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Bleeding Per Rectum: Is Awareness of the General Population Essential?

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ABSTRACT

Bleeding per rectum is a medical condition characterized by the appearance of bloody stool, also known as hematochezia. To identify the community's level of awareness and knowledge about rectal bleeding in Saudi Arabia. To assess the prevalence of rectal bleeding in the Saudi community and evaluate the factors that lead some patients to seek medical care for rectal bleeding. This is a cross-sectional study conducted among the population of Saudi Arabia. The total enumeration method was used for including all the adult males and females who agreed to answer the questionnaire. Pretested questionnaire was used in data collection. Data were coded, entered, and analyzed using SPSS 23. A total of 556 participants completed the study. The prevalence of rectal bleeding was found to be 29.9%, only 47% of them asked for medical advice. The main reason for not seeking medical care was the unavailability of time (46.6%) followed by seeking alternative medicine (30.7%). We found that 86.7% of the total participants had poor knowledge about rectal bleeding. Most respondents have low general knowledge and awareness about rectal bleeding and colorectal cancer. Third of the respondents experienced rectal bleeding, only half of them reported seeking medical advice. This serious issue of low awareness and knowledge should be addressed to reduce the late presentation. This could be attained by increasing health education programs such as community campaigns, social events and enhancing the role of media to increase public awareness about rectal bleeding and colorectal cancer.

Keywords: *Rectal bleeding, Lower gastrointestinal bleeding, Colorectal cancer management, Saudi Arabia*

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INTRODUCTION

Bleeding per rectum is a medical condition characterized by the appearance of bloody stool passage through the rectum (Hanawi *et al.*, 2020; Ren-Zhang *et al.*, 2020). It is also known as hematochezia or more commonly referred to as rectal bleeding. Blood originating from any part of the gastrointestinal (GI) tract may appear at the rectal orifice with the passage of stool. Bleeding from the GI tract may be sub-divided into upper GI tract bleeding and lower GI tract bleeding. Bleeding per rectum is majorly caused due to issues in the lower GI tract resulting in bleeding. Blood originating from the upper GI tract appears darker in color when passed from the rectum whereas the lower GI tract pathologies result in fresh red-colored blood appearing along with the stool from the rectum (Sabry & Sood, 2020).

Bleeding per rectum associated with lower GI tract origin scan be caused due to underlying diseases or pathologies leading to bleeding from parts of small intestine beyond the duodenum, large intestine, anal canal, colon, and rectum. Major conditions associated as a cause of rectal bleeding include fissures, hemorrhoids, diverticular diseases, and cancer in the lower GI tract. For instance, anal fissures may appear due to a tear in rectal muscles caused by the passage of hard stool (constipation) or due to pressure applied during childbirth. Anal fissures result in rectal bleeding with the passage of each stool and may also cause pain or discomfort during stool passing. Similarly, hemorrhoids arise due to the aggregation of tissue cushions in the submucosal layer of the anal canal. They can lead to painful bleeding incidents from rectal tissue depending upon the severity of hemorrhoids (Amin & Antunes, 2020; Stoicescu, 2020).

Furthermore, small pouches are formed inside the weak pockets of the colon wall, especially where the muscular layer is penetrated by the vasa recta, in diverticular disease. These pouches may get rupture and cause rectal bleeding. Alongside, inflammatory bowel disease and colon cancer may also lead to the appearance of blood from the rectal area. Besides these underlying medical conditions, other elements may also contribute as potential risk factors for rectal bleeding. These risk factors include family history, trauma or injury related to the rectum or lower GI tract, history of recent vascular surgery, prolonged or frequent use of non-steroidal anti-inflammatory drugs (NSAIDs), old age, sedentary lifestyle, or unhealthy eating habits (Strate *et al.*, 2013; Aytac *et al.*, 2014; Ali & Shoeb, 2017; Meguerdichian & Goralnick, 2018).

Primary symptoms of rectal bleeding may vary depending upon the type and severity grade of the underlying condition presenting as the cause of bleeding. Patients can feel the pain or pressure on the site of the rectum in serious cases. In other cases, bleeding may occur without any physical discomfort,

pain, or sensation. Some patients may observe only slight bleeding appearing on the tissue used for wiping the rectal area after stool passing. On the other hand, some patients may visualize red-colored water during rectal washing or blood streaks appearing on the passed stool. In some cases, a large quantity of blood may be visualized in the toilet bowl after stool passage. Some patients may also report a change in the color of stool to a dark red, black, or tar-like appearance. Besides, some cases have also reported mental confusion and dizziness along with rectal bleeding (Strate *et al.*, 2013; Amin & Antunes, 2020; Stoicescu, 2020).

