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HEMORRHOIDS; KNOWLEDGE OF CITIZENS ABOUT THE DISEASE

Ayman elgadda, Naif R alosaimi, Assaf F alotaibi, Adel J aJosaioii, Fahad O alosaimi, Abdulrahman A alotaibi, Hamad D alotaibi

Shaqra University, Research Unit-College of Medicine, Kingdom of Saudi Arabia

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Abstract:

Backgrounds*: Hemorrhoids are very common condition of anorectal disorders with high prevalence among Saudi Arabia citizens that related to many unhealth habits. Hemorrhoids can be prevented or resolved in its early stage through life style modification and this is required the good knowledge about the disease and bad habits that cause it. Also, in Arabic societies, hemorrhoids is related to shame, as patients especially women are shame of declare their symptoms and may be refuse to visit the clinic leading them to try traditional medicine that may be not useful in most cases that need surgery. In addition, many people however the surgery is effective refuse to undergo it due to afraid from pain or complication of it.*

Aims*: To explore Dawadmi's citizens' knowledge about hemorrhoids, its origin, causes, treatment and if they afraid from hemorrhoidectomy. In addition, we will try to explore the prevalence of the diseases between people and what is the worst habits that practiced by diseased patients. Besides find if there is correlation between low knowledge, age, gender, some habits and education and be diseased.* ***Methods****: a cross section study through using of online distribution of prepared questionnaire that aims to explore the answers of approximately 385 Dawadmi's citizens. Then harvesting of answers, tabulated them and analytically analyzing them will be done. We took permission from all respondents to the survey to participate in the research. The data of the participants in the research will be kept confidential. There is an emphasis on ethical approval that includes the participants; their data to ensure that the dignity, rights, safety and well-being of all the participants is the primary consideration of the research project. Research was approved by ethical committee in dawadmi collage of medicine.*

Results*: From 425 persons invited, 362 participates agreed to undergo the study (response = 85 %), 83 cases were male (23 %) and 274 cases were female (77 %),* ***Most of cases were from 20-40 years old (74 %) and 57.7 % of cases had bachelor education.*** *59.7 % of participates had moderate awareness about hemorrhoids, its source and management while 21.8 % of them had slight awareness while 16.7 % had complete awareness of the disease.* ***In this study the incidence of the hemorrhoids was 19.1 % of total cases.*** *67.5 % of participates thought hemorrhoidectomy is good while 56 % would not agree to undergo it if they had hemorrhoids.* ***Conclusion:*** *There is high incidence of hemorrhoids in the Dawadmi which related to moderate awareness of population which lead to increasing risk factors of hemorrhoids as low exercise practicing, low fiber and water intake. In addition, however the good impression of participates about hemorrhoidectomy most of them would not undergo it.*

Corresponding author:

Ayman elgadda,

Shaqra University,

Research Unit-College of Medicine, Kingdom of Saudi Arabia

QR code

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INTRODUCTION:

Hemorrhoids are a very common anorectal (around the anus and lower rectum) condition which defined as the symptomatic enlargement and consequence of distal displacement of the normal anal cushions.[1] Which is just well-defined as "varicose veins of the anus and rectum,". The rectum is the bottom section of your colon (large intestine) [2]. Hemorrhoids may be located inside the rectum (internal hemorrhoids), or they may develop under the skin around the anus (external hemorrhoids) [3].

They affect millions of people around the world, and represent a major medical and socioeconomic problem. We know that hemorrhoids are the most common cause of rectal bleeding and anal discomfort, however, it is unknown for us the true epidemiology of the disease since patients tend to use self-medication rather than to seek proper medical attention. This may be because of not understanding how risky the hemorrhoid is, feeling shy from declaring the symptoms or fear from surgery.
And from little research done on hemorrhoids, their prevalence was estimated between 4.4% and 86%. with a peak in prevalence between the ages of 45 and 65 years [4] while the development of hemorrhoids before the age of 20 years was rare [5]. Nearly three out of four adults will have hemorrhoids from time to time.[3]

