



COLLEGE OF HEALTH SCIENCE, SCHOOL OF NURSING AND
MIDWIFERY DEPARTMENT OF CLINICAL ONCOLOGY
NURSING

**AWARENESS OF COLORECTAL CANCER WARNING SYMPTOMS
AND ASSOCIATED FACTORS AMONG ADULT
GASTROINTESTINAL TRACT OUTPATIENT DEPARTMENT
ATTENDANTS IN TIKUR ANBESA SPECIALIZED HOSPITAL,
ADDIS ABABA, 2023**

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**A THESIS RESEARCH TO BE SUBMITTED TO THE DEPARTMENT
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Full Title of the Research	Awareness of Colorectal Cancer Warning Symptoms and Associated Factors among Adult Gastrointestinal Tract Outpatient Department Attendants in Tikur Anbesa Specialized Hospital
Study Period	From February 20/2023 to March 20/2023
Study Area	Tikur Anbesa Specialized Hospital, Addis Ababa Ethiopia

Approval sheet
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STATEMENT OF DECLARATION

By my signature below, I declare and affirm that this thesis is my own work. I have followed all ethical principles of scholarship in the preparation, data collection, analysis and completion of this thesis. All scholarly matter that is included in the thesis has been given recognition through citation. I affirm that I have cited and referenced all sources used in this document. Every effort has been made to avoid plagiarism in the preparation of this thesis.

This thesis is submitted in partial fulfillment of the requirement for a graduate degree from Addis Ababa University at College of Health Sciences, School of Nursing and Midwifery. The thesis is deposited in the Addis Ababa University Digital Library and is made available to the local, national, and international scientific communities. I solemnly declare that this thesis has not been submitted to any other institution anywhere for the award of any academic degree, diploma or certificate.

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Abbreviations /Acronyms

AOR-----	Adjusted Odds Ratio
CI-----	Confidence Interval
CRC-----	Colorectal Cancer
ETB-----	Ethiopian Birr
GIT-----	Gastro Intestinal Tract
ODK-----	Online Data Kit
OPD-----	Outpatient Department
TASH-----	Tikur Anbesa Specialized Hospital
UK-----	United Kingdom

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ABSTRACT

Introduction: Colorectal cancer prevention and control measures should include public awareness creation about colorectal cancer sign and symptoms which has great role in early detection and effective treatment. Awareness of colorectal cancer warning symptom is not well known in Ethiopia particularly in Addis Ababa. Therefore, for effective intervention to control colorectal cancer there was a need to study about awareness of colorectal cancer warning symptoms in Addis Ababa Ethiopia.

Objective: To assess awareness of colorectal cancer warning symptoms and associated factors among adult gastrointestinal tract outpatient department attendant at Tikur Anbesa Specialized Hospital, in Addis Ababa Ethiopia, 2023.

Methods: This institution based cross-sectional study was conducted among 410 adult gastrointestinal tract outpatient department attendants at Tikur Anbesa Specialized Hospital from February 20/2023 to March 20/2023. Study participants were selected by using systematic sampling technique with 9 intervals. The response rate was 97.3%. Data was collected using ODK data collection tool and exported to SPSS version 7 for analysis. Bivariable logistic regression was used to select candidate variables at p-value <0.2 and Multivariable logistic regression was also used to identify significant variables associated with the outcome variable at and p-value <0.05. Model fitness was tested with Hosmer and Lemeshow goodness of fit (P-value=0.13).

Result: One hundred twenty-four (30.2%) of the study participants had good awareness of colorectal cancer warning symptoms. Ever had any type of cancer AOR=3.64, 95%CI: 1.61-8.28), regular health checkup (AOR=2.17, 95%CI: 1.05-4.49), being relative or friend with bowel cancer patient (AOR=5.28, 95%CI: 1.92-14.52), heard about colorectal cancer warning symptoms (AOR=3.25, 95%CI: 1.59-6.64) were significant variables associated with CRC warning symptoms.

Conclusion and Recommendation: Nearly one third of study participants had good awareness of colorectal cancer warning symptoms. Factors associated with colorectal cancer warning symptoms include cancer history, health checkups, Friends/relatives of bowel cancer patients, heard about colorectal cancer warning symptoms. Hence, additional efforts are needed to raise awareness of colorectal cancer warning symptoms by considering the above important factors.

Key word: Colorectal cancer, Awareness of warning symptoms, Tikur Anbesa specialized Hospital, Addis Ababa Ethiopia

1. INTRODUCTION

1.2 Background Information

Cancer is one of non-communicable disease which is a condition in which the body cells begin to grow and reproduce in an uncontrollable way. These cells can then invade and destroy healthy tissue, including organs. Cancer sometimes begins in one part of the body before spreading to other parts [1, 2].

When this type of abnormal body cell growth occurs in the colon or rectum, it is called colorectal cancer (CRC). The colon and rectum (colorectum), along with the anus, make up the large intestine. It is the final segment of the gastrointestinal (GI) system[3]. Next to breast(11.7%) and lung cancer (11.4%), colorectal cancer (CRC) is the third most prevalent cancer which accounts 10.0% of the total cancer incidence globally(19.3 million new cases)[4].

The risk factors of CRC includes aging, gender, prior colon diseases such as inflammatory bowel disease, type 2 diabetes mellitus (DM-2), family history of the CRC, and polyp, lack of physical activity, smoking, alcohol drinking, obesity, low fiber diet, high red meat, and low fruit and vegetable intake in the diet[5-9].

Persistent change in bowel habits, including diarrhea or constipation or a change in the consistency of stool, rectal bleeding or blood in stool, Persistent abdominal discomfort, such as cramps, gas or pain, feeling that bowel doesn't empty completely, Weakness or fatigue and Unexplained weight loss are symptoms of colorectal cancer which should be aware by every individuals for effective intervention [10-12]

Colorectal cancer is a largely preventable disease which requires community participation in prevention practices like, life style modification and regular medical screening service[13]

The incidence, prevalence and complication of colorectal cancer can be prevented and controlled through awareness creation about risk factors, preventive measures, screening services, early detection and treatment[2].

To control complication and treatment cost of colorectal cancer, public at nationwide should aware about early warning symptoms. This will help an individual to come for diagnosis and early treatment. Therefore, determining the level of CRC warning symptom awareness and contributing factors among general and at-risk population is vital to initiate further intervention.

1.2 Statement of the Problem

Following lung cancer, colorectal cancer(CRC) is the second leading cancer death that constitutes 9.4% of the total cancer death(10million) worldwide[4]. Globally, there were over 1.9 million new CRC cases and 930 000 deaths were estimated in 2020. Its' burden is projected to increase to 3.2 million new cases and 1.6 million deaths by 2040[14].

Colorectal cancer plays significant role in morbidity, mortality and economic cost in Africa. In 2019, there were 58,000 and 49,000 colorectal morbidity and mortality respectively in our continent which needs a huge cost for treatment. This is due to delayed presentation due to awareness problem about warning symptoms and cancer control strategies [15].

Coming to our country Ethiopia, there were 3200 colorectal cancer incidence in 2019[15]. Even though there is a cancer prevention and control guideline, colorectal death has increased by 56% from 2010 to 2019. It makes Ethiopia is one of the four African countries affected by colorectal cancer death[15]. This increased burden of colorectal cancer alarms all concern bodies to stand for prevention and control of CRC. Among intervention strategies, awareness creation about warning symptoms is one. This is to early diagnosis and treatment for effective management of economical, physical and social cost.

Colorectal cancer warning symptoms awareness is associated with both modifiable and non-modifiable factors such as age, sex, residency, family income, educational status, hearing about CRC, family history of CRC, exposure to social media and history of hospital visit.

The 5-year survival rate of CRC can be as high as 90% if the disease is detected early. It is therefore important to screen for those who are at risk of colorectal Cancer which may help in minimizing its' mortality rate. It is possible when people become alert to warning symptoms of colorectal cancer[16].

Public awareness-level about CRC warning symptoms varies across worldwide. In developed world, the level colorectal cancer warning symptom was 59% in European country particularly in United Kingdom in 2018 [17], in Saudi Arabia was 21.6% in 2019[18] and in developing country specifically in Ethiopia specifically in Jimma, 42.4% of the study participants had high awareness about CRC warning symptoms in 2020[9].

Colorectal cancer prevention and control measures should include public awareness creation about CRC sign and symptoms which has great role in early detection and effective treatment. As far my literature review, public awareness level of colorectal cancer warning symptom is not well known in Ethiopia specifically in Addis Ababa. Hence, to be more

effective in colorectal cancer prevention and control intervention there is a need to study about CRC warning symptoms awareness and associated factors in Addis Ababa Ethiopia.

