

## KNOWLEDGE AND PRACTICE OF HEMORRHOID AMONG ADULT POPULATION IN MAJMAAH CITY, SAUDI ARABIA, 2018

Osama H. Alanazi\*, Mohammed A. Alhassan, Abdulaziz A. Alhassan, Abdulaziz A. Alfarhood, Asim D. Alanazi, Nawaaf R. Alsubai

Saudi Arabia.

Article Received on  
25 August 2018,

Revised on 16 Sept. 2018,  
Accepted on 07 October 2018

DOI: 10.20959/wjpr201818-13549

\*Corresponding Author

Dr. Osama H. Alanazi  
Saudi Arabia.

### ABSTRACT

**Background:** Hemorrhoid also known as piles, is a group of clumps or masses of tissues that consists of elastic fibers and muscles with bulging and enlarged blood vessels. It is a common condition among adults, and it is characterized by pain and bleeding. **Aim:** To assess the knowledge and practice of adult population in Majmaah city regarding hemorrhoid. **Method:** This study is cross-sectional which was conducted at Majmaah city and surrounding villages. A pre-tested questionnaire was used in this study, data collected were analyzed by

using SPSS program. **Results:** There were 71.6% knew about hemorrhoid, 55.9% reported that relatives and friends were their primary sources of information about hemorrhoid, The main cause and complication of hemorrhoid reported by participants were low fiber diet (89.8%) and strangulated hemorrhoid (90.2%) respectively. There were 82.4% usually drink plenty of fluid, 75.8% usually eat food containing high fibers, 8.8% take fibers supplements and 49.2% sometimes sit for a long time on the toilet. **Conclusion:** There were good knowledge and good practice of adult population regarding hemorrhoid.

**KEYWORDS:** Hemorrhoid, Majamaah, Knowledge, Practice.

### INTRODUCTION

The hemorrhoid is a very common anorectal disease defined as the symptomatic enlargement and/or distal displacement of anal cushions<sup>[1,2]</sup>, which are prominences of anal mucosa formed by loose connective tissue, smooth muscle, arterial and venous vessels.<sup>[3]</sup> The most common manifestation of hemorrhoids is painless<sup>[10]</sup> low-volume rectal bleeding, with bright red blood seen on the toilet tissue or around, but not mixed, in the stool. Careful examination of the anorectal area with anoscopy is essential for diagnosis.<sup>[4]</sup>

Positive fecal occult blood or anemia should not be attributed to hemorrhoids until the colon is adequately evaluated especially when the bleeding is atypical for hemorrhoids, when no source of bleeding is evident on anorectal examination, or when the patient has significant risk factors for colorectal neoplasia.<sup>[9]</sup>

Prolapsing hemorrhoids may cause perineal irritation or anal itching due to mucous secretion or fecal soiling. A feeling of incomplete evacuation or rectal fullness is also reported in patients with large hemorrhoids. Pain is not usually caused by the hemorrhoids themselves unless thrombosis has occurred, particularly in external hemorrhoid or if a fourth-degree internal hemorrhoid becomes strangulated.

Obesity Constipation and prolonged straining are widely believed to cause hemorrhoids because hard stool and increased intraabdominal pressure could obstruct venous return, resulting in engorgement of the hemorrhoidal plexus.<sup>[7]</sup>

However, Many investigators have failed to demonstrate any significant association between hemorrhoids and constipation, whereas some reports suggested that diarrhea is a risk factor for the development of hemorrhoids.<sup>[8]</sup> Pregnancy can predispose to congestion of the anal cushion and symptomatic hemorrhoids, which will resolve spontaneously soon after birth. Many dietary factors including low fiber diet, spicy foods, and alcohol intake have been implicated but reported data are inconsistent.<sup>[7]</sup>

The exact prevalence of hemorrhoids is unknown because patients have a tendency to use self-medication rather than to seek proper medical attention; however, recent evidence has suggested an increased prevalence of hemorrhoid<sup>[17]</sup> In 2016, an epidemiologic study of lower gastrointestinal bleeding (LGIB) in Riyadh, the capital city of Saudi, revealed a hemorrhoid is the most common colonoscopy finding of LGIB in Saudi patients (38.5%).