Specific aim(s):

- To explore citizens' knowledge about hemorrhoids, its origin, causes, treatment and if they afraid from hemorrhoidectomy.
- In addition, we will try to explore the prevalence of the diseases between people and what is the worst habits that practiced by diseased patients.
- Besides find if there is correlation between low knowledge, age, gender, some habits and education and be diseased

Definitions:

➢ **Classification of Hemorrhoids**:

Hemorrhoids are mostly classified on the origin of their location and degree of prolapse into **External (outside) hemorrhoids which** are painless (unless a blood clot) dilated venules of this plexus positioned below the dentate line and are enclosed with squamous epithelium [3]. In addition to **Internal (inside) hemorrhoids** which originate from the inferior hemorrhoidal venous plexus above the dentate line and are enclosed by mucosa with painless bleeding and protrusion during bowel movements. If an internal hemorrhoid is completely prolapsed, it can cause severe pain. Prolapsed means it has slid out of the anal opening and cannot be pushed back inside.

Internal hemorrhoids are more classified based on their appearance and degree of prolapse, recognized as Goligher's classification to four grades where grade four is the most serious.[6]

➢ **Pathophysiology of Hemorrhoids:**

The particular pathophysiology of hemorrhoidal progress is poorly understood. In past, the theory of "Varicose Veins", which suggested that hemorrhoids were triggered by varicose veins in the anal canal, had been common but today it is obsolete since we have evidences that hemorrhoids and anorectal varices are distinct entities. In fact, patients with portal hypertension and varices do not have an increased incidence of hemorrhoids. [7]

Today, the concept of "Sliding anal canal lining" is widely accepted [8]. This suggests that hemorrhoids are triggered when the supporting tissues of the anal cushions collapse or deteriorate. So according to this theory hemorrhoids are the pathological term to describe the abnormal downward displacement of the anal cushions causing venous dilatation.

There are classically 3 major anal cushions, positioned in the right anterior, right posterior and left lateral aspect of the anal canal, and numerous numbers of minor cushions lying between them. [9] In patients diagnosed by hemorrhoids, the anal cushions have significant pathological changes including abnormal venous dilatation, vascular thrombosis, degenerative process in the collagen fibers and fibroelastic tissues, distortion and rupture of the anal subepithelial muscle. Beside a severe inflammatory reaction involving the vascular wall and surrounding connective tissue with associated mucosal ulceration, ischemia and thrombosis. [10]

There some evidence that some enzymes or mediators are involved in the degradation of supporting tissues in the anal cushions. One of the most potent enzymes is matrix metalloproteinase (MMP), a zinc-dependent proteinase which found to be over-expressed in hemorrhoids and capable of degrading extracellular proteins such as elastin, fibronectin, and collagen [11]

➢ **Symptoms of Hemorrhoids:**

- Painless bleeding during bowel movements [3] which is typically bright red (as hemorrhoidal tissue has direct arteriovenous communication) described by patients as blood drips into toilet bowl. [12]
- Itching or irritation in your anal region [3]
- Pain or discomfort [2]

Hemorrhoids themselves do not usually cause pain unless thrombosis has occurred, mostly in an external hemorrhoid or if a fourth-degree internal hemorrhoid becomes strangulated. Anal fissure and perianal abscess are the most common causes of anal pain in hemorrhoidal patients. [13]

- Swelling around your anus [3]
- A lump near your anus, which may be sensitive or painful (may be a thrombosed hemorrhoid) [3]
- Protrusion of skin during bowel movements [2]
- A feeling of incomplete evacuation or rectal fullness is also reported in patients with large hemorrhoids. [13]
-

➢ **Causes of Hemorrhoids:**

The really exact cause of hemorrhoids is unknown. Lots of pressure is put on human rectal veins due to our upright posture, which can potentially cause bulging. [2] Other contributing factors include:

❖ **Aging**: being older mean more incidence of hemorrhoid. [2]