1.3 Significance of the Study

The finding of this study will be used by policy makers, health care providers and researchers. Knowing awareness level of CRC warning symptoms and associated factors will help policy makers to take amendments on cancer prevention and control guideline mainly health education. Health care providers will also use this study result for their healthcare services provision including screening and health education about warning symptoms. Researchers also may use it to conduct future studies at colorectal cancer.

2 LITERATURE REVIEW

2.1 Introduction to Literature Review

Different literatures were searched which were directly or indirectly linked with awareness of colorectal warning symptoms. Deferent search engines like Google scholar, PubMed, science web, hinari, CINHAL and Google were used to access literatures available worldwide. After downloading these literatures, they were reviewed systematically and recent literatures (conducted within the last five years) which are directly state the prevalence of colorectal warning symptom awareness and its' significantly associated factors are selected. Factors in the literatures, were identified with P-value<0.05 and confidence interval excluding one or the researcher's explanation. The result of reviewing literatures is described with two major sections from global to local sequence. These two sections are prevalence of CRC warning symptom awareness and its associated factors. All used literatures are cited with Vancouver referencing style.

2.1.1 Prevalence of colorectal cancer warning symptom awareness

When we see the literatures which all are cross-sectional studies conducted on awareness of colorectal cancer warning symptoms, the level of CRC warning symptom awareness is less than 50% even though, it is slightly greater than half percent in United Kingdom(59%)in 2018[17] and In Lebanon (67%) in 2019[19]. A study conducted in Gaza showed that only 12.0% participants had a good level of cancer signs and symptoms awareness[20].

In another study in Jordan university students, awareness of Colorectal Cancer Early Warning Signs was 32.8%[21]. The level of CRC warning symptom awareness in Malaysia was also below half percent (38%) in 2021[22]. On another study done in Gaza (Palestinian), 40.0% of the study participants had good awareness of CRC signs and symptoms [23]. By the study conducted in Saudi Arabia on Public Awareness of Colon Cancer Symptoms, Risk Factor, and Screening, the prevalence of symptoms associated with colon cancer awareness was 21.6% in 2019. The most common symptoms of colon cancer were Blood in the stool (22%), weight loss (19%), abdominal pain (18%), constipation and diarrhea (16%) [18].

A retrospective study over six year period from 2009 to 2015 to determine the incidence, clinical feature, and histo-pathological patterns of colorectal cancer at Komfo Anokye Teaching Hospital (KATH), Kumasi, Ghana, showed that the commonest symptoms of colorectal cancer were weight loss(44.80%), bleeding in the rectum (39.82%), and abdominal pain (38.91%) [24]

When we come to our country, high awareness level of colorectal cancer warning symptoms and risk factors in Jimma, Southwest Ethiopia was 42.4%. according to this study, study participants had recalled the following symptoms; Rectal bleeding (44.1%, Change in bowel habit (47.2%), Weight loss (42.4%), Chronic abdominal pain (48.1%), Blood in stool (49.3%), Loss of appetite (44.1%), Sensation of a non-full dump of waste (43.1%), Lump in the lower abdomen (33.9%), Anemia(38.9%) [9].

2.1.2 Factors associated with awareness of colorectal cancer warning symptom

1. Socioeconomic factors

Age

By the study conducted on assessment of awareness of colorectal cancer symptoms in United Kingdom (UK), showed that, Age of the participants has significant association with awareness of CRC warning symptoms. This study stated as older study participants have better awareness about colorectal cancer warning symptoms [25, 26].

Sex

By the study conducted in UK, women have better awareness of CRC warning symptoms as compared to men[25]. Another study conducted in Ethiopia on knowledge of colorectal cancer among adult patient in hospital also showed that sex of the study participant is a significant variable for awareness of colorectal warning symptom. By this study, being female has a higher odds of having good awareness of colorectal cancer warning symptoms[9].

Residency

According to the study conducted in Jimma Oromia Ethiopia on knowledge of colorectal cancer, study participants residency of was significant factor that determine awareness of CRC warning symptoms. In this study, being urban residents has higher odds for awareness of CRC warning symptoms[9]. There is another similar finding in Palestine. The study conducted-on awareness of colorectal cancer signs and symptoms: a national cross-sectional study from Palestine study showed that participants' residency/address is a significant factor [23].

Educational status

A cross- Sectional Study conducted on Knowledge of Colorectal Cancer Symptoms and Risk Factors in the Kingdom of Bahrain showed that educational status is significant variable. Depending on this study, Having higher educational status has good awareness of CRC warning symptoms[17].

Another cross-sectional study conducted in Ethiopia also showed as educational status was statistically an important variable for colorectal cancer warning symptom awareness. As educational status increased, the awareness of respondents was increased[9]. There is similar finding in Malaysia that showed as there is significant positive association between educational attainment and CRC warning symptoms awareness[26].

Marital status: A cross-sectional study about knowledge on warning signs and risk factors of colon cancer among the suburban population of Malaysia indicated that marital status of the study participants was a significant variable for colorectal cancer warning symptom awareness. Based on this study, study participants being married had good awareness about colorectal cancer warning symptoms as compared with counterpart [26].

Having physician family member: according to the study conducted in Lebanon on awareness of colorectal cancer warning symptoms, having physicians' family member as a primary source of medical information was a significant factor. Those who had health care provider or physicians in family member had good awareness of colorectal cancer warning symptoms as compared to those who haven't [19].

Income

The study conducted on knowledge of colorectal cancer risk factors and warning symptoms in Jimma Southwest Ethiopia has showed that household income was a statistically significant factor for having good awareness about colorectal warning symptoms. Study participants who had greater than 3000 monthly income had good awareness colorectal warning symptoms[9].

2. Medical related factors

Study participants who had familiarity with bowel cancer patients had good awareness of CRC warning symptoms. A rural-based cross-sectional survey conducted on Level of colorectal cancer awareness in Malaysia showed that familiarity with gastrointestinal cancer patient was significant factor for awareness of colorectal warning symptoms. Being relative with family members or friends those who have gastrointestinal tract(GIT) cancer has good awareness on CRC warning symptoms[22, 25]. A study conducted in Lebanon in 2019 also showed that knowing people with colorectal cancer had increased the awareness of warning symptoms[19].

3. Behavioral related factors

Attending social media:

Attending social media is an important variable for CRC warning symptom awareness. Getting information through social media about CRC had increased the awareness level of the study participants CRC warning symptoms. Hearing about CRC through watching television, listening FM radio and other social medias is identified factors to increase warning symptoms awareness [9].

Visiting Hospital:

According to a national cross-sectional study done about awareness of colorectal cancer signs and symptoms in Palestine showed having health facility visit was as significant factors to improve awareness of colorectal cancer warning symptoms. This study told us as having hospital visit history had significant association with participants' awareness level CRC warning symptoms. Presence of previous hospital visit increased CRC warning symptom awareness [23].

Regular health checkup: A study conducted on Awareness of Colorectal Cancer and Attitudes towards Its Screening Guidelines in Lebanon showed having regular health checkup or follow up was a significantly associated variable with awareness of colorectal cancer warning symptoms. Study participants who had regular health checkup has good awareness about colorectal cancer warning symptoms[19].

2.2 Summary of Literature Review

The investigator tried to get and review deferent literatures which were conducted national and international. Worldwide, the prevalence of CRC warning symptom awareness was in range from 12% to 67%. Factors associated with awareness of CRC warning symptoms are categorized as Socio-demographic related factors, Medical related factors and behavioral related factors.

Some literatures have been studied on knowledge of CRC however; these were limited to only risk factors and warning symptoms which missed screening, prevention and control sections. And, some papers have been studied with awareness of CRC warning symptoms which were very specific.

Some papers did not show analytical regression table, some have only descriptive part, and some papers did not show the overall level of CRC warning symptom awareness rather than explaining the percentage of individual symptoms.

In our country Ethiopia, there is only one research paper has been accessed which has been studied on awareness of colorectal cancer and associated factors among adult patients.

Generally, level of CRC warning symptom awareness and factors are deferent across country and not well known in our country. It needs to be studied. Therefore, this study aimed to assess awareness of CRC warning symptoms and associated factors among adult GIT OPD adult attendants in Tikur Anbesa Specialized hospital.

2.3. CONCEPTUAL FRAMEWORK

The investigator, have reviewed literatures and use them which are similar with this study to adapt the conceptual framework [9, 19, 23]. This conceptual framework is to try to show the direction of the study which is to test presence or absence of association between awareness of colorectal cancer warning symptoms and other around factors.