In a prospective study, Murshid<sup>[5]</sup> described bleeding as the main presenting symptom of hemorrhoids in Saudi patients who were seen for the first time. Though hemorrhoids can cause chronic mild per rectal bleeding, it is frequently challenging to confirm active bleeding from hemorrhoids in all patients; hence it remains a probable and not definitive source of bleeding, as the majority of people have hemorrhoids that do not bleed.<sup>[6]</sup>

Hemorrhoid classification system is useful not only to help in choosing between treatments but also to allow the comparison of therapeutic outcomes among them. Hemorrhoids are

generally classified by their location and degree of prolapse. Internal hemorrhoids originate from the inferior hemorrhoidal venous plexus above the dentate line and are covered by mucosa, while external hemorrhoids are dilated venules of this plexus located below the dentate line and are covered with squamous epithelium. Mixed (internal-external) hemorrhoids arise both above and below the dentate line. For practical purposes, internal hemorrhoids are further graded based on their appearance and degree of prolapse, known as Goligher's classification: (1) First-degree hemorrhoids (grade I): The anal cushions bleed but do not prolapse; (2) Second-degree hemorrhoids (grade II): The anal cushions prolapse through the anus on straining but reduce spontaneously; (3) Third-degree hemorrhoids (grade III): The anal cushions prolapse through the anus on straining or exertion and require manual replacement into the anal canal; and (4) Fourth-degree hemorrhoids (grade IV): The prolapse stays out at all times and is irreducible. Acutely thrombosed, incarcerated internal hemorrhoids and incarcerated, thrombosed hemorrhoids involving circumferential rectal mucosal prolapse are also fourth-degree hemorrhoids.<sup>[9]</sup>

The diagnosis of hemorrhoid is based on precise patient history and careful clinical examination. Internal hemorrhoids cannot be palpated, the digital examination will detect an abnormal anorectal mass, stenosis, scar, estimate anal sphincter tone, and determine the status of prostatic hypertrophy which may be the reason for straining as this aggravates descent of the anal cushions during micturition.<sup>[11]</sup>

The best treatment of hemorrhoids is prevention. This can be achieved by avoiding constipation, intake of high fiber diet and administration of bulk laxatives if necessary. Local symptoms such as anal irritation and pain can be alleviated by some soothing creams and suppositories, but they hardly provide long-term benefit. On the other hand, surgical treatment of hemorrhoids is often associated with morbidity that makes it of lousy reputation and unpopular among patients.<sup>[12,13]</sup> Although nonsurgical treatments of piles such as rubber band ligation, sclerotherapy, photocoagulation, and cryotherapy are well accepted and very popular to the patients, they are not suitable for all grades of piles.<sup>[14]</sup>

## **MATERIAL AND METHODS**

A cross-sectional study will be conducted on all adult male and female who live in Almajmaah city and surrounding villages. Majmaah city is located in Sudair area in the middle of Najed heights. The borderlines of Sudair from the east is Aldana desert and from the north the desert which runs between Twig Mountain and Alqassim. From the west, the

area is bordered by Jurifah vale and from the south Alatak vale. The space of sudair area is 9000 Square miles, and the number of population is about 12000. Sudair area contains many towns and villages such as Almajmaah, Hawtah Sudair, Rawdat Sudair, Harmah, Awdat Sudair, Ushirah Sudair.<sup>[15]</sup> Almajmaah is the capital city of Sudair area. It lies about 180 km from Riyadh to the North West. Almajmaah city is an area of 30,000 km<sup>2</sup> and has a population of 133 thousand people. It is the capital city of the province.<sup>[16]</sup> The study will concern Almajmaah and surrounding villages.

Total enumeration method will be used for including all the adult male and female agreed to answer the questionnaire in this study.

**The tool of data collection:** Pre-tested, questionnaires will be used in data collection. The respondents will be the people themselves. The questionnaire includes questions about socio-demographic factors, knowledge of participants, their attitude and practice about hemorrhoid.

**Statistical method:** Data were analyzed by computer using Statistical Package for Social Sciences (SPSS) version 22.

**Ethical concern:** The ethical approval will be obtained from the ethical committee of the Basic Health Research Centre of Majmaah University. Informed consent will be obtained from the students.