❖ **Chronic constipation or diarrhea** [2]

Constipation and prolonged straining are widely thought to cause hemorrhoids since hard dry stool and increased intraabdominal pressure may cause obstruction of venous return, lead to engorgement of the hemorrhoidal plexus. [1] Also, defecation of hard fecal material increases shearing force on the anal cushions. [14]

❖ Whereas some reports suggested that diarrhea is a risk factor for the development of hemorrhoids [15]

❖ **Pregnancy**

❖ Pregnancy can prompt congestion of the anal cushion and symptomatic hemorrhoids, which will resolve spontaneously soon after birth. [1]

❖ **Heredity**

❖ **Straining during bowel movements**

Increase in straining for defecation may precipitate the development of symptoms such as bleeding and prolapse in patients with a history of hemorrhoidal disease [1]

❖ **Faulty bowel function** due to overuse of laxatives or enemas [2]

❖ **Spending long periods of time on the toilet** (e.g., reading, mobile usage) [2]

➢ **Diagnosis of hemorrhoids:**

The diagnosis of hemorrhoidal disease is based on an accurate patient history and cautious clinical examination.

Valuation should include a digital examination and anoscopy in the left lateral position.

Hemorrhoidal size, location, severity of inflammation and bleeding should be distinguished during anoscopy.

The perianal area should be examined for anal skin tags, external hemorrhoid, perianal dermatitis from anal discharge or fecal soiling and anal fissure.

Some physicians choose patients sitting and straining in the squatting position to watch for the prolapse. However internal hemorrhoids cannot be palpated.

Digital examination can distinguish abnormal anorectal mass, anal stenosis and scar, assess anal sphincter tone, and verify the status of prostatic hypertrophy which can be the cause of straining as this exacerbates descent of the anal cushions during micturition.

Intrarectal retroflexion of the colonoscope or transparent anoscope with flexible endoscope also allow good visualization of the anal canal and hemorrhoid, and permit recording pictures. [16]

➢ **MANAGEMENT OF HEMORRHOIDAL DISEASE**

Therapeutic treatment of hemorrhoids differs from dietary and lifestyle modification to radical surgery, according to degree and severity of symptoms. [17] [18]

- **Dietary and lifestyle modification**

Eating high-fiber foods: Eat more fruits, vegetables and whole grains. (25-35 grams of fiber/day) [2] Doing so softens the stool and increases its bulk, which will help you avoid the straining that can cause hemorrhoids. Also, will help in avoiding problems with gas. [3] Fiber supplement reduced the risk of continuing symptoms and bleeding by about 50%, but did not improve the symptoms of prolapse, pain, and itching [19]. **Drinking plenty of fluids.** Drink six to eight glasses of water and other liquids (not alcohol) each day will help keep stools soft [3] and prevent hard stools and aid in healing. [2] Moreover, Straining and holding your breath when trying to pass a stool produces greater pressure in the veins in the lower rectum. [20] **in addition to importance of go as soon as you feel the urge** [19]. Staying active to help prevent constipation and to reduce pressure on veins, which can occur with long periods of standing or sitting. Also help in losing excess weight which contribute to your hemorrhoids. [3] **Avoiding long periods of sitting as** Sitting too long, particularly on the toilet, can increase the pressure on the veins in the anus. [3]

- **Medical treatment:**

Medical treatment depends on usage of certain drugs which appear in some studies to have positive effect in reducing hemorrhoids as oral flavonoids [20, 21, 22, 23], oral calcium dobesilate [24, 25, 26] and topical treatment [27, 28, 29]. In addition to some operative treatment as sclerotherapy [18, 30, 31, 32], rubber band ligation [13, 33], infrared coagulation [18, 34], radiofrequency ablation [35, 36] and cryotherapy [37].