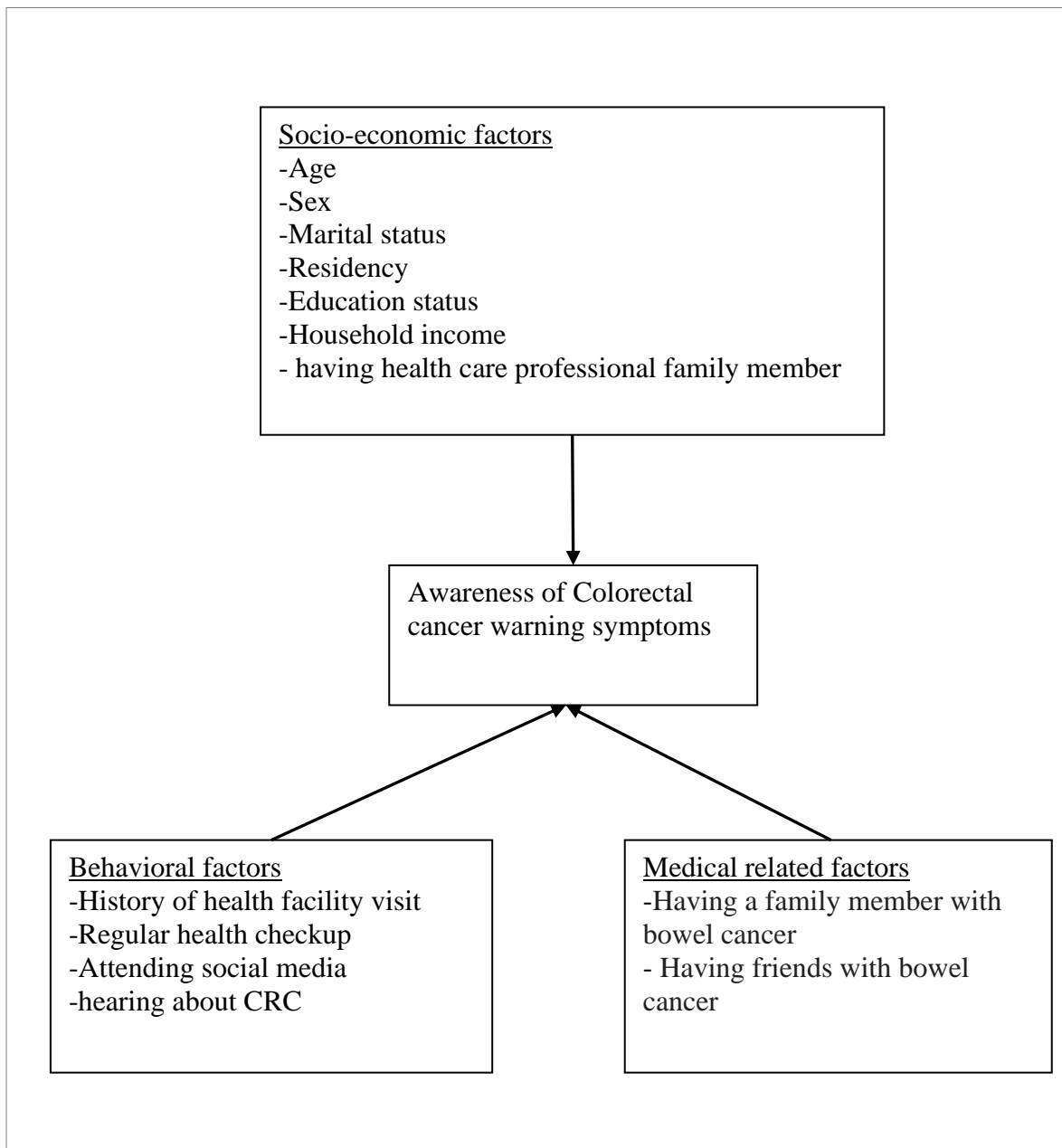


Figure 1: Conceptual framework adapted from previous studies [9, 19, 23] to assess awareness of colorectal cancer warning symptoms and associated factors among adult GIT OPD attendants Tikur Anbesa Specialized hospital, Addis Ababa, 2023.

3 OBJECTIVES

3.1 General Objective

To assess awareness of colorectal cancer warning symptoms and associated factors among adult gastro intestinal tract outpatient department attendants in Tikur Anbesa Specialized hospital Addis Ababa, Ethiopia, 2023

3.2 Specific Objectives

3.2.1 To determine awareness level of colorectal cancer warning symptoms among adult gastrointestinal tract outpatient department attendants in Tikur Anbessa specialized hospital

3.2.2 To identify factors associated with awareness of colorectal cancer warning symptoms among adult gastro intestinal tract outpatient department attendants in Tikur Anbessa specialized hospital

4 METHODS AND MATERIALS

4.1 Study Area and Period: This study was conducted in Tikur Anbessa Specialized Hospital which is located in Addis Ababa. Addis Ababa is the capital city of Ethiopia. It is divided into ten sub cities for administrative purpose. There are twelve public hospitals in Addis Ababa. Among referral public hospitals in Addis Ababa, Tikur Anbessa Specialized Hospital (TASH) is one of the public hospitals which serve as a referral and teaching hospital for Addis Ababa University. It gives all healthcare services like maternal and child health services, operation service, diagnostic laboratory services, inpatient services subdivided based on sex age, types of diseases, outpatient service subdivided in each specialties. Among outpatient services given in this hospital, gastrointestinal outpatient department is the one in which a monthly estimate of 1252 people come to gastro intestinal outpatient department (OPD) for examination or follow-up purpose. The study was conducted from February 20/2023 to March 20/2023.

4.2 Study Design: An institution based cross-sectional study.

Population

4.2.1 Source Population: All adult gastro intestinal tract outpatient department attendants at Tikur Anbessa Specialized hospital.

4.2.2 Study population: All adult gastro intestinal tract outpatient department attendants at Tikur Anbessa Specialized hospital during study period.

4.3 Eligibility criteria:

4.3.1 Inclusion criteria: all adult clients (age >18years old) who was referred from other health institutes, and departments/units to adult GIT OPD at Tikur Anbessa specialized hospital during study period.

4.3.2 Exclusion criteria: Severely ill attendants, patients who are diagnosed with colorectal cancer and on treatment for cancer were excluded from the study.

4.4 Sampling Method

4.4.1 Sample size determination: The single population proportion formula was used to determine the required sample size by considering the following assumptions: prevalence of CRC warning symptom awareness was 57.6% (P=0.58) in Jimma Southwest Ethiopia [9], 95% confidence level giving $Z_{\alpha/2} = 1.96$, the desired degree of precision of 5%.

$$n = \frac{(Z_{\alpha/2})^2 P(1-P)}{d^2} = 374.3 \approx \underline{375}$$

Where;

n = number of sample,; d= degree of freedom

P= proportion or prevalence of awareness about CRC warning symptoms,

q=1-p, p and q always equal to one and

By adding 10% nonresponse rate gives total sample size 413.

4.4.2 Sampling procedure: Systematic sampling technique was used to recruit study participants. Sampling interval (K) is calculated by dividing expected study population for sample size as indicated below.

$$K = P/S = 1252/413 = 8.75 = 9$$

Where;

K=Stands for sampling interval

P= Stands for study population which is expected number of adult GIT OPD attendants during the study period.

S= Stands for sample size determined by single population proportion formula.

Hence, sampling interval 9 was used to run Systematic sampling technique. Among adult gastro intestinal tract OPD attendants during study period, every 9th attendants were selected for study. One of the first 9 attendants was selected with simple random sampling technique by taking random number from one up to nine.

4.5 Operational Definition:

To assess individual study participants' awareness of CRC warning symptoms, a scoring system was used. Similar scoring systems were also used in previous studies[9, 17]. There

are nine questions used to assess awareness of study participants about colorectal cancer warning symptoms. A study participant who had scored 6.75 or more ($\geq 75\%$) had been categorized as having good awareness about CRC warning symptoms. And who had scored less than 6.75 ($< 75\%$), he/she had been categorized under poor awareness.

4.6 Study Variables

4.6.1 Dependent/outcome variable: Awareness of CRC warning symptoms (yes/No)

4.6.2 Independents variables: These variables include three major sections: Socio-demographic characteristics, Medical related characteristics and behavioral characteristics. Socio-demographic characteristics: Age, sex, marital status, residency, education status, household income, having health professional family member.

Medical related characteristics: having a family member with bowel cancer, having friends with bowel cancer

Behavioral factors: History of health facility visit, regular health checkup, attending social media, hearing about colorectal cancer

4.7 Data Collection Tool and Procedure:

4.7.1 Data collection procedure: Data was collected when clients were at waiting time for service. An individual had been asked for voluntariness, fulfill inclusion and exclusion criteria. When, an individual did not fulfill inclusion and exclusion criteria, the data collectors had gone to the next client at gastro intestinal OPD. Place of interview was seated which was comfortable for client. Interview did not affect service.

4.7.2 Data collection tool: A structured online interviewer administered questioner was used which was adapted from previous similar studies [9, 19, 22]. The questioner had four sections which were socio-demographic characteristics of the study participants, Medical related characteristics, behavioral related characteristics and colorectal cancer warning symptoms. The last portion of the questioner had nine questions which were used to determine the level of study participants' awareness about colorectal cancer warning symptoms. Each question has its own predetermined alternatives for answer.

