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Knowledge Assessment of Appendicitis among Saudi Population

Authors
Omar Alhaidari, Tariq Alyousif, Saad Algarni, Saud Almalki
Ahmad Alghamdi, Lina Alyousif

Abstract
The aim of this study is to assess the knowledge, attitude and perception of Saudi population on appendicitis and appendectomy and to determine the level of awareness about appendicitis among Saudi Arabia; The population used in this study was all the citizens of Saudi Arabia; and the study sample included (3368) participant randomly chosen from the population; In order to achieve the objectives of the study, the researcher used the analytical descriptive method for this study. The main tool adopted for the present study is a questionnaire that consist of 27 items designed to measure the level of awareness in the Saudi population in regard to appendicitis; many conclusions were extrapolated from the results of the study, the most important of which is that (47.2%) of the sample did not know the cause of appendicitis, also (60.3%) of the respondents believe that appendicitis can be prevented, and (56.9%) of the sample did not know what are the risks of appendectomy, which shows an alarming level of misinformation and unawareness of such an important life threatening issue which reflected in the result of the final item in the questionnaire which showed that (95.9%) of respondents believe that there is no advocacy of awareness about appendicitis by the media in Saudi Arabia; The study made several recommendations as well, the most important of which is the urgency to develop a plan to raise the awareness of the Saudi society using various media outlets about the causes of appendicitis and how to deal with it, the researcher also suggested that further studies are needed to measure the readiness of the various Saudi media outlets to educate the community about the causes of appendicitis and how to deal with it.

Introduction

Appendicitis is the most common surgical cause of abdominal pain in the general population worldwide.[1][2] And the third most common indication for abdominal surgery in the elderly patient.[3][4] An American Journal of Epidemiology study in 1990 found that appendicitis was a common condition affecting approximately 6.7% of females and 8.6% of males. In the U.S. 250,000 cases of appendicitis are reported annually.[5] Approximately 7 percent of the population will have appendicitis in their lifetime, with the peak incidence occurring between the ages of 10 and 30 years.[6] About 327,000 appendectomies were performed during U.S. hospital stays in 2011, a rate of 10.5 procedures per 10,000 populations. Appendectomies accounted for 2.1% of all operating-room procedures in 2011.[7]

The annual mortality rate per 100,000 people from appendicitis in Saudi Arabia has decreased by 49.2% since 1990, an average of 2.1% a year. Also, the healthy life lost per 100,000 people from appendicitis in Saudi Arabia has decreased by 58.8% since 1990, an average of 2.6% a year.[8]

The aim of this study is to assess the knowledge, attitude and perception of Saudi population on appendicitis and appendectomy and to determine the level of awareness about appendicitis among Saudi Arabia.

Materials and Methods

This cross-sectional study was carried out during the period from November 2016 to December 2016. It was conducted on Saudi population whom provided the data that were collected throw electronic questionnaire. A total of 3368 subjects were collected to evaluated the knowledge and awareness about appendicitis and appendectomy among Saudi population.

The electronic questionnaire included demographic information (age, gender, level of education), detailed information concerning appendix and the diagnosis and treatment of suspected appendicitis, and complication following the appendectomy surgery.

P-value of 0.05 and confidence interval of 95% were considered statistical significant. All statistical analysis was done using IBM SPSS Statistics version 23.

Results and characteristics of the study sample

The frequencies and percentages of the sample were calculated according to their responses to the questionnaire items prepared by the researcher as shown in the following tables:

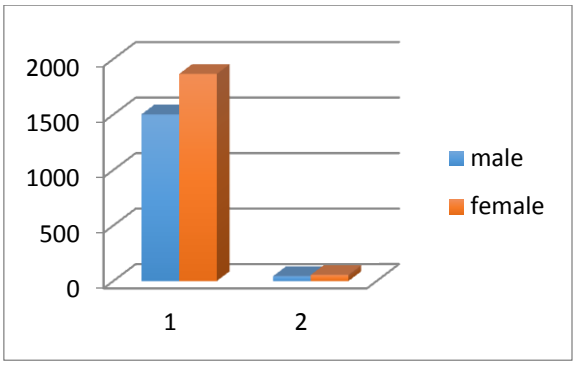
1 Distribution of sample members by gender

Table (3-1*)* Distribution of sample members according to gender

N	Gender	Frequency	Percentage
1	male	1502	44.6%
2	female	1866	55.4%
Total		3368	100%

Table (3-1) shows that (44.6%) of the respondents are Male, while (55.4%) of the sample are female.

Figure (1) shows the distribution of sample members according to gender



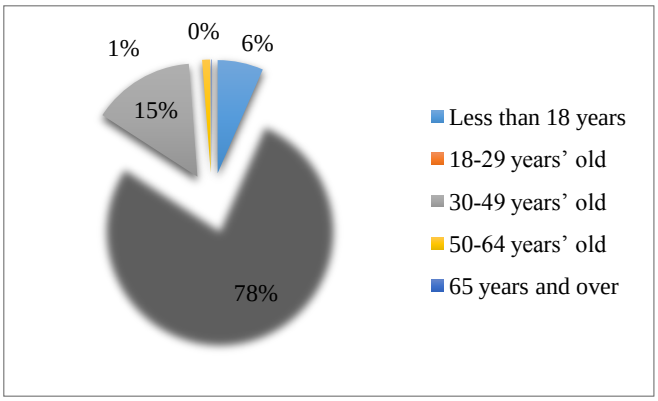
2 Distribution of the sample by age

Table (3-2) Distribution of the sample according to age

N	Age	Frequency	Percentage
1	Less than 18 years	220	6.5%
2	18-29 years' old	2614	77.6%
3	30-49 years' old	493	14.6%
4	50-64 years' old	38	1.1%
5	65 years and over	3	0.1%
Total		3368	100%

Table (3-2) shows that (6.5%) of the sample were under 18 years of age, while (77.6%) of the respondents were between 18-29 years old, (14.6%) of the sample is between the ages of 30-49 years' old, (1.1%) of the sample aged between 50-64 years old, and (0.1%) of the sample aged between 65 years and over.