For evaluation and management of rectal bleeding, preliminary biochemical testing such as complete blood count (CBC), international normalized ratio (INR), partial thromboplastin time (PTT) is carried out to assess the baseline picture. For detailed assessment, endoscopy is considered as a gold standard technique that can aid in the identification of the site of bleeding. Alternatively, Computed Tomographic (CT) angiography may be opted to diagnose the underlying cause of rectal bleeding in patients who are unable to withstand endoscopic requirements. However, these tools may find it difficult to the identification of the exact site of bleeding in case of large volumes of blood. Thus, more sensitive approaches such as tagged red blood cell scintigraphy can be deployed for accurate localization of bleeding sites and diagnosis. Management and treatment of rectal bleeding are directly dependent upon the outcomes of diagnosis. Serious cases of bleeding accompanied by fainting or compromised vital signs are managed on an emergency basis with fluid resuscitation through an intravenous (IV) fluid support. After diagnosis, the site of bleeding can be treated via medication or surgical interventions including electrical cautery, application of sclerosing agent, infrared coagulation, and other operative interventions (Prasad Kerlin & Tokar, 2013; Thacker, 2013; Kim *et al.*, 2014; Strate & Gralnek, 2016).

Although bleeding per rectum is a commonly occurring medical complication, yet the data related to the incidence of rectal bleeding in various populations is limited. To address the scarcity of data, numerous studies have been conducted in different regions of the world focusing on multiple aspects of this frequently occurring medical condition. Specifically, studies were conducted to assess the awareness of the general public regarding their knowledge and attitude towards rectal bleeding. These studies were particularly significant because rectal bleeding is considered as one of the major symptoms of colorectal cancer. Thus, there is a strong need for public awareness and education to improve the practices related to intestinal and bowel health.

For instance, a study conducted in the United States (US) reported a high incidence of rectal bleeding incidents in the old as well as young population. The study indicated that one in seven of the surveyed members was found with a history of rectal bleeding. Despite the very high incidence of disease in participants, only a minor portion of sampled individuals indicated healthcare-seeking behavior. The outcomes of the study highlighted a lack of awareness in the general public about dangerous conditions associated with rectal bleeding (Talley & Jones, 1998).

Besides, a prospective cohort study was carried out in Ireland to identify the awareness of the general public regarding rectal bleeding as a concerning indicator of colorectal cancer. The study outcomes suggested that the majority of participants recognized rectal bleeding as a possible symptom of colorectal cancer. However, 25% of the participating patients would not go screening for colorectal cancer even when affected with rectal bleeding. These outcomes indicated gaps between awareness and practices of the general public regarding rectal bleeding and its possible role in colorectal cancer (McVeigh *et al.*, 2013). Likewise, a cross-sectional study carried out in more than 2000 colorectal cancer patients from United Kingdom (UK) was assessed and the results suggested that improved awareness about rectal bleeding may enhance the cancer management outcomes with the help of early symptomatic presentation (Forbes *et al.*, 2014). Similarly, a study from Denmark also reported an association of rectal bleeding and long patient delays in patients affected with colorectal cancer. This study suggested conducting more research to examine factors responsible for barriers in seeking medical care by the patients affected with rectal bleeding (Pedersen *et al.*, 2013).

Moreover, a dire need for educational interventions was reported by a study in Nigeria. In this study, the majority (more than 60%) of the participants did not know about the relationship between rectal bleeding and colorectal cancer. Outcomes of this study also indicated a strong correlation between knowledge and health services seeking attitude among the participants (Alatise *et al.*, 2017; Williams *et al.*, 2021). Additionally, lack of awareness and knowledge regarding rectal bleeding as a warning sign among undergraduate students in Jordan was reported by a cross-sectional study. The researchers highlighted the need for educational intervention to promote the early detection of colorectal cancer in a given population (Mhaidat *et al.*, 2018). Likewise, a study from Bahrain identified the requirement of educational campaigns and awareness sessions to increase knowledge about rectal bleeding, as only 22% of the surveyed individuals could recognize rectal bleeding as a symptom of colorectal cancer (Nasaif & Al Qallaf, 2018).