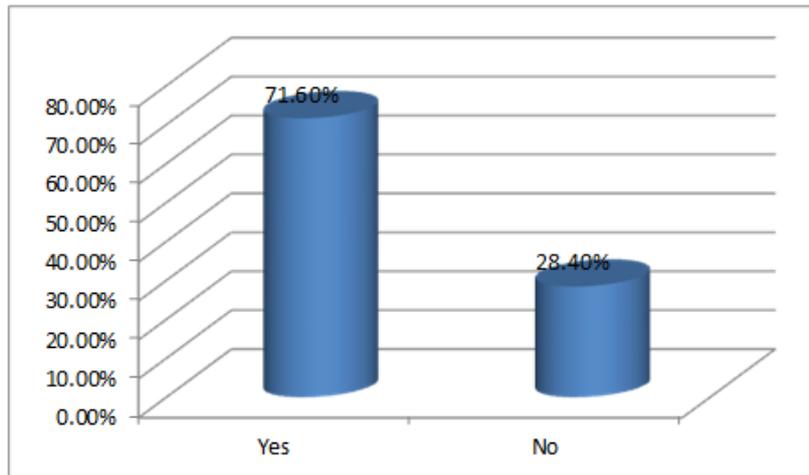
## RESULTS

The present study included 500 individuals; males were more dominant 350(70%) than females 150(30%). Individuals with age of 26-35 years represented the predominant age group 139(27.8%), followed by those with age more than 56 years 114(22.8%), then those with 46-55 years 100(20%) and those with age of 18-25 years and 36-45 years 75(15%) and 72(14.4%) respectively. The vast majority 449(89.8%) were Saudi individuals, whereas 51(10.2%) were non-Saudi. There were 440(88%) individuals reported good financial status, 40(8%) and 20(4%) reported poor and excellent economic status respectively. The large majority 458(91.6%) reported Majmaa as the place of residence, and only 42(8.4%) reported other areas, demographics of participants are shown in table 1.

**Table. 1: Demographics of participants.**

<b>Characteristics</b>	<b>N(%)</b>
<b>Gender</b>	
<b>Male</b>	350(70%)
<b>Female</b>	150(30%)
<b>Age</b>	
<b>18-25</b>	75(15%)
<b>26-35</b>	139(27.8%)
<b>36-46</b>	72(14.4%)
<b>46-55</b>	100(20%)
<b>&gt;56</b>	114(22.8%)
<b>Nationality</b>	
<b>Saudi</b>	449(89.8%)
<b>Non-Saudi</b>	51(10.2%)
<b>Financial status</b>	
<b>Poor</b>	40(8%)
<b>Good</b>	440(88%)
<b>Excellent</b>	20(4%)
<b>Marital status</b>	
<b>Single</b>	200(40%)
<b>Married</b>	251(50.2%)
<b>Divorced</b>	49(9.8%)
<b>Place of residence</b>	
<b>Majmaa</b>	458(91.6%)
<b>Others</b>	42(8.4%)

The knowledge of individuals were assessed by asking 4 questions, the knowledge of participants about hemorrhoid is shown in figur1, large percent 71.6%(358individuals) reported knowing hemorrhoid and the most source of information they reported was relatives and friends 200(55.9%), followed by health care professionals 100(27.9%), whereas media represent the least source 58(16.2%). Different causes of hemorrhoids were reported by participants, straining during bowel movement, obesity, low fiber diet, chronic diarrhea or constipation, sitting for long time on the toilet and pregnancy represented 44%, 78%, 89%, 80%, 60% and 50% and respectively, whereas 10.2% reported that they don't know. The complications of hemorrhoid according to individuals perspective were as follow, 87.8% reported anemia, 52% reported bowel cancer, 89.2% reported bleeding, 90.2% reported strangulated hemorrhoid, 53.2%, 89%, and 79.8% reported rectal prolapsed, fissures and fistulae and anal irritation respectively, where as 9.8% didn't know. The knowledge of participants is shown in table 2.



**Fig. 1: Knowledge of participants about hemorrhoid.**

**Table. 2: Knowledge of different aspects related to hemorrhoid.**

Questions	N(%)
<b>The source of knowledge</b>	
Healthcare professional	100(27.9%)
Relatives and friends	200(55.9%)
Media	58(16.2%)
<b>Causes of hemorrhoid</b>	
Straining during bowel movements	220(44%)
Obesity	390(78%)
Low-fiber diet	449(89.8%)
Chronic diarrhea or constipation	400(80%)
Sitting for long periods of time on the toilet	300(60%)
Pregnancy	250(50%)
I don't know	51(10.2%)
<b>Hemorrhoid may lead to</b>	
Anemia	439(87.8%)
Bowel cancer	260(52%)
Bleeding	446(89.2%)
Strangulated hemorrhoid (painful)	451(90.2%)
Rectal prolapsed	266(53.2%)
fissures and fistulae	445(89%)
Anal irritation or infection	399(79.8%)
I don't know	49(9.8%)

The practice of individuals regarding hemorrhoid is shown in table3. More than half of participants 52.2% reported being active as other people in the same age, the majority (82.4%) reported that they usually drink plenty of fluids, 75.8% reported that they usually eat food containing fibers, and the large majority 91.2% stated that they didn't take fibers supplements. Regarding sitting on the toilet, there were 49.2% said they sometimes sit for a long time, 40% said that they rarely do and 10.8% said they usually do.

Table. 2: Practice of individuals regarding hemorrhoid.