Figure (2) shows the distribution of sample members according to age



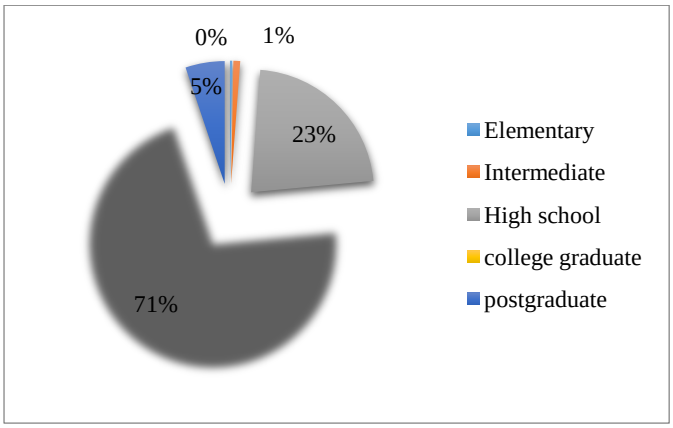
3 Distribution of the sample by educational level

Table (3-3) Distribution of the sample according to the educational level

N	Age	Frequency	Percentage
1	Elementary	10	0.3%
2	Intermediate	30	0.9%
3	High school	752	22.3%
4	college graduate	2402	71.3%
5	postgraduate	174	5.2%
Total		3368	100%

Table (3-3) shows that (0.3%) of the respondents have an elementary qualification, while (0.9%) of the sample have an Intermediate qualification, (22.3%) of the sample had a High school qualification, (71.3%) of the sample are college graduates, and (5.2%) of the sample had a postgraduate qualification.

Figure (3) shows the distribution of the sample according to the educational level



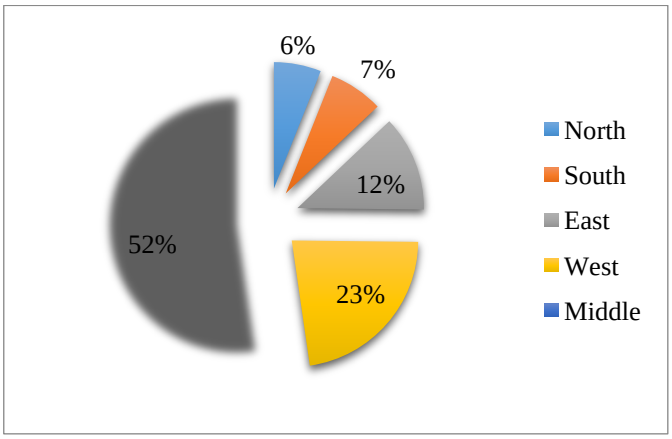
4 Distribution of the sample members by region

Table (3-4) Distribution of sample members according to region

N	Age	Frequency	Percentage
1	North	203	6.0%
2	South	233	6.9%
3	East	412	12.2%
4	West	759	22.5%
5	Middle	1761	52.3%
Total		3368	100%

Table (3-4) shows that (6.0%) of the respondents live in the North region, while (6.9%) of the sample resides in the South region, (12.2%) of the sample resides in the East region, (22.5%) of the respondents live in the West region, and (52.3%) of the respondents live in the Middle region.

Figure (4) shows the distribution of sample members according to the region



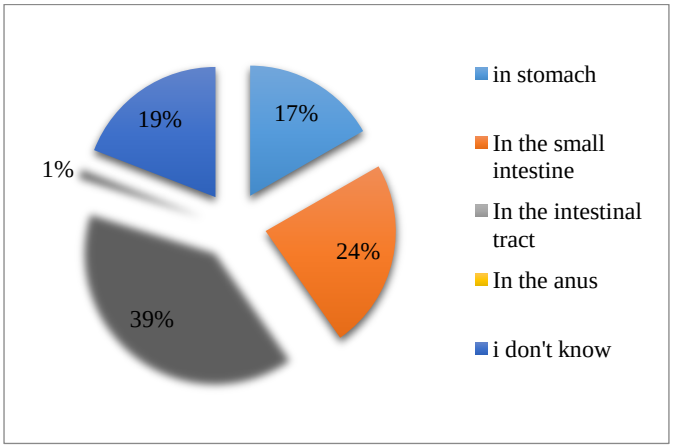
5 Distribution of the sample by where the appendicitis located in the body

Table (3-5) Distribution of the sample according to where the appendix is located in the body

N	where the appendix is located in the body	Frequency	Percentage
1	in stomach	563	16.7%
2	In the small intestine	794	23.6%
3	In the intestinal tract	1331	39.5%
4	In the anus	36	1.1%
5	I don't know	644	19.1%
Total		3368	100%

Table (3-5) shows that (16.7%) of the respondents believe that the appendix is in the stomach, while (23.6%) of the sample believe that the appendix is in the small intestine, (39.5%) of the sample believed that the appendix was in the intestinal tract, (1.1%) of the sample believed that the appendix was in the anus, and (19.1%) of the sample did not know where the appendix was located in the body.