In Saudi Arabia, a study from the Aseer region recently identified that almost 52.6% of study participants recognized rectal bleeding as a matter of concern being the main symptom of colorectal cancer. However, the public attitude towards screening and prevention of colorectal cancer is unsatisfactory and educational campaigns are required to improve the awareness in the general public (Shehata *et al.*, 2020). In addition, more than 500 students from medical schools of Saudi Arabia were reported to have limited knowledge about risk factors of colorectal cancer and lacked screening attitudes, despite the significance of early detection and presentation in the management of highly incident colorectal cancer (Althobaiti & Jradi, 2019; Ashokkumar *et al.*, 2021). Furthermore, a study carried out in the Al-Ahsa region of Saudi Arabia depicted that only 27.2% of enrolled school teachers knew about rectal bleeding as a prominent symptom of colorectal cancer (Al-Thafar *et al.*, 2017). These studies indicate a lack of awareness in the general public in Saudi Arabia and other countries about the severe outcomes associated with rectal bleeding. Therefore, more efforts are required to educate the public in this regard through awareness campaigns.

Objectives

1. To identify the community's level of awareness and knowledge about rectal bleeding regarding its risk factors and causes in Saudi Arabia.

2. To assess and evaluate the factors that lead some patients to seek medical care about rectal bleeding.
3. To assess the prevalence of rectal bleeding in the Saudi community.

MATERIALS AND METHODS

Study design
A cross-sectional study was carried out.

Study area
This study was conducted in Saudi Arabia over one year started on 8/10/2019. The data collection period started from February/2020 to June /2020.

Study population
The study population was recruited from General Population.

Inclusion criteria
Any Adult Saudi Arabia residents who agreed to participate in the study, both genders.

Exclusion criteria
Non- Saudi Arabia residents who have led from other orifices, refuse to share in the study.

Sample size
The sample size was calculated using the EPI info program. Based on a 95% confidence interval, 5% margin of error, and the total population of Saudi Arabia. The estimated sample size was 384 and was adjusted to 422 to compensate for the 10% non-response rate.

Data collection tools
The study was conducted using an online self-administered questionnaire via Google Form. The generated link was randomly shared on social media (i.e., Facebook, WhatsApp, Telegram, and Twitter). The aim of the study was clearly explained in the interface.
A validated questionnaire was used based on previous studies. The questionnaire contains socio-demographic characteristics of the participants like age group, sex, nationality, and residence. The questionnaire also includes questions about Awareness of Bleeding per rectum. A common grading method was used for each variable in this questionnaire as follows: 2 points were given to the correct option, 0 for the incorrect answer, and 1 for neutral. After data collection, a participant who correctly answers 75% or more of the questions (8 questions, 16 points out of 16) was considered as good knowledge about Bleeding per rectum.

Pilot study
The questionnaire was pretested in a pilot study over a sample of 20 participants and their results were not included in the study. Some modifications were done accordingly to ensure clarity and easy understanding of the questions.

Sampling technique
A convenient non-probability sampling technique was employed to collect the data from the participants.

Data analysis
Data was coded, entered, and analyzed using the Statistical Package for Social Science (SPSS) version 23. Qualitative data were expressed in the form of numbers and percentages (No. & %). Chi-square (χ^2) test was used to examine qualitative data between two groups.

Ethical considerations
Respective approval of the study was obtained from the Research Ethics committee at Taibah University. All participants were volunteers and asked to do their best. All data were kept confidential and used only for research purposes.

RESULTS AND DISCUSSION

Socio-demographic characteristics of the participants
A total of 556 individuals from the general public population of Saudi Arabia completed the questionnaires. Out of them, 308 (55.4%) were females and 248 (44.6%) were males. The distribution of their age was as follows: 18 to 24 years (50.2%), 25 to 30 years (20.1%), 31 to 40 years (11.9%), 41 to 50 years (7.9%), and more than 50 years (9.9%). The great majority of the participants were Saudi Arabian nationals (92.3%). Regarding their highest level of education, 445 (80%) of the participants completed their University studies and 100 (18%) completed their high school studies.
Most of the participants were single (66%) and 182 (32.7%) were married. Regarding the region of residence, (1.6%) were from the Northern Region, (2%) from Southern Region, (7%) were from the Eastern Region, (82%) from Western Region, and (7.4%) were from the Middle Region. The characteristics of the participants are summarized in **Table 1**.