Each question had one point value. The tool was prepared by online data kit mobile application. Data was collected by 3 bachelor nurses and supervised by two master holders.

4.8 Data Quality Control

Training was given for data collectors and supervisors. Training was on instructions on the questions to be asked, their meaning, how to ask them, and how to record the answers. Within a week before actual data collection, Pre-test was made on 5% (21) of the sample size at Adama public hospital by considering information contamination. Based on pretest, socio-demographic part of the questioner was modified. Questioner will be translated to Amharic language and back to English to check consistency. Supervisors had traveled with data collection teams to observe and ensure that their teams adhered to protocol. Each questionnaire was checked daily by supervisors, and principal investigator. Data collection form was prepared with ODK data collection application. Using online data kit application was used to prevent data entry problems from questioner in to Epi Data software data entry template.

4.9 Data Processing and Analysis

Online data was downloaded from ODK data collection tool and saved as Microsoft excels data. Then it was exported to SPSS Version 25 statistical software for analysis. Further data management (variable recoding,) was done after exporting to SPSS. Both descriptive and analytical analysis was conducted. Descriptive statistics were calculated for frequencies and summarized in graphs and tables. Bi-variable logistic regression was used to screen most important variables at P-value <0.2 . Then, multivariable logistic regression was done to show significant associations between variables and CRC warning symptoms awareness. Variables at p-value <0.2 on bi-variable analyses were entered into a multivariable logistic regression model to control for confounders. Model fitness was tested by Hosmer and Lemeshow test which the p-value was 0.13 (P-value >0.05). With multivariable logistic regression, Variables with a P-value <0.05 set at a 95% confidence interval were considered as statistically significant. An adjusted odds ratio at 95% confidence interval was used to show the strength and direction of associations. Then, the result was interpreted and presented using statements, tables, texts, and charts as a whole.

4.10. ETHICAL CLEARANCE

Letter of ethical clearance was taken from Addis Ababa University, College of Health Sciences, School of Nursing and Midwifery research and ethics review committee, and then the Institutional Review Board (IRB) of the college. Supportive letter was taken from Hospital medical director office. Clear introduction was given for study participants about their rights to refuse or participate in the study. Confidentiality was maintained during interview. Written informed consent was taken. There were no personal identifiers in questioner. The collected data was not left to be seen by others.

4.11. Dissemination plan

The finding of this study will be submitted and presented to Addis Ababa University, College of health science, School of Nursing and Midwifery. The finding also will be disseminated to TASH, and other concerned stakeholders. Furthermore, the manuscript will be submitted to be presented on different workshop and seminars. Finally, attempt will be done to publish on medical journal.

5. RESULTS

A total of 413 adult gastro intestinal outpatient department attendants had been included in the study. Of them 410 had respond to all questions in the questioner. Three questioners had been rejected because of incomplete responses. This makes the response rate was 99.3%.

5.1. Socio-demographic characteristics of the respondent

The study participant's age ranged from 18 to 75 years with a mean age of 42.14 ± 13.26 (standard deviation). Among the study participants, 219(53.4%) were females. Almost, half of the study participants had responded as they were orthodox tewahido church followers in their religion. It accounts 211(51.5%). Only twenty-seven (6.6%) of the study participants were rural in their residence. Majority (38.5%) of the study participants had secondary and preparatory school educational status followed by college diploma holder and above (30.7%).

Regarding to marital status, more than half (62.4%) study participants were married. The rest 37.6% were single, divorced and widowed. Among 410 study participants, only 160(39.0%) had Healthcare professionals in their family members (Table 1).

Table 1: Socio-demographic characteristics of the study participants in adult GIT OPD attendants at Tikur Anbesa Specialized Hospital, Addis Ababa 2023

Variables	Frequency	Percentage
Age in years (n=410)		
18-29	75	18.3%
30-39	117	28.5%
40-49	87	21.2%
50-59	78	19.0%
≥60	75	12.9%
Sex		
Male	191	46.6%
Female	219	53.4%
Residence (n=410)		
Urban	383	93.4%
Rural	27	6.6%
Religion n=410)		
Orthodox	211	51.5%
Protestant	91	22.2%
Muslim	97	23.7%
Others	11	2.7%
Educational status of the respondents (n=410)		
Illiterate	58	14.1%
Primary level (1-8)	68	16.6%
Secondary and preparatory	158	38.5%
College diploma and above	128	30.7%
Marital status (n=410)		
Single	85	20.7%
Married	256	62.4%
Divorced	30	7.3%
Widowed	39	9.5%
Household monthly income in Ethiopian Birr(n=410)		
≤3000	69	17.0%

3001—6000	79	19.4%
6001-9000	38	9.3%
9001-12000	42	10.3%
12001-50000	154	37.6%
>50,000	25	6.1%
Having health care professional family member(n=410)		
No	250	62.0%
Yes	160	39.0%
Type of profession in a study participant's family		
Midwifery	26	16.3%
Nurse	49	30.6%
Public health	18	11.2%
Medical doctors (GP&Specialist)	40	25.0ss%
Others	27	16.9%

5.2. Behavioral related characteristics of the study participants

Two hundred ninety-seven (72.4%) of the study participants had history of health facility visit. Of them, 128(43.0%), 88(29.7%) and 75(25.3%) had visit health facility before a year, within the last six months and before six months respectively.

One hundred sixty-one (39.3%) of the adult GIT OPD attendants in Tikur anbesa hospital had regular health checkup history. Among this population, majority of them (43.5%) had regular health checkup once per year.

Among the study participants, 362 (88.3%) were social media followers like television, FM radio, Facebook, telegram etc. Nearly half of the study participants 219(53.4%) had heard about colorectal cancer. But, only 77(35.2%) of them had heard about warning symptoms (Table 2).

Table 2: Behavioral related characteristics of the study participants in adult GIT OPD attendants at Tikur Anbesa Specialized Hospital, Addis Ababa 2023 (N=410)

Variables	Frequency	Percentage
Did you visit health facility before? (N=410)		
Yes	297	72.4%
No	113	27.6%
When did you visit health facility? (N=297)		
In the last six month	88	29.7%
Before six months	75	25.3%
Before a year	128	43.0%
Others (specified)	6	2.0%
Do have regular health checkup? (N=410)		
Yes	161	39.3%
No	249	60.7%
How often do you have regular health checkup? (N=161)		
Once per six months	55	34.2%
Once per year	70	43.5%
Once per five years	33	20.5%
Others(specified)	3	1.8%
Do you follow social media like TV, radio, ...?		
Yes	362	88.3%
No	48	11.7%
Have ever heard about colorectal cancer?		
Yes	219	53.4%
No	191	46.6%
Have you heard about CRC warning symptoms?		
Yes	77	35.5%
No	142	64.5%

5.3. Medical related characteristics of the study participants

Among the study participants, 71(17.3%) of them had any type of cancer previously. Ten (14.1%) of them who respond as they had any type of cancer had been bowel cancer patient. All of these study participants (10) had bowel cancer before the last one year. Forty-five (11.0%) and thirty-six (8.8%) of the study participants had respond as they had ever bowel cancer patient in their family and friends/relatives respectively (Table 4).

Table 3: Medical related characteristics of the study participants in adult GIT OPD attendants at Tikur Anbesa Specialized Hospital, Addis Ababa 2023

Variable	Frequency	Percentage
Had you any type of cancer ever? (N=410)		
Yes	71	17.3%
No	339	82.7%
Had your bowel cancer ever? (N=71)		
Yes	10	14.1%
No	61	85.9%
Had you bowel cancer patients in your family member ever? (N=410)		
Yes	45	11.0%
No	365	89.0%
Had you friends or relatives who had bowel cancer ever? (N=410)		
Yes	36	8.8%
No	374	91.2%

5.4. Colorectal cancer warning symptom awareness of the study participants

Most commonly identified colorectal cancer warning symptom were unexplained weight loss (n=238, 58.0%) and back pain (n=227, 55.4%) followed by tiredness (n=220, 53.7%) and blood in stool (n=220, 53.7%). Felling presence of Lump in anus (n=138, 33.7%) was the least identified warning symptom by study participants (Table 5).

Table 4: Colorectal cancer warning symptom awareness of the study participants in adult GIT OPD attendants at Tikur Anbesa Specialized Hospital, Addis Ababa 2023

CRC warning symptom awareness question (N=410)	Yes	No
	No (%)	No (%)
Abdominal pain	211(51.5)	199(48.5)
Anal bleeding	172(42.0)	238(58.0)
Chang in bowel habit	176(42.9)	234(57.1)
Feeling of incomplete emptiness of bowel	166(40.5)	244(59.5)
Tiredness and/or Anemia	220(53.7)	190(46.3)
Unexplained weight loss	238(58.0)	172(42.0)
Blood is stool	220(53.7)	190(46.3)
Lump in anus	138(33.7)	272(66.3)
Back pain	227(55.4)	183(44.6)

By using the above nine colorectal cancer warning symptom awareness questions (Table 5), study participant's score was calculated. Those who answered more than 6.75(75%), was categorized under had good awareness and those who scored less than 6.75(75%), was stated as had poor awareness of CRC warning symptoms.