Figure (5) shows the distribution of the sample according to where the appendix is located in the body



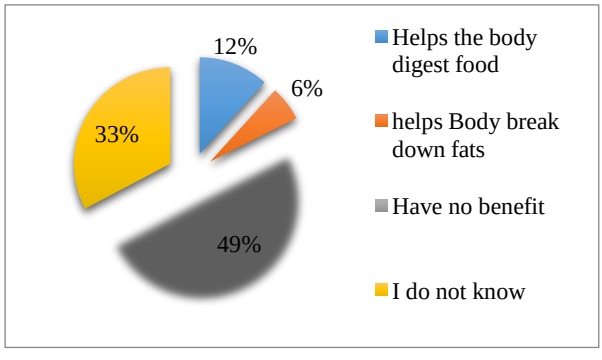
6 Distribution of the sample according to the function of the appendix:

Table (3-6): Distribution of sample members according to the function of the appendix in the body

N	Function of the appendix	Frequency	Percentage
1	Helps the body digest food	396	11.8%
2	helps Body break down fats	196	5.8%
3	Have no benefit	1674	49.7%
4	I do not know	1102	32.7%
Total		3368	100%

Table (3-6) shows that (11.8%) of the respondents believe that the function of the appendix is to digest food, while (5.8%) of the sample believe that the function of the appendix is to help the body break down fats , (49.7%) of the sample believe that the appendix has no benefits, and (32.7%) of the sample did not know the function of appendix .

Figure (6) shows the distribution of sample members according to the function of the excess body in the body



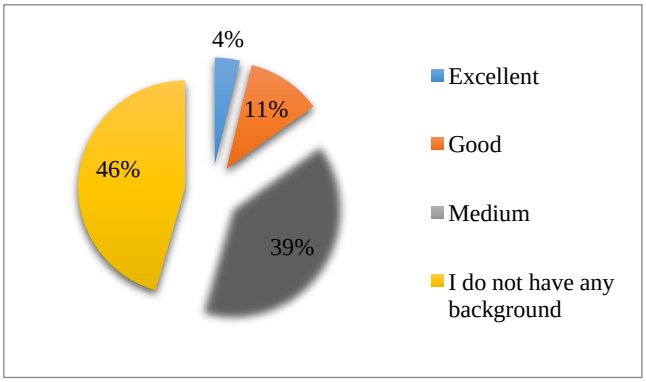
7 Distribution of the sample according to the amount of background on appendicitis:

Table (3-7) Distribution of the sample according to the amount of your background about appendicitis

N	Background about appendicitis	Frequency	Percentage
1	Excellent	128	3.8%
2	Good	380	11.3%
3	Medium	1325	39.3%
4	I do not have any background	1535	45.6%
Total		3368	100%

Table 3.8 shows that (3.8%) of respondents had an excellent background about appendicitis, while (11.3%) of respondents had a good background about appendicitis, (39.3%) of respondents had a medium background about appendicitis and (45.6%) did not have any background about appendicitis.

Figure (7) shows the distribution of the sample according to the background about appendicitis



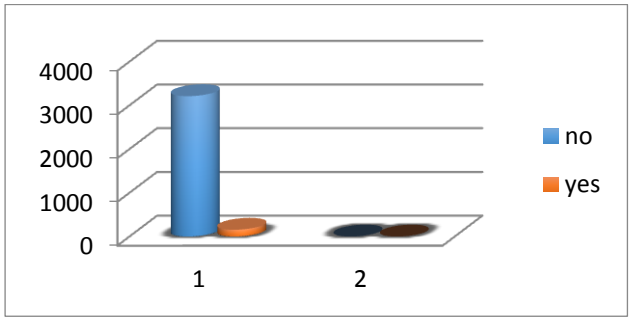
8 Distribution of the sample according to whether they ever had appendicitis

Table (3-8) Distribution of the sample according to whether they ever had appendicitis

N	Have you already had appendicitis?	Frequency	Percentage
1	No	3212	95.4%
2	Yes	156	4.6%
Total		3368	100%

Table (3-8) shows that (95.4%) of the sample never had appendicitis, while (4.6%) of the sample were previously suffered from appendicitis

Figure (8) shows the distribution of the sample according to whether they have already had appendicitis



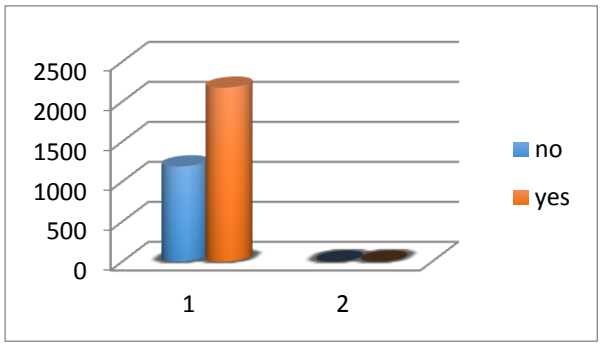
9 Distribution of the sample by Whether they know a person or a relative ever suffered from appendicitis:

Table (3-9) Distribution of the sample according to whether they know a person or a relative ever suffered from appendicitis

N	Do you know a person or a relative ever suffered from appendicitis	Frequency	Percentage
1	No	1192	35.4%
2	Yes	2176	64.6%
Total		3368	100%

It is clear from Table (3-9) that (35.4%) of the sample do not know a person or a relative who has suffered from appendicitis, while (64.6%) of the sample know a person or relative who has suffered from appendicitis.