Table 1. Socio-demographic characteristics of the participants (n = 556)

Variable	Categories	Frequency	Percentage
Gender	Male	248	44.6%
	Female	308	55.4%
Age in years	18 – 24	279	50.2%
	25 – 30	112	20.1%
	31 – 40	66	11.9%
	41 – 50	44	7.9%
	More than 50	55	9.9%
Nationality	Saudi Arabian	513	92.3%
	Non- Saudi	43	7.7%
Educational level	Illiterate	10	1.8%
	Primary	0	0
	Secondary	1	0.2%
	High school	100	18%
	University	445	80%
	Other	0	0

Marital status	Single	367	66%
	Married	182	32.7%
	Absolute	0	0
	Widowed	7	1.3%
Region of residence	Northern Region	9	1.6%
	Southern Region	11	2%
	Eastern Region	39	7%
	Western Region	456	82%
	Middle Region	41	7.4%

Prevalence of rectal bleeding and factors associated with seeking medical care

The prevalence of rectal bleeding among the study participants was found to be 29.9%. Only 78 (47%) of the participants asked for medical advice. Most of the participants (56.4%) consulted a physician within a week of the onset of rectal bleeding and the rectal bleeding was the main symptom for 60 (76.9%) of the participants. The main reason for not having medical care for rectal bleeding was the unavailability of time (46.6%) followed by sought alternative medicine (30.7%). Detailed information is summarized in **Table 2**.

Table 2. Prevalence of rectal bleeding and factors associated with seeking medical care

Variable	Frequency	Percent
Have ever had bleeding per rectum?		
Yes	166	29.9%
No	390	70.1%
Did you seek medical attention?		
Yes	78	47%
No	88	53%
If yes: how soon?		
Within a week	44	56.4%
Within a month	22	28.2%
Within a year	7	9%
Within more than a year	5	6.4%
Was rectal bleeding the main symptom?		
Yes	60	76.9%
No	18	23.1%
If no: was the reason:*		
Absence of financial resources.	8	9.1%
No capable facility availability.	10	11.4%
Inability to leave work or family for the time needed.	9	10.2%
Sought alternative medicine (traditional remedies and healers)	27	30.7%
Unavailability of time	41	46.6%
Other	22	25%

*Multiple answers can be chosen.

Awareness and knowledge about rectal bleeding

The participants were asked different questions to assess their level of awareness regarding rectal bleeding. The percentages of participants who correctly answered each of those questions are shown in **Figure 1**. Those who correctly answered 75% or more of these questions were considered as having good knowledge about rectal bleeding.

So, in this study, the mean knowledge score was 9.11 ±2.15 out of 16 and we found that only 74 (13.3%) of the participants are having good knowledge about rectal bleeding and 482 (86.7%) are having poor knowledge. **Figure 2** summarizes this result.

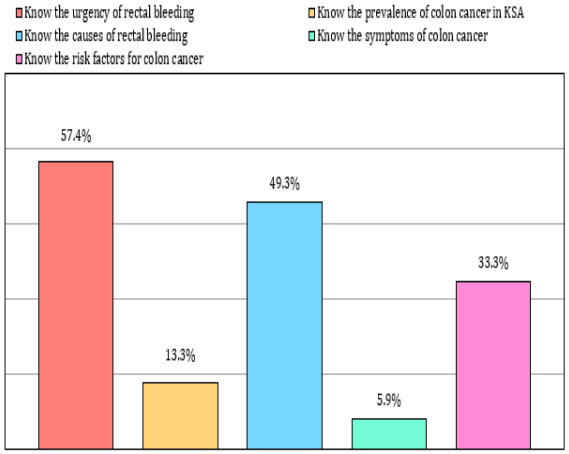

Figure 1. Awareness about rectal bleeding (percentages of participants with correct answers)