Thus, one hundred twenty-four 30.2% (25.8—34.7) of the study participants had good awareness of colorectal cancer warning symptoms. The rest two hundred eighty-six (69.8%) study participants had had poor awareness of colorectal cancer warning symptoms (figure 2).

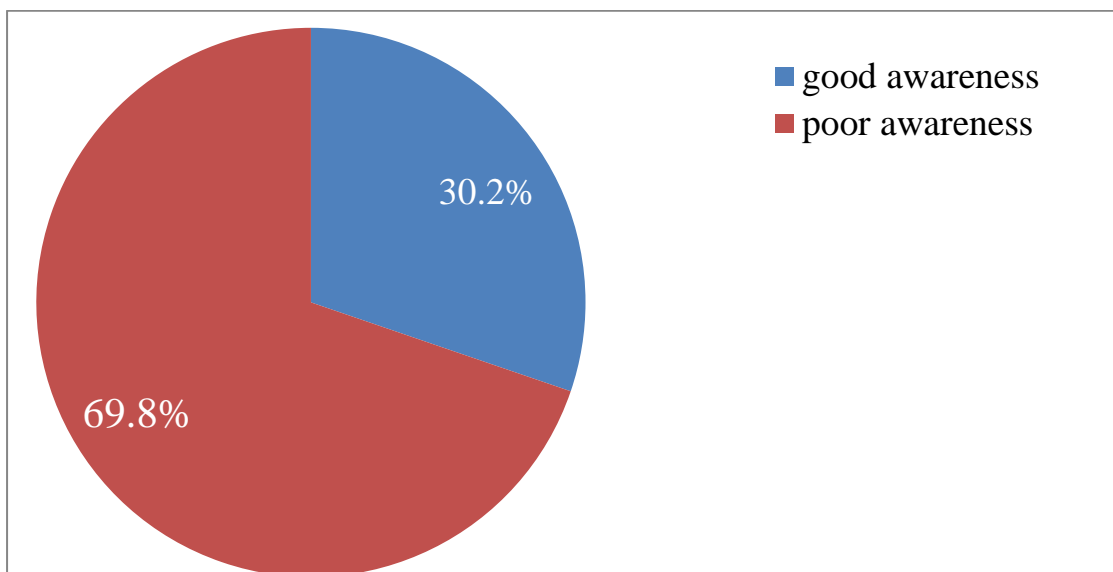


Figure 2: Awareness of CRC warning symptoms among adult GIT OPD attendants at Tikur Anbesa Specialized Hospital in Adiss Ababa, 2023

5.5. Predictor variables of CRC warning symptoms awareness among adult GIT OPD attendants

Bivariable analysis was done before doing multivariable logistic regression to select candidate variables for multiple logistic regressions. This is to select important variables to run multivariable logistic regression. Having healthcare professional in family member, Household income, ever had any type of cancer, ever had bowel cancer patient in family member, Ever had bowel cancer patient relatives and/or friends, History of health facility visit, Regular health checkup, Follow social media and Heard about CRC warning symptom were selected variables which has P-value<0.2.

These variables were entered in to multivariable logistic regression to control confounders. With multivariable logistic regression, variables that had P-value less than 0.05 at 95% confidence interval has been taken as statistically significant variable. Thus, ever had any type of cancer, Ever had bowel cancer patient friends and/or relatives, doing regular health checkup and Ever heard about CRC warning symptoms were significantly associated variables with CRC warning symptom awareness.

A study participants who had ever any type of cancer had 3.64 times(AOR=3.64, 95%CI: 1.61-8.28) higher awareness of CRC warning symptoms as compared to who had no any type of cancer. Knowing someone who had bowel cancer was an identified factor for increasing colorectal cancer warning symptoms awareness level. Those who had bowel cancer patient relatives and/or friends had 5.28(AOR=5.28, 95%CI: 1.92-14.52) higher awareness of CRC warning symptoms as compared with their counterparts.

Making health checkup was important variable to increase level of awareness about colorectal cancer warning symptoms. A study participant who did regular health checkup had 2.17(AOR=2.17, 95%CI: 1.05-4.49) higher awareness of CRC warning symptoms as compared to those who did not have regular health checkup. Being informed about colorectal cancer warning symptom was another significant predictor for awareness of colorectal cancer warning symptom awareness. A study participant who had ever heard about CRC warning symptoms had 3.25 (AOR=3.25, 95%CI: 1.59-6.64) higher awareness of CRC warning symptoms as compared to with their counterparts (Table 6).

Table 5: Factors associated with awareness of colorectal cancer warning symptoms among GIT OPD attendants at Tikur Anbesa Specialized Hospital In Addis Ababa,2023 (N=410)

Variables	Awareness level		COR (95%)	Adjusted	
	Good	poor		Sig	AOR (95%)
Having healthcare professional in family member					
No	61	187	1		1
Yes	63	99	1.83(1.19-2.81)	0.84	0.93(.46-1.86)
Ever had any type of cancer					
No	76	263	1		1
yes	48	23	7.22(1.13-12.63)	0.00	3.64(1.61-8.28)*
Had bowel cancer patient in family					
No	103	262	1		1
Yes	21	24	2.23(1.19-4.17)	0.99	0.99(0.42-2,36)
Had bowel cancer patient relatives					
No	101	273	1		1
Yes	23	13	4.78(2.33-9.79)	0.00	5.28(1.92-14.52)*
History of health facility visit					
No	20	93	1		1
Yes	104	193	2.51(1.46-4.29)	0.91	1.05(0.41-2.70)
Regular health checkup					

No	47	202	1		1
Yes	77	84	3.94(2.53-6.14)	0.03	2.17(1.05-4.49)*
<hr/>					
Follow social media					
No	9	42	1		1
Yes	115	244	2.14(1.01-4.54)	0.88	0.91(0.27-3.04)
<hr/>					
Heard about CRC warning symptom					
No	37	105	1		1
Yes	35	42	2.37(1.32-4.24)	0.00	3.25(1.59-6.64)*
<hr/>					
Monthly household income					
≤3000birr	5	64	1		1
3001-6000birr	18	61	3.78(1.32-10.81)	0.13	3.11(0.71-13.69)
6001-9000birr	16	24	9.31(3.05-28.38)	0.06	5.03(0.97-26.19)
9001-12000birr	17	25	8.70(2.90-26.12)	0.07	4.91(0.87-27.59)
12001-50000birr	60	94	8.17(3.11-21.47)	0.11	5.99(0.49-23.99)
>50000birr	8	17	6.02(1.75-20.78)	0.16	3.48(0.61-19.81)

6. DISCUSSION

This study had tried to assess awareness of colorectal cancer warning symptoms and associated factors among adult gastrointestinal outpatient department attendants at Tikur Anbesa Specialized Hospital located in Addis Ababa. According to this study, 30.2% (25.8—34.7) of the study participants had good awareness of colorectal cancer warning symptoms. This is lower than the study conducted in Jimma, Southwest Ethiopia which was 42.4%[9]. The possible reason for this difference might be due to study population difference. Study participants for previous study conducted in Jimma were surgical and medical in patients. Being patient might increase the chance of awareness about colorectal cancer particularly warning symptoms. Another reason for this discrepancy might be problem of questioner pretest. Pretest for the study conducted in Jimma had been done in the study area (in Jimma town) that leads to information contamination. Therefore, the study participants might be informed about colorectal cancer before actual data collection. Hence, it might inflate awareness level of colorectal cancer warning symptoms in Jimma, Southwest Ethiopia.

This study finding was higher than the study conducted on Public Awareness of Colon Cancer Symptoms, Risk Factor, and screening, the prevalence of symptoms associated with colon cancer awareness in Saudi Arabia (21.6%) in 2019[18]. The possible reason for this discrepancy might be due to socio-demographic characteristics and study period difference. The previous study conducted in Saudi Arabia was studied in 2018. With this study time difference, public awareness about colorectal cancer warning symptom is expected to be increased. The study conducted in Saudi Arabia was on Cancer Symptoms, Risk Factor, and screening. This might be another possible reason for result deference between the current and previous study.

By this study, good level of awareness about colorectal cancer warning symptom is smaller than the previous study conducted in Malaysia (38%) in 2021[22], Gaza (Palestinian), 40.0% [23], United Kingdom(59%)in 2018[17] and In Lebanon (67%) in 2019[19]. The possible reason for this difference might be socio-demographic difference. The chance of exposure for colorectal cancer related information might bring this deference. Because, having colorectal cancer warning symptom was an important factor for awareness of CRC warning symptoms.