- **SURGICAL TREATMENT**

Hemorrhoidectomy suregery is one of the most effective treatment for hemorrhoids with the lowest rate of recurrence compared to alternative modalities. [38] It may be performed using scissors, diathermy [39, 40] or vascular-sealing device such as Ligasure (Covidien, United States) [41] and Harmonic scalpel (Ethicon Endo-surgery, United States). [41, 42] Excisional hemorrhoidectomy can be performed safely under perianal anesthetic infiltration as an ambulatory surgery. [6, 43, 44]. However it is associated with some complications as postoperative pain. [44, 45,46], acute urinary retention (2%-36%), postoperative bleeding (0.03%-6%), bacteremia and septic complications (0.5%-5.5%), wound breakdown, unhealed wound, loss of anal sensation, mucosa prolapse, anal stricture (0%-6%), even fecal incontinence (2%-12%). [47,48]

Lecture review:

The literature had been explored using various electronic databases including CNHAL, Pub Med and Google Scholar, because of the importance of hemorrhoids and its prevalence in Saudi Arabia and desire to increase the efficiency of treatment methods either surgical or non-surgical and to increase awareness of the individual and society, reflecting health economics and costs.

Significantly in the use of published research and guidelines for the updated practices of the existing database evidence.

The keywords used: **hemorrhoids, constipation, hemorrhoidectomy, dietary fiber, sclerotherapy and rubber band ligation**

Hemorrhoids is widely distributed between the two genders, however little researches have been done on this scope. However pain or blood which may be associated with hemorrhoids, Dr. S. Riss, M. Mittlböck and A. Stift, in their study" Hemorrhoids, constipation and fecal incontinence: is there any relationship?" said that Hemorrhoids, irrespective of their degree, do not influence quality of life. This result was assumed after using short form-12 health survey on Participants, who attended the Austrian nationwide healthcare programme for colorectal cancer screening at four medical institutions, were enrolled prospectively between 2008 and 2009 [49]
In the next study of Robert S. Sandler and Anne F. Peery, Rethinking in their study "What We Know about Hemorrhoids, *Clinical Gastroenterology and Hepatology*" that aimed to assess any potential relationship between hemorrhoids and anorectal dysfunction. They used in this study colonoscopy and detailed anorectal examination were performed on participants who attended the Austrian nationwide healthcare programme for colorectal cancer screening at four medical institutions were enrolled prospectively between 2008 and 2009. They finished in that however the median constipation score was low in both groups, there was a significant association between constipation and hemorrhoids in adult patients [50].

While Bernstein, W.C. "Colon Rectum (1983)" said that Hemorrhoids are not varicosities, but relatively are vascular cushions consist of arterioles, venules, and arteriolar-venular communications which slide down, become congested and enlarged, then may bleed. The pathogenesis starts in the fibromuscular supporting layer in the submucosa, above the vascular cushions. The bright red bleeding, which relates to hemorrhoidal disease, its origin is arteriolar. Also, he thought that portal hypertension has been shown not to be the cause of hemorrhoids. Finally, he declared that the use of rubber bands, sclerosing solutions, cryosurgery, or the infra-red beam in the early stages of hemorrhoidal disease can prevent prolapse and bleeding and can prevent the progress to third- and fourth-degree hemorrhoids [51].

As a suggested non-surgical management of hemorrhoids is dietary fiber intake. JW Anderson (2009) showed that dietary fiber intake provides many health benefits and reducing many risk factors of hemorrhoids. As, individuals with high intakes of dietary fiber appear to be at significantly lower risk for developing coronary heart disease, stroke, hypertension, diabetes, obesity, and certain gastrointestinal diseases. Also, fiber supplementation enhances weight loss. Increased fiber intake benefits a number of gastrointestinal disorders including the following: gastroesophageal reflux disease, duodenal ulcer, diverticulitis, constipation, and hemorrhoids. And he clarified that dietary fiber intake provides similar benefits for children as for adults. The recommended dietary fiber intakes for children and adults are 14 g/1000 kcal. So, he suggested that more effective communication and consumer

education is required to enhance fiber consumption from foods or supplements [52].

