Croatia since 2007. The program's primary goal is to detect colon cancer at an early stage of the disease, which should reduce the incidence and mortality from colon cancer.

Aim: To determine the interest of the target group in participating in the program, reasons for not responding to the program, and their knowledge about it altogether.

Materials and methods: Surveying 50 patients within the program's target group about their response to and understanding of reasons for screening.

Results: Although 84% of the participants know about the program, the response rate was unsatisfactory.

Conclusion: Most of the respondents who suffered from a colorectal carcinoma received a call but did not respond due to the absence of symptoms, which correlates with a low level of knowledge on colorectal carcinoma.

KEYWORDS: colon cancer, screening, The National Program for Early Detection of Colon Cancer, Croatia

INTRODUCTION

Colorectal cancer is the second most common malignancy in both sexes and is a major public health problem(1). Around 950,000 new cases are diagnosed worldwide each year(2,8). The incidence varies throughout the world is higher in de-

veloped countries, and lower in developing countries. The peak incidence is around and after the age of sixty. In Croatia, over 3,500 patients are diagnosed annually, and over 2,100 people die from the disease, making colon cancer the second most often malignant cause of death in the population of Croatia(1,3). The National Program for Early Detection of Colon Cancer has been implemented in Croatia since 2007 by the Ministry of Health in cooperation with regional public health institutes and qualified endoscopists. Screening methods

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are a test for the occult bleeding in the stool and a colonoscopy. All citizens between the ages of 50 and 74 receive an invitation to participate, to which they confirm their interest via a free answer sheet and get a test for the occult bleeding in the stool. In case the test is positive, they are scheduled for colonoscopy(6). The main goal of the program is to detect colon cancer at an early, asymptomatic, or premalignant stage of the disease, which should reduce the incidence and mortality from colon cancer. All people above the age of 50 are considered to be at medium risk. People at high risk - history of familial polyposis or non-polyposis colon cancer, inflammatory bowel disease should start testing earlier (before age 40) and should be tested more frequently(4). According to the Croatian Cancer Registry, about 20% of patients are diagnosed at an early stage (cancer present only in the intestine) which is essential as colorectal cancer prognosis depends on early, asymptomatic diagnosis and timely treatment(5,7).

MATERIAL AND METHODS

In October 2020, we conducted a telephone survey amongst 50 patients treated at Surgical Oncology of University Hospital for Tumors, Sestre milosrdnice University Hospital Center in September 2020. Patients included were between the age of 50 and 74, which makes them a part of the target population for The National Colorectal Cancer Screening Program. The research aimed to determine the interest of the target group in participating in the program, reasons for non-responding to the program and their knowledge about it altogether.

RESULTS

The most of participants knew about the National Program (84%), received an invitation to participate (74%), and only half participated (54%). Of those who did not participate, the reason is the lack of symptoms. Given the knowledge about colon cancer, it can be said that the majority know nothing or know little (74%) while only 26% have a lot of knowledge.

DISCUSSION

The patients with a colorectal carcinoma in this study were not, in majority, diagnosed through

the National Program, although they belong to the target group. Those did not participate in the program because they had no symptoms, thus confirming the lack of basic knowledge about colorectal carcinoma and the idea behind screening. Although there was a limited number of respondents in this group, similar results are observed in the analyses of the previous three cycles of the screening program with regards to response rate. In the first call cycle, the turnout for Croatia was 21%, in the second cycle 26%, and in the third 26%(9). Some regions followed extremely poor results - one county had a response rate around 17% from 2008 to 2014(11).

Some of the factors influencing the response to an early detection program for colon cancer are demographic and socioeconomic factors, education, and individual interest in the prevention program. More extensive knowledge and education about colon cancer, risk factors and prevention of the disease itself have been proven to influence a positive attitude towards the prevention program, as most of the curable cases (surgery only) are diagnosed at an asymptomatic stage, mostly caught accidentally or by screening(7,11). According to the results of this study, a more significant number of respondents were aware that there was a National Program for Early Detection of Colon Cancer, but again were poorly informed about the disease itself. Downside of this study is the number of participants and being conducted in affected target population. Despite the continuum of screening for colorectal cancer in Croatia, literature on reasons for week response rate remains scarce.

Recently, one of the impact factors on lower program response rate was also COVID-19 pandemic. Since the outburst throughout the European countries, a lot of planned public healthcare plans were suspended, especially in the spring of 2020. Accordingly, colorectal cancer screening programs were suspended in many countries(10). Belgian study that researched the impact of the government anti-COVID-19 measures on the workload of a Belgian academic laboratory for histopathology and cytopathology showed that the total number of samples received were down by 35% in March 2020 and by 72% in April 2020, when compared to January and February 2020(12).

In Croatia, the number of colonoscopies returned to the average number after the post-COVID initial peak within three months and Ricciardi-

ello and associates'(10) research indicated that screening delays of up to 4-6 months do not significantly reduce the performance of screening(7,10). The risk of developing colorectal carcinoma increases after the age of 50, and we can say that age is one of the main risk factors(2). From this study, the response appears to correlate with age. Most respondents are aged 56 to 67, while those over 68 respond poorly. The research conducted by Čukelj and co-workers states the same data – the response increases with age but begins to decline after 70 years of age(13).

CONCLUSION

In Croatia, a screening program for a colorectal carcinoma is implemented based on fecal occult blood test (FOBT) and colonoscopy in case of a positive test for the population aged 50-74. For the past 13 years, we have recorded the response rate of 20-30%. Most of the respondents who suffered from a colorectal carcinoma received a call but did not respond because they had no symptoms, which correlates with a low level of knowledge about colorectal carcinoma because survival in asymptomatic stages is what defines the successful treatment of colorectal carcinoma in Europe.

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Sažetak

NEDOSTATAK INFORMACIJA O RAKU DEBELOG CRIJEVA I REKTUMA U ŠIROJ JAVNOSTI
MOGAO BI BITI RAZLOG NISKE STOPE ODGOVORA NA PROGRAM PROBIRA

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Uvod: Godišnje u Hrvatskoj od kolorektalnog karcinoma oboli oko 3500 bolesnika. Nacionalni program ranog otkrivanja raka debelog crijeva u Hrvatskoj se provodi od 2007. godine. Primarni cilj programa je otkrivanje raka debelog crijeva u ranoj fazi bolesti, što bi trebalo smanjiti učestalost i smrtnost od raka debelog crijeva.

Cilj: Utvrditi interes ciljne skupine za sudjelovanje u programu, razloge neodazivanja na program te njihovu ukupnu upućenost u program.

Materijali i metode: Anketiranje 50 pacijenata unutar ciljne skupine programa o njihovom odgovoru i razumijevanju razloga za probir.

Rezultati: Iako 84% sudionika zna za program, stopa odaziva nije bila zadovoljavajuća.

Zaključak: Većina ispitanika koji su bolovali od kolorektalnog karcinoma primili su poziv, ali se nisu odazvali zbog nepostojanja simptoma, što korelira s niskom razinom znanja o kolorektalnom karcinomu.

KLJUČNE RIJEČI: *rak debelog crijeva, probir, Nacionalni program ranog otkrivanja raka debelog crijeva, Hrvatska*