The result of this study (30.2% (25.8—34.7)) is similar to the previous study conducted in Jordan university students, awareness of Colorectal Cancer Early Warning Signs was 32.8%[21].

This study revealed that the study participants had recalled colorectal warning symptoms (Abdominal pain, Anal bleeding, Chang in bowel habit, Feeling of incomplete emptiness of bowel, Tiredness and/or Anemia, Unexplained weight loss, Blood is stool, Lump in anus and Back pain) from 33.7% to 58.0% . This result was in line with the study conducted among medical and surgical outpatient department attendants at Jimma university medical center[9].

This percentage of recalling warning symptoms study were higher than the study conducted on Public Awareness of Colon Cancer Symptoms, Risk Factor, and screening, the prevalence of symptoms associated with colon cancer awareness in Saudi Arabia in 2019. The most common symptoms of colon cancer which were recalled by the study participants in the previous study were Blood in the stool (22%), weight loss (19%), abdominal pain (18%) [18]. The possible reason for this discrepancy might be due to socio-demographic characteristics and study period difference. The previous study conducted in Saudi Arabia was studied in 2018. With this study time difference, public awareness about colorectal cancer warning symptom is expected to be increased. The study conducted in Saudi Arabia was on Cancer Symptoms, Risk Factor, and screening. This might be another possible reason for result deference between the current and previous study.

When we are going to predictor of colorectal cancer warning symptom awareness doing regular health or medical checkup, previous history of any type of cancer, having bowel cancer patient friends, history of following social media and having information about colorectal cancer warning symptoms had been identified as they were significant factors which can determine level of colorectal cancer warning symptoms awareness.

According to this study finding, having regular health checkup was significantly associated facto with good awareness of colorectal cancer warning symptoms. This is consistent with the study conducted in Lebanon [19]. This might be due to being informed about colorectal cancer particularly about its' warning symptoms. Participants who had regular health checkup might be educated about CRC warning symptoms. Getting information about colorectal cancer may help individuals to develop their awareness of CRC warning symptoms which was supported by study done in Jimma, Southwest Ethiopia[9].

Ever had bowel cancer patient relatives and/or friends was an identified significant factor associated with awareness of colorectal cancer warning symptom. This is in line with the study conducted in Malaysia, Lebanon and United Kingdom [19, 22, 25]. The possible reason might be, being relative or friend with bowel cancer patients would made the study participants being informed about colorectal cancer warning symptoms. The other reason might be increase the chance to observe what was happened on bowel cancer patients when they were being with them or help the cancer patient friends.

This study showed that, Study participants who ever had been any type of cancer patient and ever heard about colorectal cancer warning symptom had good awareness of CRC warning symptoms. This is not supported or contradicted by other previous studies. The possible reason would be due to familiarity with cancer related information. Therefore, this finding indicated that accessing information about colorectal cancer warring symptoms is important way to increases public awareness of colorectal cancer warning symptom.

7. STRENGTH AND LIMITATION OF THE STUDY

7.1 Strength of the study

The investigator for this study understood that this study was the second study conducted on awareness of colorectal cancer warning symptoms in Ethiopia. This is one quality of the study.

7.2 Limitation of the study

Using cross-sectional study design might affect the data quality by recall bias. Previous studies conducted on colorectal cancer warning symptom awareness in Ethiopia were limited. Therefore, some important variables might be missed. This is institution based study that may affect the generalizability of the result to the general community.

8. CONCLUSION and RECOMMENDATION

8.1 Conclusion

This study revealed that only one third of adult gastro intestinal outpatient department attendants had good awareness of colorectal cancer warning symptoms in Addis Ababa, Ethiopia. History of cancer, health checkup, knowing bowel cancer patient and hearing about CRC warning symptoms were identified important factors for colorectal cancer warning symptom awareness.

8.2 Recommendations

For Higher officials and policy makers

To improve public awareness of colorectal cancer warning symptoms, recommended additional emphasis is required on information, education and behavioral change. Colorectal cancer information accessibility for general population and health facility attendants should be assured.

For healthcare Providers

Information about colorectal cancer warning symptoms and health checkup were important predictors to increase awareness of CRC warning symptoms. So, healthcare provides are recommended to give colorectal cancer information for their clients in their health education or counseling session of their healthcare service.

For Researchers

It will be better, if public awareness of colorectal cancer warning symptoms is studied in the community. Researchers also recommended to conduct additional study by adding another variables.

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ANNEX

Questionnaires English version

Information Sheet

Dear study participants:

My name is Sr.Tizita Zerihun. I am a second year clinical oncology nursing department postgraduate student from Addis Ababa University, college of Health Sciences, School of Nursing and Midwifery. Currently, I am conducting my thesis on assessment of awareness of colorectal cancer warning symptoms and associated factors among adult gastrointestinal outpatient department attendants in Tikur Anbesa Specialized hospital Addis Ababa Ethiopia, 2023. The objective of this study is to assess awareness of colorectal cancer warning symptoms and associated factors among adult gastro intestinal outpatient department attendants in Tikur Anbesa Specialized hospital. I am going to ask you some questions that are very important for the programmers in cancer prevention and control to plan and improve intervention. Your name will not be written in this form and the information you give is kept confidential. You will have no any harm by participating in the study. If you do not want to answer, all or some of the questions, you do have the right to do so. However, your willingness and support to answer all of the questions would be appreciated and thank you on the behalf of all adult gastrointestinal outpatient department attendants.

Are you volunteer to participate in the study?

9.1.1.1 Yes

2, NO

If not volunteer, give thanks and skip to the next client.

Dear study participants, if you have any question of comment, yoy can contact me via may address below.

Name: Tizita Zerihun

Phone:+251901165343

Email: tizitazerihun2020@gmail.com

GENERAL INSTRUCTIONS (asking questions and recording answers)

All questions in this paper are based upon adult gastrointestinal outpatient department attendant recall. It is very important that you ask each question exactly as it is written on the questionnaires. In addition to the questions, there are statements that appear in all italic form, indicating that they are interviewer instructions and should not be read aloud to the study participants.

Questioner to assess awareness of colorectal cancer warning symptoms and associated factors among adult GIT outpatient department attendants in Tikur Anbesa Specialized hospital Addis Ababa Ethiopia, 2023

Questionnaire ID number _____

Part I: Socio-demographic characteristics of all eligible study participants

S.N ^o	Socio-demographic variables.	Response format	Skip to
Q01	What is your age? (completed in years)	_____years.	
Q02	Sex	1. Male 2. Female	
Q03	What is your religion?	1. Orthodox 2. Protestant 3. Muslim 2. Others (specify) _____	
Q04	What is your Ethnicity	_____	

Q05	What is your residence	1. Urban 2. Rural	
Q06	What is your marital status?	1. Single 2. Married 3. Divorced 4. Widowed	
Q07	What is the highest grade you completed?	1. Illiterate 2. Read and write 3. Primary level (1-8 grade) 4. Secondary and preparatory level (9-12 grade) 5. Diploma and above	
Q08	What is your occupation? <i>*This question is for Female for "Q02".</i> <i>Or</i> What is your wives' occupation? <i>*if "Male" for Q02 and "Married".</i>	1. House wife 2. Daily labor 3. Merchant 4. Private sector 5. Government employee 99. If other(Specify)_____	
Q09	What is your occupation? <i>*If male for "Q02".</i> <i>OR</i> What is your husbands' occupation? <i>*If "Female" who are married in "Q06"</i>	1. Farmer 2. Daily labor 3. Merchant 4. Private sector employee 5. Government employee 99. if other(Specify)_____	
Q10	What is your husbands'/wives' educational status? <i>*This question is for only who are married in "Q06"</i>	1. Illiterate 2. Read and write 3. Primary level(1-8) 4. Secondary level(9-12) 5. Deploma level and above	
Q11	What is the average monthly income of the household? (in birr) <i>*Probe for approximate number</i>	_____ Don't know_____	

Q12	Do you have health care professional in your family member?	0, No 1, Yes	
Q13	If Yes for “Q12”, in what specific profession?	1. Midwifery 2. Nurse 3. Public health 4. Medical doctor(GP& specialist) 99. If other, specify_____	

Part II: questions to assess medical related characteristics of the study participants

S.No	medical related characteristics	Alternatives for answer	Remark
Q20	Had you any type of cancer ever?	0, No 1, Yes	
Q21	If yes for “Q20”, Had you bowel cancer ever?	0, No 1, Yes	
Q22	If yes for “Q21”, when did you have bowel cancer ever?	1. Within the last 6 month 2. Before the last 6month 3. Before the last one year	
Q23	Had you bowel cancer patient family member ever?	0, No 1, Yes	
Q24	Had you friends or relatives who have bowel cancer ever?	0, No 1, Yes	
Q25	Today, Why do you come to this room?	1. For health check up 2. For diagnosis 3. For treatment 99. If other specify_____	

Part III: question to assess behavioral related characteristics of study participants.