METHODOLOGY:

Design: A descriptive, cross-sectional design will be used to answer the research questions.
Study setting: the study was conducted in Dawadmi which is a Saudi governorate located in the Riyadh region with a population of 190,000

Inclusion criteria:	**Exclusion criteria:**
Agreed to undergo the questionnaire	Disagree to undergo the questionnaire
Saudi Arabian citizen	Refuse to use his answers in the study
Older than 15 years old	Not Saudi Arabia citizen or out of Dawadmi
Dawadmi citizen	Younger than 15 years old

Sample Size:
According to Cochran's sample size formula, $\mathbf{N = z^2 pq / e^2}$. Assuming that p will be 0.5 and the confidence will be 95%, with at least 5 % precision.

So, we $((1.96)^2 (0.5) (0.5)) / (0.05)^2 = 386$.

So evaluated sample size is 386, and with considering of responding questionnaire we will try to collect 425 response.

Sampling Technique:
It will be randomized sampling of subjects to obtain a representative sample for the study.
Data Collection methods, instruments used, measurements:
In this study, we will use a prepared questionnaire that composed of 43 questions divided into 3 categories. We will start the questionnaire with demographic variables as age, gender, educational level and the existing of the disease. In addition, the questionnaire will be designed to explore the most possible part of people so it will be divided into 17 questions for hemorrhoid patients and 21 questions for non-hemorrhoid patients. In both categories, we will try to evaluate the knowledge of people of hemorrhoid, its causes, how to cure and prevent it. After preparing the questionnaire, we will create it online using Google application then distribute it using some online application as WhatsApp, and Facebook among Saudi Arabian

Data Management and Analysis Plan:

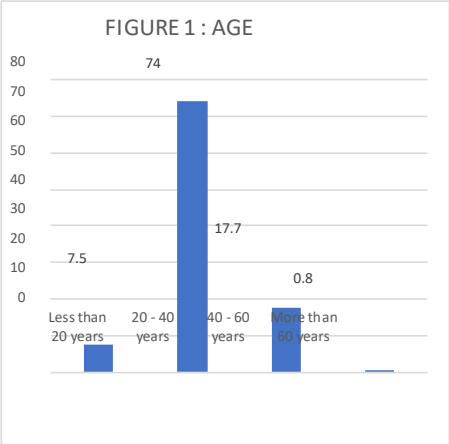
Data analysis will be performed using SPSS version 22 (Statistical Package for Social Sciences). Descriptive statistics will be conducted for all study variables, which include the measure of central tendency (mean), variability (standard deviation), and shape of distribution (skewness and kurtosis; Polit & Beck, 2012).

Ethical Considerations:

- All answers will be unpublished or sharable with anyone out of the team and will be used only in purpose of this study.
- No name of any participate will be required.
- No gifts or reward will be given to any one to participate in questionnaire

RESULTS:

From 425 persons invited, 362 participates agreed to undergo the study (response = 85 %), 83 cases were male (23 %) and 274 cases were female (77 %) (FIGURE2). Most of cases were from 20-40 years old (74 %), 17.7 % were from 40-60 years old while 7.5 % were younger (10-20 years old) and the rest were older than 60 years old (FIGURE 3). 57.7 % of cases had bachelor education, 24.6 % had diploma while 15.2 % were still students at the time of the study and 2.5 % were uneducated (TABLE 1). 33.7 % of participates indicated that they have one or more cases with hemorrhoid in their families while the rest indicated that they did not have a family history of hemorrhoids (TABLE 2).