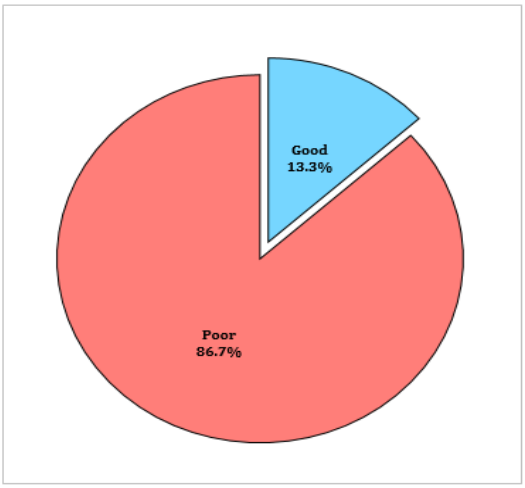

Figure 2. Level of awareness about rectal bleeding

Overall, more than half of the participants (57.4%) knew that rectal bleeding is an urgent symptom. About the predisposing factors for colon cancer, family history was known for 257 (46.2%) of the participants followed by smoking (38.3%), diet and red meats (37.6%), and obesity (31.8%). In addition, only 74 (13.3%) of the participants knew that the prevalence of colon cancer in KSA is 11%.

Regarding the causes of rectal bleeding, 274 (49.3%) of the participants correctly identified them without adding any other wrong answers. The most commonly reported cause for rectal bleeding was hemorrhoids (70.7%); this was followed by anal ulcers (56.3%), colon cancer (36.7%), and inflammatory bowel disease (25.4%). About a third of the participants (28.1%) wrongly think that spicy food can cause rectal bleeding.

When the participants were asked about the symptoms of colorectal cancer; only 33 (5.9%) of them correctly identified them without adding any additional wrong answers. The commonest reported symptom was rectal bleeding (40.8%), followed by loss of weight (34.4%) and constipation (30.8%).

About 185 (33.3%) of the participants correctly knew the risk factors for colorectal cancer without adding any other wrong answers to the same question. Those reported risk factors were family and genetics (46.2%), high-fat diet (36.5%), increasing age (33.5%), inflammatory bowel disease (24.6%), colon polyps (21.8%), and hemorrhoids (16.2%).

In addition, 494 (88.8%) of the participants have heard about hemorrhoids followed by colorectal cancer (68.9%) and anal fissure and ulcers (50.4%). Lastly, (47%) of the participants have been diagnosed or had a relative or close friend have been diagnosed with Hemorrhoids.

Detailed information about the awareness about rectal bleeding is summarized in **Table 3**.

Table 3. Awareness about rectal bleeding

Variable	Frequency	Percent
Do you think rectal bleeding is an urgent symptom?		
Yes	319	57.4%
No	75	13.5%
Don't know	162	29.1%
Do you think there is a relation between the following?		
Being over 50 makes more likely to develop colon cancer	216	38.8%
Sex and colon cancer	101	18.2%
Exercise and colon cancer	73	13.3%
Diet and red meats and colon cancer	209	37.6%
Obesity and colon cancer	177	31.8%
Smoking and colon cancer	213	38.3%
Hypertension and rectal bleeding	62	11.2%
Family history and colon cancer	257	46.2%
Anemia and rectal bleeding	76	13.7%
Don't know	157	28.2%
What do you think is the prevalence of colon cancer in our society?		
Less than 1%	35	6.3%
1%	40	7.2%
5%	104	18.7%
11%	74	13.3%
18%	36	6.5%
Don't know	267	48%
Which of the following do you think might cause rectal bleeding:		
Hemorrhoids	393	70.7%
Diverticulosis	77	13.8%
Colon cancer	204	36.7%
Polyps	91	16.4%
IBD	141	25.4%
Anal ulcers	313	56.3%
Diabetes millets	29	5.2%
Hypertension	29	5.2%
Spicy food	156	28.1%
Don't know	104	18.7%
Which of the following are symptoms of CRC:		
Rectal bleeding	227	40.8%
Abdominal pain	249	44.8%
Loss of weight	191	34.4%
Diarrhea	94	16.9%
Constipation	171	30.8%
Lump at anus	155	27.9%
Chest pain	20	3.6%
Breathlessness	36	6.5%
Fever	74	13.3%
Headache	39	7%
Don't know	213	38.3%