S.No	Behavioral related characteristics	Alternatives for answer	Remark
Q30	Did you visit health facility before today?	0, No 1, Yes	
Q31	If yes for “Q30”, when did you visit health facility?	1. In the last six month 2. Before six month 3. Before a Year 99. If others, specify _____	
Q32	If yes for “Q30”, How often did you visit health facility? <i>(Use number per six month approximately)</i>	_____ -----	
Q33	Do you have regular health checkup?	0, No 1, Yes	
Q34	If yes for “Q33”, how often do you have health checkup?	1. Once per six month 2. Once per year 3. Once per five years 99. If others, specify _____	
Q35	Do you follow social media like, TV, radio, face book, telegram...?	0, No 1, Yes	
Q36	Have you ever heard about colorectal cancer?	0, No 1, Yes	
Q37	If yes for “Q36”, have heard about warning symptoms of colorectal cancer?	0, No 1, Yes	

Part IV: Questions to assess the awareness of CRC symptoms

S.N ^o	Colorectal Cancer symptoms	Circle the alternative answer	Remark
Q40	Abdominal pain	0. No 1. Yes	
Q41	Anal bleeding	0. No 1. Yes	
Q42	Change in bowel habits	0. No 1. Yes	
Q43	Feeling of incomplete emptiness of bowel	0. No 1. Yes	
Q44	Tiredness/anemia	0. No 1. Yes	
Q45	Unexplained weight loss	0. No 1. Yes	
Q46	Blood in stools	0. No 1. Yes	
Q47	Lump in anus	0. No 1. Yes	
Q48	Back pain	0. No 1. Yes	

I have finished my question. If you have additional information or comments please?_____

Thank you for your time.

Data collector: Name _____ Sign _____ Date _____

Supervisor: Name _____ Sign _____ Date _____

መጠይቅ በአማርኛ ቋንቋ

የተሳታፊዎች መረጃ መስጫ

➤ ስለጥናቱ ገለጻ

ጤና ይስጥልኝ? ሲስተር ትዝታ ዘረሁን እባላለሁ። በአዲሱ አበባ ዩኒቨርሲቲ ህክምና እና ጤና ሳይንስ ኮሌጅ በነርቲንግ እና ሚድዋይፈሪ ት/ቤት የካንሰር ነርቲንግ ት/ት ክፍል የ2ኛ ዓመት የማስትሬት ዲግሪ ተመራቂ ተማሪ ነኝ። በአሁኑ ሰዓት በጥቁር አንበሳ ስፔሻላይዥድ ሆስፒታል ከካንሰር ተመላላሽ ህክምና ክፍል የሚመጡ ጎልማሳ ሰዎች ስለአንጀትና ፊንጢጣ ካንሰር ምልክቶች ስላላቸው ግንዛቤ እና ተዛማጅ ተግዳሮቶችን በማጥናት ላይ ነኝ።

የጥናቱ ዓላማ፡- በጥቁር አንበሳ ስፔሻላይዥድ ሆስፒታል ከካንሰር ተመላላሽ ህክምና ክፍል የሚመጡ ጎልማሳ ሰዎች ስለአንጀትና ፊንጢጣ ካንሰር ምልክቶች ስላላቸው ግንዛቤ እና ተዛማጅ ተግዳሮቶችን ማጥናት።

ተሳታፊዎች፡ - በጥቁር አንበሳ ስፔሻላይዥድ ሆስፒታል ካንሰር ተመላላሽ ህክምና ክፍል የሚመጡ ጎልማሳ ሰዎች። የተከበራችሁ የስራ ክፍሉ ተገልጾች በዚህ ጥናት መሳተፍ ምንም አይነት ገንዘብ ባያስገኝም በካንሰር መከላከልና ቁጥጥር ላይ ለሚሰሩ ግለሰቦችና ተቋማት የሚጠቅም ውጤት ያስገኛል። ስለዚህ ስለአንጀትና ፊንጢጣ ካንሰር ምልክቶች ጥያቄዎችን እጠይቅዎታለሁ። የርስዎ ስም

በመጠይቁ ቅጽ ላይ አይጻፍም። እርስዎ የሚሰጡት መረጃ ከአጥኚውና ቃለመጠይቅ አድራጊው በስተቀር ለሶስተኛ ወገን ተላልፎ አይሰጥም። በቃለ መጠይቁ ላይ ሙሉ በሙሉ ወይም በከፊል አለመሳተፍ ይችላሉ። መመለስ የማይፈልጉት ጥያቄ ቢኖር ያለመመለስ ወይም በማንኛውም ጊዜ ራስዎን ከጥናቱ የማግለል ሙሉ መብት አለዎት። ነገር ግን የእርስዎ ተሳትፎ ለዚህ ጥናት መሳካት አዎንታዊ አስተዋጾ ያደርጋል። ማንኛውም ጥያቄ ካለዎት በሚከተለው አድራሻዬ ማግኘት ይችላሉ።

ስም: ሲ/ር ትዝታ ዘሪሁን

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በጥናቱ ለመሳተፍ ፈቃደኛ ነዎት?

- 1 አዎ
- 2 አይደለሁም

ፈቃደኛ ካልሆኑ አመስግነህ/ሽ ወደ ቀጣዩ ደንበኛ እለፍ/ፊ

የተሳታፊዎች የስምምነት መግለጫ ቅጽ

በአማርኛ

እኔ ስሜ ከዚህ በታች የተገለጸው የዚህ ጥናት ዓላማ በደንብ የተብራራልኝ ሲሆን የጥናቱንም ዓላማ ተረድቻለሁ። በዚህ ጥናት ላይ ለመሳተፍ በሙሉ ፈቃደኝነት ላይ የተመሰረተ መሆኔን በሚገባ የተረዳሁ ሲሆን በማንኛውም ጊዜ ከጥናቱ ራሴን የማግለል መብት እንዳለኝ አውቂያለሁ። ስለሆነም የምሰጠው መረጃ ምስጢር እስከተጠበቀ ድረስ በዚህ ጥናት ለመሳተፍ ተስማምቻለሁ። በዚህ ጥናት ለመሳተፍ ስምምነቴን ስገልፅ ለምጠየቀው ጥያቄ በእውነት ላይ የተመሰረተ መልስ ለመስጠት የተስማማሁ መሆኔን አረጋግጣለሁ።

የመረጃ ሰጪው ፊርማ _____ ቀን _____

የጠያቂው ስምና ፊርማ _____ ቀን _____

ማሳሰቢያ(ጥያቄውን ጠይቅ/ቂና መልሱን ጻፍ/ፈ)

የሁሉም መጠይቆች መልስ ማስታወስ ላይ የተመሰረተ ነው። መጠይቆች በተጻፉበት መሰረት በትክክል እያነበቡ መጠየቅ በጣም አስፈላጊ ነው። አብዛኛዎቹ መጠይቆች የመልስ አማራጮች አላቸው። እንዲነበቡ ከታዘዙት በስተቀር የመልስ አማራጮች ለተጠያቂዎች አይነበቡም። ጥያቄውን በምትጠይቁበት/ቂበት ጊዜ የተሳታፊዎችን መልስ በጥንቃቄ አድምጥ/ጪ፤ የሚመልሱት መልስ ካሉት አማራጮች ውስጥ በትክክል የሚመሰረቱትን አማራጭ አክብ/ቢ።

በጥቁር አንበሳ ስፔሻላይዥድ ሆስፒታል የሆድና አንጀት ተመላላሽ ህክምና ክፍል የሚመጡ ጎልማሳ ሰዎች ስለአንጀትና ፊንጢጣ ካንሰር ምልክቶች ስላላቸው ግንዛቤ እና ተዛማጅ ተግዳሮቶችን ለማጥናት የተዘጋጀ መጠይቅ