Figure (9) shows the distribution of the sample by Whether they know a person or a relative ever suffered from appendicitis



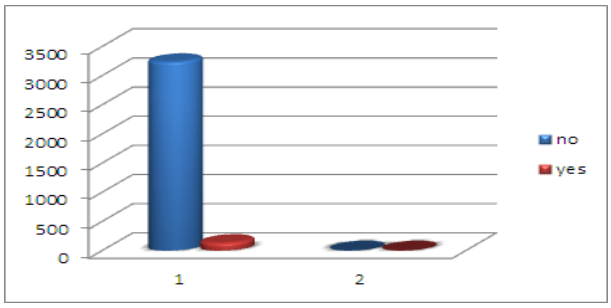
10 Distribution of the sample according to whether they think appendicitis is hereditary:

Table (3-10) Distribution of the sample according to whether they think appendicitis is hereditary

N	Is appendicitis hereditary?	Frequency	Percentage
1	No	3235	96.1%
2	Yes	133	3.9%
Total		3368	100%

Table (3-10) shows that (96.1%) of the sample did not think that appendicitis was hereditary, while (3.9%) of the sample thought that appendicitis was hereditary.

Figure (10) shows the distribution of sample according to whether they think appendicitis is hereditary



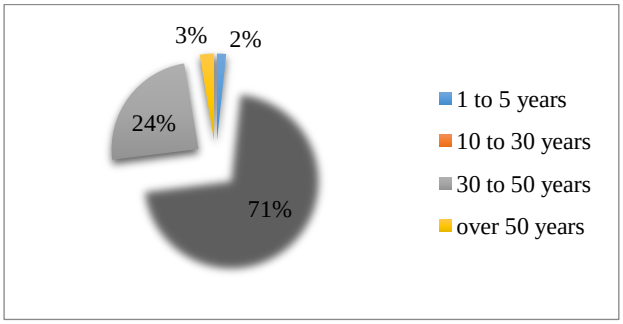
11 Distribution of the sample according to what age they think commonly associated with appendicitis

Table (3-11) Distribution of the sample according to what age they think commonly associated with appendicitis

N	What age commonly associated with appendicitis?	Frequency	Percentage
1	1 to 5 years	57	1.7%
2	10 to 30 years	2402	71.3%
3	30 to 50 years	820	24.3%
4	over 50 years	89	2.6%
Total		3368	100%

Table (3-11) shows that (1.7%) of the sample found that appendicitis often occurs in the age of 1 to 5 years old, while (71.3%) of the sample believes that appendicitis often affects people from 10 to 30 years old, (24.3%) of the sample believed that appendicitis often occurs in people aged 30 to 50 and (2.6%) of the sample thinks appendicitis affects people over the age of 50.

Figure 11 shows the distribution of the sample according to what age they think commonly associated with appendicitis



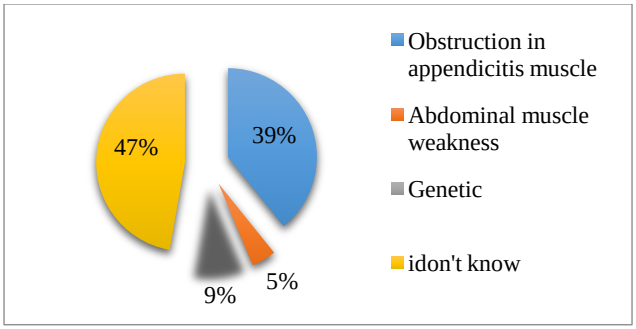
12 Distribution of the sample by the cause of appendicitis:

Table (3-12) Distribution of the sample according to the cause of appendicitis

N	What age commonly associated with appendicitis?	Frequency	Percentage
1	Obstruction in appendicitis muscle	1321	%39.2
2	Abdominal muscle weakness	150	%4.5
3	Genetic	306	%9.1
4	I don't know	1591	%47.2
Total		3368	100%

Table (3-12) shows that 39.2% of the sample saw the cause of appendicitis is obstruction in appendicitis muscle, while 4.5% of the sample thought that the cause of appendicitis was Abdominal muscle weakness, (9.1%) of the sample believed that the cause of the appendicitis was Genetic and (47.2%) of the sample did not know the cause of appendicitis.

Figure 12 shows the distribution of the sample according to the cause of appendicitis



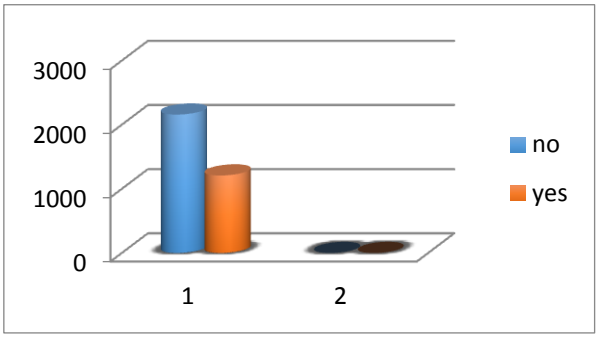
13 Distribution of the sample by whether they think food poisoning causes appendicitis:

Table (3-13) Distribution of the sample by whether they think food poisoning causes appendicitis

N	Does food poisoning causes appendicitis?	Frequency	Percentage
1	No	2159	64.1%
2	Yes	1209	35.9%
Total		3368	100%

Table (3-13) shows that (64.1%) of respondents do not think that food poisoning can cause appendicitis, while 35.9% of respondents believe that food poisoning causes appendicitis.