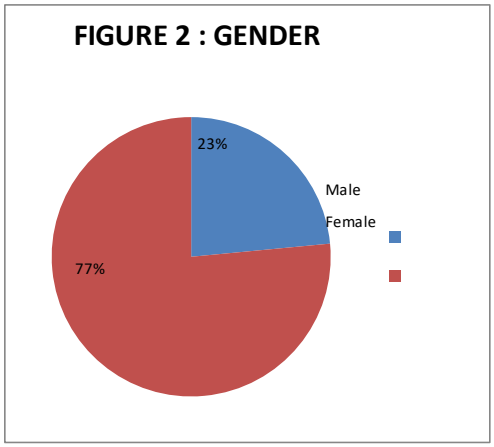


TABLE 1: Education degree	Frequency	Percent
Uneducated	9	2.5
Student	55	15.2
Diploma	89	24.6
Bachelor	209	57.7
Total	362	100

Do you have a family history of hemorrhoid

TABLE 2		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	122	33.7	33.7	33.7
	No	240	66.3	66.3	100.0
	Total	362	100.0	100.0	

59.7 % of participates had moderate awareness about hemorrhoids, its source and management while 21.8 % of them had slight awareness while 16.7 % had complete awareness of the disease (TABLE 3). This awareness is related to some demographic factors. 70.2 % of 40-60 years old population were having moderate awareness, 59.9 % in 20-40 population and 42.3 % in younger population. 61.2 % of females had moderate awareness, 19.6 % had complete awareness, 17.8 % had slight and 1.4 % had no awareness. 60.8 % of males had moderate, 33.8 % slight and 2.7 % for both complete and no awareness. 66.6 % of uneducated people were moderate aware. in students, 41.7 % were moderate aware, while 43.8 % were slight aware, 10.3 % had complete awareness and 4.2 % with no awareness. having diploma leading to 60.6 % of them to be moderated aware, 28.2 % of slight aware and 9.8 % with complete awareness. population with bachelor had higher percentage of people with moderate and complete awareness with 66.7 % and 19.6 % respectively (TABLE 4).

TABLE 3: Awareness about hemorrhoids	Frequency	Percent
Not at all aware	5	1.7
Slightly Awareness	64	21.8
Moderately Awareness	175	59.7
Extremely Awareness	49	16.7
Total	293	100

TABLE 4: DEMOGRAPHIC FACTORS AND DEGREE OF AWARENESS		Awareness				P-VALUE
		Not at all aware5	Slightly Awareness 64	Moderately Awareness17 9	Extremely Awareness4 5	
Age	Less than 20 years	0.00%	46.1 %12	42.3%11	11.6 %3	0.203
	20 - 40 years	1.8 %4	20.3 %44	59.9 %130	18 %39	
	40 - 60 years	2.1%1	14.9%7	70.2 %33	12.7 %6	
	More than 60 years	0.00%	1.60%	1.10%	0.00%	
Gender*	Male	2.7 %2	33.8 %25	60.8 % 45	2.7 %2	0.000
	Female	1.4 %3	17.8 %39	61.2 % 134	19.6%43	
Education degree*	Uneducated	16.7 %1	16.7 % 1	66.6 % 4	0.00%	0.000
	Student	4.2 %2	43.8 %21	41.7 % 20	10.30%5	
	Diploma	1.4 %1	28.2 %20	60.6 % 43	9.8 %7	
	Bachelor	0.6 %1	13.1 %22	66.7 %112	19.6 %33	
*significant at P-VALUE <= 0.05						

In this study the incidence of the disease was 19.1 % of total case while 15.7 % did not if they were having hemorrhoids or not and 65.2 % indicated not having hemorrhoids (TABLE 5). In those who are know that they had hemorrhoids; 15.38 % indicated that uses NSAID (analgesics) to much last year, 24.62 % used it but in irregular manner while 60 % indicated that they did not used it last year. 61.19 % of them indicated that they never needed laxative drug during last year, 25.37 % USED it in irregular manner while 13.43 % were depend on it. 54.79 % of them did not practice exercise at all, 19.18 % practice for 30 min./ week, 17.81 % for 2 hours and only 8.22 % for more than 2 hours.57.35 % of patients indicated that they eating dietary fibers but not enough quantity, 23.53 % indicated that they did not eating fibers, 14.71 % did not know what is the proper amount to eat daily while only 4.41 % eating it regularly. 51.47 % of patients indicated that did not drink enough water and other drinks, 16.18 % drink water in excess way, 22.06% drink enough water and 10.29 % did not know what proper water to drink daily.70 % of patients indicated that they had chronic diarrhea last 6 months. 41.2 5 of them showed that they had to sit for long time. 36.7 5 of patients declared that they eat large amount of spicy food in their diet while 46 5 indicated regular eating it but in small amounts. 51.8 % of patients

showed that they in many times they delay their entering to bathroom even they had to (TABLE 6).