What are the risk factors for CRC:		
Increasing age	186	33.5%
Family and genetics	257	46.2%
High-fat diet	203	36.5%
Colon polyps	121	21.8%
IBD	137	24.6%
Stress	134	24.1%
Hemorrhoids	90	16.2%
Environment	75	13.5%
Sharing food with CRC patients	16	2.9%
Don't know	200	35%
How often do you hear about:		
Colorectal cancer	383	68.9%
Hemorrhoids	494	88.8%
Diverticulosis	99	17.8%
Colon polyps	111	20%
Anal fissure and ulcers	280	50.4%
IBD	152	27.3%
Don't know	50	9%
Do you have or any relatives or close friends who have been diagnosed with any of the following?		
Colon cancer	63	11.3%
Colon polyps	15	2.7%
Anal fissure and ulcers	58	10.4%
IBD	34	6.1%
Diverticulosis	8	1.4%
Hemorrhoids	266	47.8%
The diagnosis was not made	247	44.4%

The relationship between the level of awareness about rectal bleeding and different socio-demographic factors

The Chi-square test was used to explore the relationship between the awareness about rectal bleeding and different socio-demographic factors (gender, nationality, age, education, marital status, and residence). We found that gender, age, and marital status had statistically significant associations with the level of awareness regarding rectal bleeding (P = 0.044, 0.001, 0.000 respectively). Our results showed that females and married participants had higher awareness compared to other groups. Also, the level of awareness improves with increasing age as depicted by the highest level of awareness observed in participants older than 50 years while the lowest level of awareness was observed in participants aged 18 to 24 years. Other socio-demographic factors (nationality, education, and residence) did not reach the statistical significance level ($p < 0.05$) **(Table 4)**.

Table 4. The relationship between the level of awareness about rectal bleeding and different socio-demographic factors

Studied group	Awareness about Rectal bleeding				*p*-value*
	Good awareness		Poor awareness		
	N	%	N	%	
Gender					
Male	25	10.1%	223	89.9%	**0.044**
Female	49	15.9%	259	84.1%	
Age in years					
18 – 24	27	9.7%	252	90.3%	**0.001**
25 – 30	12	10.7%	100	89.3%	
31 – 40	11	16.7%	55	83.3%	
41 – 50	7	15.9%	37	84.1%	
More than 50	17	30.9%	38	69.1%	
Nationality					
Saudi	72	14%	441	86%	**0.082**
Non-Saudi	2	4.7%	41	95.3%	

Educational level					
Illiterate	0	0	10	100%	**0.585**
Secondary	0	0	1	100%	
High school	15	15%	85	85%	
University	59	13.3%	386	86.7%	
Marital status					
Single	33	9%	334	91%	**0.000**
Married	40	22%	142	78%	
Widowed	1	14.3%	6	85.7%	
Region of residence					
Northern Region	0	0	9	100%	**0.081**
Southern Region	1	9.1%	10	90.9%	
Eastern Region	5	12.8%	34	87.2%	
Western Region	57	12.5%	399	87.5%	
Middle Region	11	26.8%	30	73.2%	

Several limitations to our study were noted. The results of this study cannot be considered accurately representative of all Saudi population, as our sampling strategy was convenient sampling, therefore, some people have a very minute chance of receiving the survey and participate. In addition, participants were reached to using the internet, so people who are unfamiliar with the internet or living in very remote regions may not have the opportunity to participate. Despite these limitations, our results have generated important data on the Saudi population's views on rectal bleeding and colon cancer.

Increasing the level of awareness about rectal bleeding always should be taken seriously regardless of its primary cause as it is considered one of the alarming symptoms related to many diseases with a wide spectrum and variable range of seriousness starting from simple hemorrhoids or injuries to the anal canal as in anal fissures then inflammatory bowel diseases and the most serious one which is colorectal cancer.

This study aimed to identify the community′s level of awareness and knowledge about rectal bleeding regarding its risk factors and screening methods in Saudi Arabia and to assess the prevalence of rectal bleeding in the Saudi community and evaluate the factors that lead some patients to seek medical care about rectal bleeding.

In the current study (44.6%) were males and (55.4%) were females. The great majority of the participants were Saudi Arabian nationals (92.3%) the remaining (7.7%) are from other nationalities. Most of the respondents were within the age group between eighteen and twenty-four years old and the most reliable reasoning here is this group has better access to social media, so they have a better chance to encounter the survey.