Figure 13 Shows distribution of the sample by whether they think food poisoning causes appendicitis



14 Distribution of the sample according to (The appendicitis pain is located on the _____ of the abdomen?)

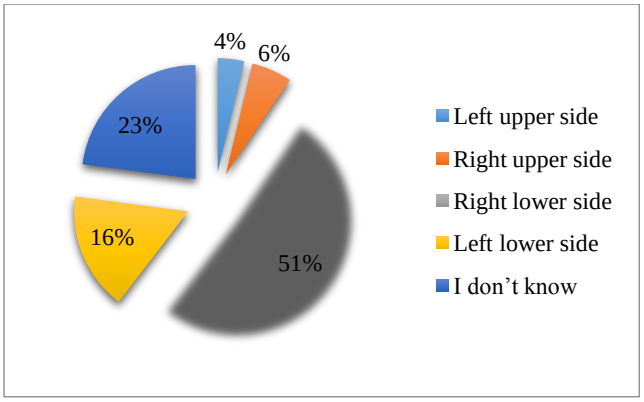
Table (3-14) Distribution of the sample according to (The appendicitis pain is located on the _____ of the abdomen?)

N	The appendicitis pain is located on the _____ of the abdomen?	Frequency	Percentage
1	Left upper side	126	3.7
2	Right upper side	194	5.8
3	Right lower side	1714	50.9
4	Left lower side	562	16.7
5	I don't know	772	22.9
Total		3368	100%

Table (3-14) shows that (3.7%) of the respondents believe that the appendicitis pain located on the left upper side of the abdomen, while (5.8%) of the respondents believe that the appendicitis pain located on the right upper side Of the abdomen,

(50.9%) of the respondents believe that the appendicitis pain occurs on the right lower side of the abdomen, (16.7%) of the respondents believe that the appendicitis pain occurs on the left lower side of the abdomen and 22.9% of respondents did not know where the appendicitis pain occurs in the abdomen.

Figure (14) shows the distribution of the sample according to (The appendicitis pain is located on the _____ of the abdomen?)



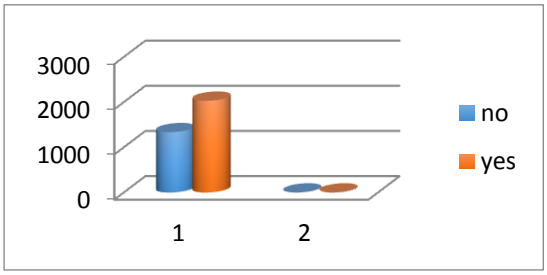
15 Distribution of the sample by: Is it possible to prevent appendicitis?

Table (3-15) Distribution of the sample according to whether appendicitis can be prevented

N	Is it possible to prevent appendicitis?	Frequency	Percentage
1	No	1336	39.7%
2	Yes	2032	60.3%
Total		3368	100%

Table (3-15) shows that (39.7%) of the respondents believe that appendicitis cannot be prevented, while (60.3%) of the respondents believe that appendicitis can be prevented.

Figure (15) shows the distribution of sample according to whether appendicitis can be prevented



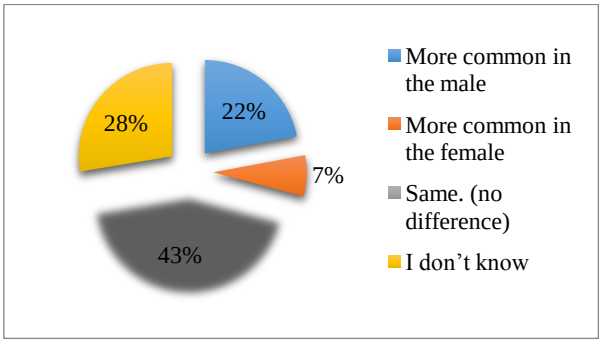
16 Distribution of the sample by what gender they think more commonly associated with appendicitis

Table (3-16) Distribution of the sample according to what gender they think more commonly associated with appendicitis

N	Do you think appendicitis is_____?	Frequency	Percentage
1	More common in the male	743	%22.1
2	More common in the female	239	%7.1
3	Same. (no difference)	1456	%43.2
4	I don't know	930	%27.6
Total		3368	100%

Table (3-16) shows that (22.1%) of respondents believe that appendicitis is more common in males, while (7.1%) of the sample believe that appendicitis is more common in females, (43.2%) of the sample believed it's the same (No difference), and (27.6%) of the respondents do not know.