Questions	N(%)
<b>Compared to other people your age, would you say you are physically more active, less active, or about as active?</b>	
More active	139(27.8%)
Less active	100(20%)
About as active	261(52.2%)
<b>Do you drink plenty of fluid?</b>	
Usually	412(82.4%)
Sometimes	76(15.2%)
Rarely	12(2.4%)
<b>Do you usually eat food containing high fibers</b>	
Usually	379(75.8%)
Sometime me	51(10.2%)
Rarely	70(14%)
<b>Do you take fibers supplements</b>	
Yes	44(8.8%)
No	456(91.2%)
<b>Sitting for long periods of time on the toilet</b>	
Usually	54(10.8%)
Sometimes	246(49.2%)
Rarely	200(40%)

## DISCUSSION

The current study is the first study to assess the knowledge and practice regarding hemorrhoid among the adult population. There was no previous study on this subject. In our study, the knowledge about hemorrhoid was high; there were 71.6% knew about hemorrhoid. The main source of information for individuals who reported knowing hemorrhoid was relatives and friends (55.9%). It was reported that chronic diarrhea, constipation, postponing bowel movement, poor bathroom habits, and poor fiber diets are contributing causes of hemorrhoid.<sup>[18]</sup> Also, it was reported that hemorrhoid is very common during pregnancy.<sup>[11]</sup>

Regarding causes of hemorrhoids, the main cause reported in this study was low fiber diet (89.8%) followed by chronic diarrhea or constipation (80%), whereas the least reported cause was straining during bowel movements (44%), only 10.2% said that they didn't know.

Regarding complications of hemorrhoid, the most reported complication was strangulated hemorrhoid (90.2%), and the least reported one was bowel cancer (52%). In this study we investigated the practice of participants regarding hemorrhoid, there was good practice of participants, where 82.4% reported usually drinking plenty of water, and 75.8% usually eat food containing high fibers, these prevent constipation which is one cause of hemorrhoid.

Also, 49.2% of participants in this study reported that they sometimes sit for a long period on the toilet and 40% said that this was rare. There was no previous study conducted on this subject so that we couldn't compare our results with previous ones. Further researches on this subject are very recommended.

## CONCLUSION

There were good knowledge and practice of participants regarding hemorrhoid.

## REFERENCES

1. Lohsiriwat V. Approach to hemorrhoids. *Curr Gastroenterol Rep.*, 2013; 15: 332. [PubMed].
2. Lohsiriwat V. Hemorrhoids: from basic pathophysiology to clinical management. *World J Gastroenterol*, 2012; 18: 2009–2017. [PMC free article] [PubMed].
3. Thomson WH. The nature and cause of haemorrhoids. *Proc R Soc Med.*, 1975; 68: 574–575. [PMC free article] [PubMed].
4. Rockey DC Lower gastrointestinal bleeding. *Gastroenterology*, 2006; 130: 165-171.
5. Murshid KR Hemorrhoids! Don't call the surgeon yet. *Saudi J Gastroenterol*, 1997; 3: 94-95.
6. Gralnek IM The role of colonoscopy in evaluating hematochezia: a population based study in a large consortium of endoscopy practices. *Gastrointestinal Endoscopy*, 2013; 77: 410-418.
7. Loder PB, Kamm MA, Nicholls RJ, Phillips RK. Haemorrhoids: pathology, pathophysiology and aetiology. *Br J Surg.*, 1994; 81: 946–954. [PubMed].
8. Johanson JF, Sonnenberg A. Constipation is not a risk factor for hemorrhoids: a case-control study of potential etiological.
9. American Gastroenterological Association medical position statement: Diagnosis and treatment of hemorrhoids.
10. Aigner F, Gruber H, Conrad F, Eder J, Wedel T, Zelger B, Engelhardt V, Lametschwandtner A, Wienert V, Böhler U, et al.
11. Harish K, Harikumar R, Sunilkumar K, Thomas V. Videoanoscopy: useful technique in the evaluation of hemorrhoids. *J Gastroenterol Hepatol*, 2008; 23: e312–e317. [PubMed]
12. Brisinda G, Civello IM, Maria G. Haemorrhoidectomy: painful choice. *Lancet*, 2000; 355: 2253.

13. Maria G, Brisinda G, Civello IM. Anoplasty for the treatment of anal stenosis. *Am J Surg*, 1998; 175: 158-160.
14. Corman ML. Colon and rectal surgery. 4<sup>th</sup> ed. Philadelphia (PA): Lippincott-Raven, 1998; 147-205.
15. Dr. Abdullah Bin Ibrahim bin Ali Al Turki, Sudair Region in the First Saudi State (Historical Study), First Edition, Riyadh, King Abdul Aziz Press Press, 28-31.
16. 16. Abdullah Al-Hudaiba Al-Subaie, Our Country Archeology and Heritage, First Edition, Riyadh, King Fahad National Library, 305.
17. Johanson JF, Sonnenberg A. The prevalence of hemorrhoids and chronic constipation. An epidemiologic study. *Gastroenterology*, 1990; 98: 380–386. [PubMed]
18. Yarnell E. Naturopathic Gastroenterology, Wenatchee WA, Healing Mountain Publishing, 2000, 2009.