የመጠይቁ መለያ ቁጥር _____

ክፍል አንድ፡- ማህበራዊና ኢኮኖሚያዊ ጉዳዮችን በተመለከተ የተዘጋጀ መጠይቅ

ተ/ቁ	ማህበራዊ እና ኢኮኖሚያዊ ጉዳዮችን በተመለከተ	የመልስ አማራጭ	እለፍ
ቁ01	እድሜዎት ስንት ነው?	_____ ዓመት.	
ቁ02	ጾታዎ?	1. ወንድ 2. ሴት	
ቁ03	ሐይማኖትዎ ምንድን ነው?	1. ኦርቶዶክስ ተዋሕዶ 2. ፕሮቴስታንት 3. ሙስሊም 99. ሌላ _____	
ቁ04	ብሔርዎ ምንድን ነው?	_____	
ቁ05	የሚኖሩት የት ነው?	1. ከተማ 2. ገጠር	
ቁ06	የጋብቻሁኔታዎ?	1. ያላገባች 2. ያገባች 3. የፈታች 4. ባሏ የሞተባች	
ቁ07	የትምህርት ደረጃዎ?	1. ማንበብና መፃፍ የማይችል 2. ማንበብና መፃፍ የሚችል 3. አንደኛ ደረጃ (1 - 8ኛ ክፍል) 4. ሁለተኛ ደረጃ--መሰናዶ (9-12ኛ ክፍል) 5. ዲፕሎማና ከዚያ በላይ	
ቁ08	ስራዎ ምንድን ነው? * ተጠያቂዎ ሴት እና ባለትዳረ ከሆነች ወይም የባለቤትዎ ሥራ ምንድን ነው? * ተጠያቂው ወንድ እና ባለትዳረ ከሆነ	1. የቤት እመቤት 2. የቀን ሰራተኛ 3. ነጋዴ 4. የግል ድርጅት ሠራተኛ 5. የመንግስት ሰራተኛ 99. ሌላ (ይጠቀስ)-----	

ቁ09	የባለቤትዎ የትምህርት ደረጃ? *ባለትዳረ ለሆኑት ብቻ	1. ማንበብና መጻፍ የማይችል 2. ማንበብና መጻፍ የሚችል 3. አንደኛ ደረጃ (1-8ኛ ክፍል) 4. ሁለተኛ ደረጃ--መሰናዶ (ከ9-12ኛ ክፍል) 5. ዲፕሎማና ከዚያ በላይ	
ቁ10	ስራዎ ምንድን ነው? *ተጠያቂው ወንድ እና ባለትዳረ ከሆነ ወይም የባለቤትዎ ሥራ ምንድን ነው? *ተጠያቂዎ ሴት እና ባለትዳረ ከሆነች	1. አርሶ አደር 2. የቀን ሰራተኛ 3. ነጋዴ 4. የግል ድርጅት ሠራተኛ 5. የመንግስት ሰራተኛ 99. ሌላ ካለ ይጠቀስ-----	
ቁ11	የቤተሰቡ አጠቃላይ ወርሐዊ ገቢ ስንት ነው(በብር)? *ተጨማሪ ማብራሪያ በመጠቀም አጠጋጋ/ጊ	_____ ብር አለውቅም-----	
ቁ12	ከቤተሰቡ አባላት የጤና ባለሙያ አለ?	0, የለም 1, አዎ	
ቁ13	ለጥያቄ ቁ12 መልሱ “አዎን” ከሆነ በምን ሙያ ነው?	1. ሚዲያዊ ደረጃ 2. ነርስ 3. የጤና መከናኘ 4. ሐኪም (ጠቅላላ/ስፔሻሊስት ሐኪም) 99. ሌላ ካለ ይጠቀስ-----	

ክፍል ሁለት:- ከህክምና እና ከጤና ጋር የተያያዙ ነገሮችን የሚዳስሱ ጥያቄዎች

ተ.ቁ		የመልስ አማራጮች	ምርመራ
ቁ20	በህይወት ዘመንዎ የካንሰር ታማሚ ሁነው ያውቃሉ?	0, የለም 1, አዎ	አዎ ከሆነ ወደ ቁ22 እለፍ
ቁ21	ለጥያቄ ቁ20 መልሱ “አዎን” ከሆነ የአንጅት ካንሰር ታማሚ ሁነው ያውቃሉ?	0, የለም 1, አዎ	

ቁ22	ለጥያቄ ቁ21 መልሱ “አዎን” ከሆነ መቼ ነው የአንጅት ካንሰር ታማሚ የነበሩ?	1. ባለፈው 6 ወር ውስጥ 2. ከ6 ወር በፊት 3. ከ1 ዓመት በፊት 99. ሌላ ከሆነ ይጠቀስ-----	
ቁ23	ከቤተሰብዎ አባላት መካከል የአንጅት ካንሰር ታማሚ የሆነ አለ?	0, የለም 1, አዎ	
ቁ24	ከወዳጅ ዘመድዎ መካከል የአንጅት ካንሰር ታማሚ የሆነ አለ?	0, የለም 1, አዎ	
ቁ25	ዛሬ እዚህ ክፍል ለምን መጡ?	1. ለጤና ክትትል 2. ለምርመራ 3. ለህክምና 99. ሌላ ካለ ይጠቀስ-----	

ክፍል ሦስት:- አግልግሎት የመጠቀም ልምድን በተመለከተ የተዘጋጁ ጥያቄዎች

ተ.ቁ	አግልግሎት የመጠቀም ልምድ	የመልስ አማራጮች	ምርመራ
ቁ30	ከዛሬ በፊት የጤና ተቋም ገብተው ያውቃሉ?	0, የለም 1, አዎ	መልሱ የለም ከሆነ ወደ ቁ33 እለፍ
ቁ31	ለጥያቄ ቁ30 መልሱ አዎን ከሆነ መቼ?	1. ባለፈው 6 ወር ውስጥ 2. ከ6 ወር በፊት 3. ከ1 ዓመት በፊት 99. ሌላ ከሆነ ይጠቀስ-----	
ቁ32	ለጥያቄ ቁ30 መልሱ አዎን ከሆነ በምን ያህል ድግግሞሽ? <i>*በየወሩ ስንት ጊዜ እንደነበረ በማጠጋገት በቁጥር ይገለጽ</i>	-----	
ቁ33	ቋሚ የጤና ክትትል/ምርመራ ያደርጋሉ?	0, የለም 1, አዎ	መልሱ የለም ከሆነ ወደ ቁ35 እለፍ

ቁ34	ለጥያቄ ቁ33 አዎ ከሆነ በምን ያህል ድግግሞሽ?	1. በ6 ወር አንድ ጊዜ 2. በዓመት አንድ ጊዜ 3. በ5ዓመት አንድ ጊዜ 99. ሌላ ከሆነ ይጠቀስ-----	
ቁ35	ማህበራዊ ሚዲያ(ቴሌቪዥን፣ ራዲዮ፣ ፌስቡክ...) ይከታተላሉ?	0, የለም 1, አዎ	
ቁ36	ስለአንጀት እና ፊንጢጣ ካነሰር ስምተው ያውቃሉ?	0, የለም 1, አዎ	

ክፍል አራት፡- የአንጀትና ፊንጢጣ ካነሰር ምልክቶችን ለመዳሰስ የተዘጋጁ ጥያቄዎች

ተ.ቁ	ከዚህ በታች የተዘረዘሩትን የአንጀትና ፊንጢጣ ካነሰር ምልክቶች “አይደለም” ወይም “አዎን” በማለት ይመልሱ	የመልስ አማራጮች	ምርመራ
ቁ40	የሆድ ህመም	0. አይደለም 1. አዎን	
ቁ41	የፊንጢጣ መድማት	0. አይደለም 1. አዎን	
ቁ42	የመፀዳዳት ባህሪ/ልምድ መለወጥ	0. አይደለም 1. አዎን	
ቁ43	ሙሉ በሙሉ መጻዳዳት ያለመቻል ስሜት	0. አይደለም 1. አዎን	
ቁ44	ድካም/ደም ማነስ	0. አይደለም 1. አዎን	
ቁ45	ምክንያቱ ያልታወቀ የክብደት መቀነስ	0. አይደለም 1. አዎን	
ቁ46	ደም የቀላቀለ ሰገራ	0. አይደለም	

		1. አዎን	
ቁ47	ፊንጢጣ የማበጥ ስሜት	0. አይደለም 1. አዎን	
ቁ48	የጀርባ/ወገብ ህመም	0. አይደለም 1. አዎን	

ጥያቄዬን ጨርሻለሁ። እባክዎትን ጥያቄ፣ ተጨማሪ መልእክት ወይም ማስተካከያ ሐሳብ ካለዎት _____

_____።

ዉድ ጊዜዎትን ሰጥተው ለቃለ መጠይቁ ስለተሳተፉ በጣም አመሰግናለሁ።

መረጃ ሰበሰቢው፡- ስም _____ ፊርማ _____ ቀን _____

ክትትል ያደረገው፡- ስም _____ ፊርማ _____ ቀን _____

APPROVAL/DECLARATION SHEET

ADDIS ABABA UNIVERSITY
 COLLEGE OF HEALTH SCIENCES
 SCHOOL OF NURSING AND MIDWIFERY
 DEPARTMENT OF ONCOLOGY

I, undersigned MSc student, declared that I have submitted my original work on a title awareness of colorectal cancer warning symptoms and associated factors among adult

gastrointestinal outpatient department attendants in Tikur Anbesa specialized Hospital, Addis Ababa, Ethiopia, 2023.

Submitted by:

Name of student	Signature	Date
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This thesis work has been submitted for examination with my approval as an advisor.

Approved by:

1. _____

Name of Major Advisor	Signature	Date
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2. _____

Name of Co-Advisor	Signature	Date
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