Figure 16 shows the distribution of the sample according to what gender they think more commonly associated with appendicitis



17 Distribution of the sample according to whether appendicitis is an emergency:

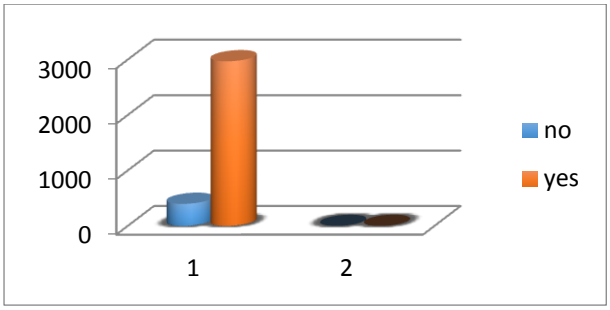
Table (3-17) Distribution of the sample according to whether appendicitis is an emergency

N	Is the appendicitis an emergency case?	Frequency	Percentage
1	No	398	11.8%
2	Yes	2970	88.2%
Total		3368	100%

Table (3-17) shows that (11.8%) of the respondents do not consider appendicitis to be an

emergency, while (88.2%) of respondents believe that appendicitis is an emergency.

Figure 17 Distribution of the sample according to whether appendicitis is an emergency



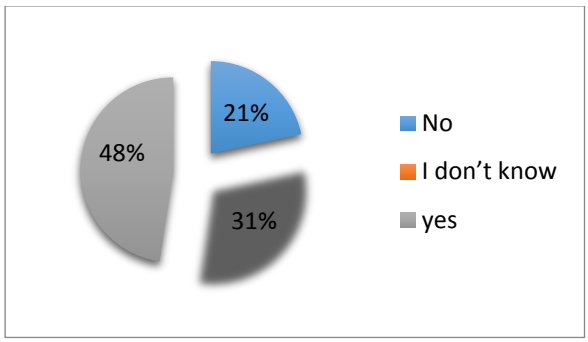
18 Distribution of the sample according to whether appendicitis may lead to death:

Table (3-18) Distribution of the sample according to whether appendicitis may lead to death

N	Do you think the appendicitis can cause death?	Frequency	Percentage
1	No	728	21.6%
2	I don't know	1036	30.8%
3	Yes	1604	47.6%
Total		3368	100%

Table (3-18) shows that (21.6%) of respondents do not believe that appendicitis may lead to death, while (30.8%) of the sample do not know and (47.6%) Of respondents do believe that appendicitis may lead to death.

Figure 18 shows distribution of the sample according to whether appendicitis may lead to death



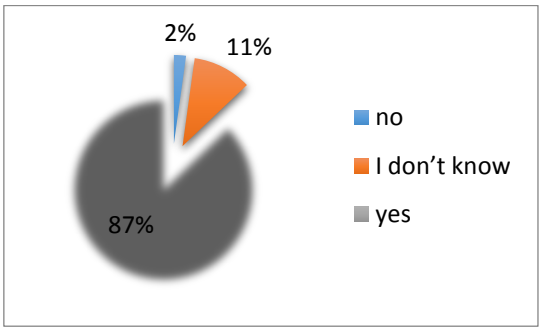
19 Distribution of the sample according to whether there could be complication of appendicitis if not treated

Table (3-19) Distribution of the sample according to whether there could be complication of appendicitis if not treated

N	Do you think there is a complication of appendicitis if not treated?	Frequency	Percentage
1	No	74	2.2%
2	I don't know	361	10.7%
3	Yes	2933	87.1%
Total		3368	100%

It is clear from Table (3-19) that (2.2%) of the sample do not believe that there are complications if appendicitis is not treated, while (10.7%) of the respondents do not know and (87.1%) of the sample believe that there are complications if the appendicitis is not treated.

Figure 19 Distribution of the sample according to whether there could be complication of appendicitis if not treated



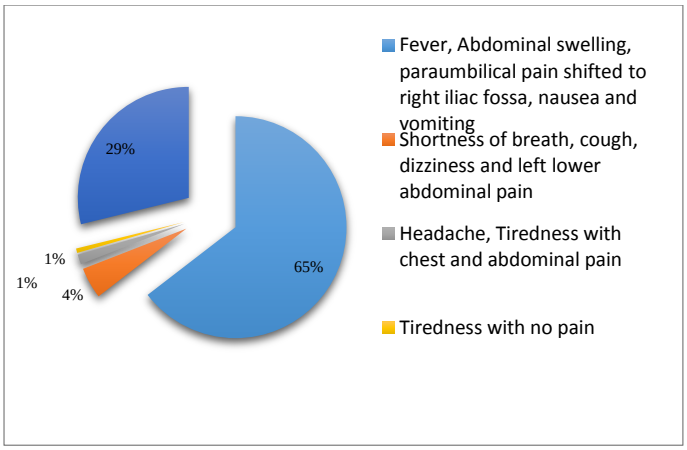
20 Distribution of the sample according to how can you know you are suffering from appendicitis

Table (3-20) Distribution of the sample according to How can you know you are suffering from appendicitis?

N	How can you know you are suffering from appendicitis?	Frequency	Percentage
1	Fever, Abdominal swelling, paraumbilical pain shifted to right iliac fossa, nausea and vomiting	2174	%64.5
2	Shortness of breath, cough, dizziness and left lower abdominal pain	153	%4.5
3	Headache, Tiredness with chest and abdominal pain	48	%1.4
4	Tiredness with no pain	22	0.7%
5	I don't know	971	%28.8
Total		3368	100%

It is clear from Table (3-20) that (64.5%) of the respondents believe that the symptoms of appendicitis are: Fever, Abdominal swelling, paraumbilical pain shifted to right iliac fossa, nausea and vomiting, while (4.5%) believe that the symptoms of appendicitis are: Shortness of breath, cough, dizziness and left lower abdominal pain, (1.4%) believe that the symptoms of appendicitis are: Headache, Tiredness with chest and abdominal pain, (0.7%) of the sample thought that the symptoms of appendicitis are Tiredness with no pain and 28.8% of the sample did not know.