TABLE 5: Do you have hemorrhoids?	Frequency	Percent
Yes	69	19.1
No	236	65.2
I do know	57	15.7
Total	362	100

Table 6 some habits and its relation with hemorrhoid's patient				
NSAID USAGE	Too much	Not at all	In irregular manner	
	60 %	24.62 %	15.38 %	
Laxative usage	Too much	Not at all	In irregular manner	
	13.43 %	61.19 %	25.37 %	
Perform exercise	Not at all	For 30 min	For 2 hours	For more than 2 hours
	54.79 %	19.18 %	17.81 %	8.22 %

In young population (<20 years old), 76 % indicated that they were not having hemorrhoids while 4 % indicated that they had and 20 % did not know. 60 % of 20-40 years old population were free from disease, 21.5 % had the disease and 18.5 % did not know. 61.1 % of 40-60 years old population were free from hemorrhoids, 25 % were having the disease and 12.9 % did not know. 71 % of students indicated not having hemorrhoids while 15 % did not know. Within population with bachelor degree, 19.5 % had hemorrhoids while 15.5 % did not know. In diploma-population, 62 % did not have hemorrhoids while 17 % did not know. 57 % of uneducated population did not have hemorrhoids while 14 % did not know. (TABLE 7)

TABLE 7: DEOMGRAPHIC FACTORS AND HEMORRHOID'S PATIENTS					
		Yes	No	Not know	Total
Age	Younger than 20 years old	1 (4 %)	19 (76 %)	5 (20 %)	25 (100 %)
	20-40 years old	51 (21.5 %)	143 (60 %)	43 (18 %)	237 (100 %)
	40-60 years old	16 (25 %)	38 (61.1 %)	8 (12.9 %)	62 (100 %)
	Older than 60 years old	0 (00 %)	2 (100 %)	0 (00 %)	2 (100 %)
Gender	Male	12 (14.46 %)	55 (66.27 %)	16 (19.28 %)	83 (100 %)
	Female	56 (20.59 %)	176 (64.71 %)	40 (14.7 %)	272 (100 %)

Education level	Un educated	2 (28.57 %)	4 (57.14 %)	1 (14.29 %)	8 (100 %)
	Student	7 (13.46 %)	37 (71.15 %)	8 (15.38 %)	52 (100 %)
	Diploma	18 (20.69)	54 (62.07 %)	15 (17.24 %)	87 (100 %)
	Bachelor	40 (19.42 %)	134 (65.05 %)	32 (15.53 %)	206 (100 %)

In assessing the impression of participates about hemorrhoidectomy, 67.5 % of participates thought that is good. 82.8 % Younger participates (less 20 years old) stated that the surgery is good while 64.5 % of 20-40 years old population thought it is good. No significant different between male and female in thought of surgery. In addition, education level does not have effect of this thought. However, all this number reduced when it is about undergo the surgery if diseased where only 56 % of participates though that they would entering surgery if needed. The reduced number of agreements of undergoing surgery whatever the age, gender or education level. 66 % of males did not have hemorrhoids while 19 % did not know. In female population, 21 % were having hemorrhoids while 14.7 % did not know (TABLE 8).