About (80%) of respondents have completed their university educational level, roughly two-thirds of them were singles.

The prevalence of rectal bleeding among the study participants was found to be 29.9%, of that only 47 % of the participants asked for medical advice this reflects decreased treatment-seeking behavior the same result was obtained in the parallel study conducted in the USA (Talley & Jones, 1998).

Regarding the cause of not seeking treatment the main reason for not having medical care for rectal bleeding was the unavailability of time followed by seeking alternative medicine so whatever the cause of decreased treatment-seeking behavior needs to be addressed.

Concerning the general knowledge and awareness about rectal bleeding small percentage which is only (13.3%) of the participants were found to be having good knowledge about rectal bleeding and (86.7%) are having poor knowledge, in contradiction to other studies conducted in Ireland showing increased awareness about rectal bleeding (McVeigh *et al.*, 2013).

More than half of respondents knew that rectal bleeding is an urgent symptom needs to be assessed and about more than third of respondents knew predisposing factors for colon cancer such as family history, smoking, diet and obesity, the same finding was found in other study conducted in Saudi Arabia showing limited awareness about rectal bleeding and risk factors of colon cancer (Althobaiti & Jradi, 2019; Roberts-Wolfe *et al.*, 2021).

About more than two-thirds of respondents stated that the most common cause of rectal bleeding was hemorrhoids, half of them also mentioned anal ulcers but only one third identified it as the alarming sign for colon cancer similar results were reported in a study conducted in Nigeria also demonstrating low awareness about rectal bleeding as a sign of colorectal cancer (Alatise *et al.*, 2017).

Most of the respondents (more than 88%) have heard about hemorrhoids followed by colorectal cancer. The observation here is that many people might self-diagnose their bleeding as hemorrhoids when in fact there is a chance that the bleeding is of more serious cause such as colorectal cancer, and then they present late at the hospital reducing their chances of a positive outcome. Nearly half of the respondents have been diagnosed or had a relative or close friend have been diagnosed with Hemorrhoids.

Regarding the symptoms of colorectal cancer only (5.9%) of respondents correctly identified them without adding any additional wrong answers and the commonest reported symptom was rectal bleeding which was reported by more than third of respondents followed by loss of weight which was also stated by roughly one-third of them and finally, constipation which only confirmed by less than one-third of them and these percentages are reflecting a very serious issue here because this means low awareness about symptoms of cancer which will result in late presentation these symptoms are not only for cancer but even symptoms of advanced chronic disease which needs urgent investigations and early management, but this was not the case in the parallel study conducted in the UK which

revealed increased awareness about symptoms associated with colorectal cancer (Forbes *et al.*, 2014).

Considering the relationship between the awareness about rectal bleeding and different socio-demographic factors this study revealed statistically significant associations between gender, age and marital status and the level of awareness regarding rectal bleeding showing that females and married respondents had higher awareness compared to other groups this could be attributed to that marriage increases interaction and information sharing between couples also level of awareness increases with increasing age also this is considered logical as it confirms the fact that states older age more information and experience.

CONCLUSION

A small percentage of respondents had good general knowledge and awareness about rectal bleeding but the vast majority of them had poor awareness and did not have accurate information about it. About one-third of respondents currently have or had a history of rectal bleeding, half of them reported seeking medical advice. More than half of respondents were aware that rectal bleeding is an urgent symptom that needs to be assessed and more than a third of respondents knew predisposing factors for colon cancer. About more than two-thirds of respondents reported hemorrhoids as the most common cause of rectal bleeding. Extremely low knowledge about many other symptoms of colorectal cancer was observed. There was a significant association between gender, age, and marital status and the level of awareness regarding rectal bleeding showing the level of awareness is higher in females, married groups, and older age groups when compared to the other groups. So, this serious issue of low awareness and low general knowledge should be addressed to reduce the incidence of colorectal cancer and its complications through avoiding its proven risk factors and reduce the number of late presenting cases by raising the level of awareness about its early symptoms. This could be attained by health education programs such as community campaigns and social events. Also, by enhancing the role of media such as TV and social media through programs presented by health care professionals to increase the general public awareness about rectal bleeding and other symptoms of colorectal cancer.

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