Figure 20 show the distribution of the sample according to How can you know you are suffering from appendicitis?



21 Distribution of the sample according to what do you think the risk of appendectomy?

Table (3-21) Distribution of the sample according to what do you think the risk of appendectomy?

N	what do you think the risk of appendectomy?	Frequency	Percentage
1	Anesthesia	610	18.1%
2	Recurrent appendicitis	174	5.2%
3	indigestion	411	12.2%
4	Loss of appetite	257	7.6%
5	I don't know	1916	56.9%
Total		3368	100%

Table (3-21) shows that (18.1%) of the sample believed that the risk of appendectomy was anesthesia, while (5.2%) of the sample believed that the risk of appendicitis was recurrent appendicitis, (12.2%) of the sample believed that the risk of appendectomy was indigestion, (7.6%) of the sample believed that the risk of appendicitis was Loss of appetite, while (56.9%) of the sample did not know.

Figure 21 show what do you think the risk of appendectomy?

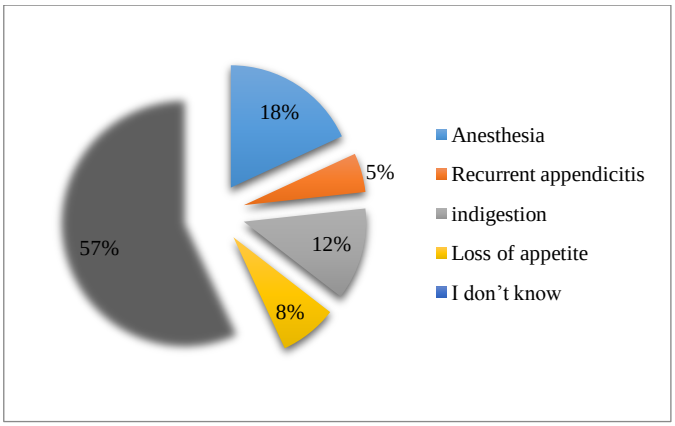
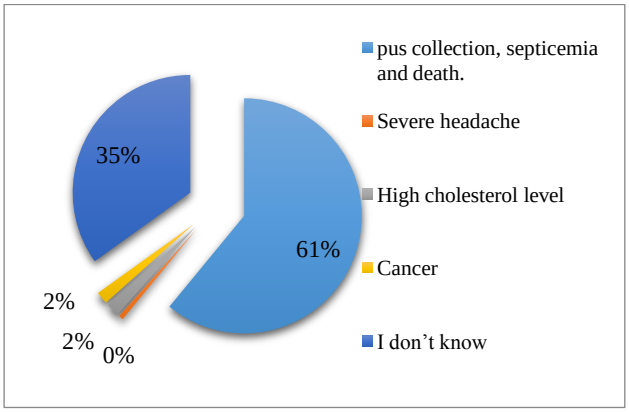


Table (3–22) Distribution of the sample according to What do you think the risk of perforated appendicitis?

N	What do you think the risk of perforated appendicitis?	Frequency	Percentage
1	pus collection, septicemia and death	2053	61.0%
2	Severe headache	21	.6%
3	High cholesterol level	61	1.8%
4	Cancer	57	1.7%
5	I don't know	1176	34.9%
Total		3368	100%

Figure (3-22) shows that (61.0%) of the respondents believe that in the case of perforated appendicitis there is a risk of pus collection septicemia and death will occur, while (0.6%) of the respondents believe that that in the case of perforated appendicitis there is a risk of Severe headache will occur, (1.8%) believe that in the case of perforated appendicitis there is a risk of high cholesterol level will occur, (1.7%) of the sample believe that in the case of perforated appendicitis there is a risk of Cancer will occur and (34.9%) of the sample did not know.

Figure 22 shows the distribution of the sample according to What do you think the risk of perforated appendicitis?



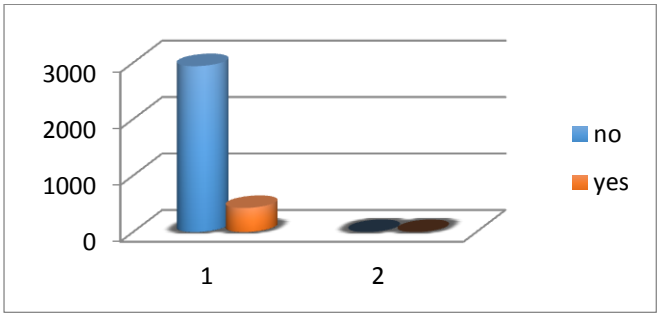
22 Distribution of the sample according to Can appendicitis heal itself?

Table (3–23) Distribution of the sample according to Can appendicitis heal itself?

N	Can appendicitis heal itself?	Frequency	Percentage
1	No	2941	87.3%
2	Yes	427	12.7%
Total		3368	100%

Table (3-23) shows that (87.3%) of the respondents believe that appendicitis cannot heal itself, while (12.7%) of the respondents believe that appendicitis can heal itself.