TABLE 8: DEMOGRAPHIC FACTORS AND HEMORRHOIDECTOMY		What is your impression about hemorrhoidectomy		if you are diagnosed with hemorrhoid, you will agree with preforming the surgery	
		Good N= 238	Bad N= 115	Yes N= 201	No N= 155
Age	Less than 20 years	82.8%	17.2%	76.7 %	23.3%
	20 - 40 years	64.5 %	35.5 %	54.3 %	45.7 %
	40 - 60 years	71.9 %	28.1%	57 %	43 %
	More than 60 years	80 %	20 %	60 %	40 %
Gender	Male	66 %	34 %	52.2 %	47.8 %
	Female	67.9 %	32.1 %	57.4 %	42.6 %
Education degree	Uneducated	62.5 %	37.5 %	87.5 %	12.5 %
	Student	65.5 %	34.5 %	56%	44%
	Diploma	70.5 %	29.5 %	67.8 %	32.2 %
	Bachelor	65.5 %	34.5 %	50.7 %	49.3 %

Hemorrhoids or piles are a common anorectal disorders disorder among adults. In this study we aimed to study the knowledge of hemorrhoids and exploring prevalence.

In this study we impeded 12 questions to assess the knowledge of participates about hemorrhoids, source and treatment option. Each correct answer was calculated ended in categorize each participate by one term; complete awareness, moderately awareness, slightly and no awareness. in this study 59.7 % of participates were in term of moderately awareness. however, this is more than half of total participates, it is considered low knowledge especially when knowing that only 16.7 % of participates had complete awareness. Age has significant effect on this knowledge. Older people had higher levels of knowledge about the disease. While gender had little effect on this knowledge. education level of participates has significant relationship with level of

their knowledge. the higher the education level of participates, the higher the knowledge they own about the disease. This give a great indication about importance of education not only to increase knowledge about hemorrhoid but to increase awareness of many other aspect [53].

Epidemiological data are of great importance as they reflect the burden of a disease. The incidence of hemorrhoids in this study was 19.1 % mostly of population of 40-60 years old followed by 20-40 years old population. This indication of that getting older is risk factor for hemorrhoids. Incidence are more in females than males. The incidence is higher than other study which conducted in United States, the prevalence was of 4.4%. In both genders, a peak in prevalence is noted between 45 and 65 years of age [54].

NSAID medicines and chronic usage of laxative are known to worsen hemorrhoids however excess usage of them was noticed in this study. Practicing exercises is considering an important factor in reducing hemorrhoids and prevent its occurrence [2] however unfortunately most of patients did not practice exercise at all, only quarter of them who practice it for at least 2 hour/ week. Low degree of exercise is a significant problem that not only contributing to hemorrhoids' occurrence but to many other aspects as most chronic diseases as obesity, CV disorder, diabetic mellites, arthritis and bone deformation [55]. Dietary fiber regular intake was shown in many studies to be an effective way to regulate abdominal movements, reduce constipation and prevent/ relieve hemorrhoids [56, 57]. However, more than half of patients did not eat enough amounts of daily fiber or not knowing the amounts needed while quarter of them did not eat it at all. Fluid intake is important for reducing constipation and hemorrhoids' occurrence [58] however, more than half of patients did not drink water in sufficient amount or even did not know the sufficient amount. In addition, most of patients had to sit for long time, ate spicy foods in their diet and delay the defecation.

Hemorrhoidectomy is type of surgery used to mange hemorrhoids. Most of participates had a good impression about it especially in younger population and in the two gender with all level of education. However, we wanted to ensure this perception so we added an addition question to put them in situation of choosing surgery if they are diseased. The impressed results that the number decreased dramatically in answering of this question from 67.5 % of having good impression to 56 % of accepting the surgery in case of being with hemorrhoids. This reduction does not be affected by age, gender or education level. This indicates however the importance of the surgery, most people would not accept it in their own condition.

In conclusion, there is high incidence of hemorrhoids in the Dawadmi which related to moderate awareness of population which lead to increasing risk factors of hemorrhoids as low exercise practicing, low fiber and water intake. In addition, however the good impression of participates about hemorrhoidectomy most of them would not undergo it.

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