Figure 23 shows the distribution of the sample according to Can appendicitis heal itself?



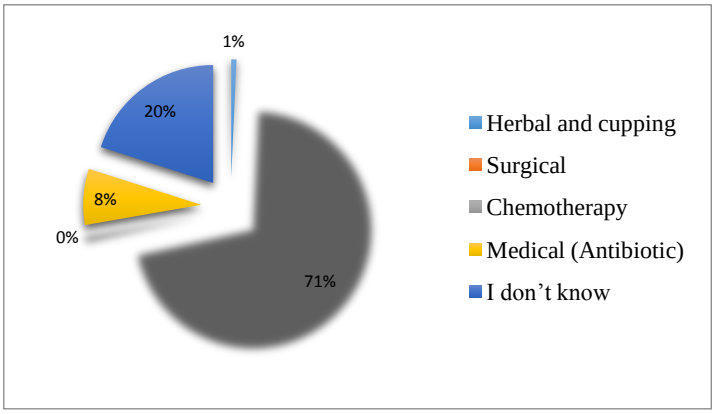
23 Distribution of the sample according to If the answer is "NO" how do you think appendicitis is treated?

Table (3–24) Distribution of the sample according to If the answer is "NO" how do you think appendicitis is treated?

N	If the answer is "NO" how do you think appendicitis is treated?	Frequency	Percentage
1	Herbal and cupping	24	0.7%
2	Surgical	2386	70.8%
3	Chemotherapy	23	0.7%
4	Medical (Antibiotic)	259	7.7%
5	I don't know	676	20.1%
Total		3368	100%

Table (3-24) shows that (0.7%) of the respondents believe that it is possible to treat appendicitis with herbal and cupping, while (70.8%) of the respondents believe that acute appendicitis can be treated surgically, (0.7%) believe that it is possible to treat it with Chemotherapy, (7.7%) believe that it is possible to treat it Medically (Antibiotics) and (20.1%) of the sample did not know.

Figure 24 show the distribution of the sample according to If the answer is "NO" how do you think appendicitis is treated?



24 Distribution of the sample according to how long does it take to full recovery after treating the appendicitis?

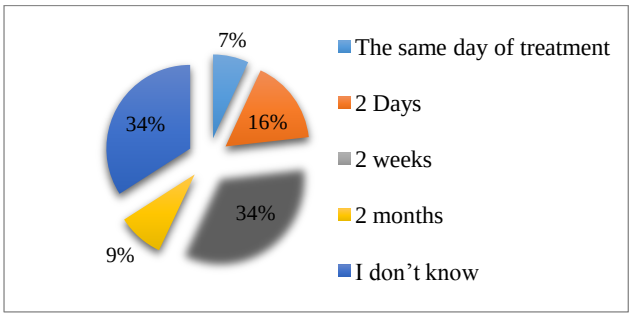
Table (3–25) Distribution of the sample according to how long does it take to full recovery after treating the appendicitis?

N	how long does it take to full recovery after treating the appendicitis?	Frequency	Percentage
1	The same day of treatment	232	6.9%
2	2 Days	550	16.3%

3	2 weeks	1138	33.8%
4	2 months	301	8.9%
5	I don't know	1147	34.1%
Total		3368	100%

Table (3-25) shows that (6.9%) of the respondents believe that the full recovery after treating appendicitis may be on the same day of treatment, while (16.3%) believe that the full recovery after treatment of the appendicitis take 2 days, (33.8%) believe that it may take 2 weeks, (8.9%) believe that full recovery after appendicitis may take 2 months, and (34.1%) of the sample did not know.

Figure 25 shows that distribution of the sample according to how long does it take to full recovery after treating the appendicitis?



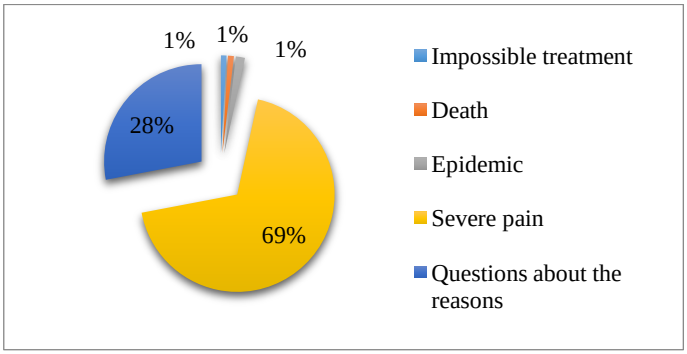
26 Distribution of the sample according to what is your first impression from hearing appendicitis?

Table (3–26) Distribution of the sample according to what is your first impression from hearing appendicitis?

N	what is your first impression from hearing appendicitis?	Frequency	Percentage
1	Impossible treatment	31	0.9%
2	Death	33	1.0%
3	Epidemic	51	1.5%
4	Severe pain	2310	68.6%
5	Questions about the reasons	943	28.0%
Total		3368	100%

Table (3-26) shows that (0.9%) of the respondents first impression when hearing about appendicitis is Impossible treatment, while (1.0%) their first impression is Death, (1.5%) their first impression when hearing about appendicitis is Epidemic, (68.6%) first impression when hearing about appendicitis is Severe pain, (28.0%) of the sample first impression is Questions about the reasons.

Figure 26 shows that distribution of the sample according to what is your first impression from hearing appendicitis?



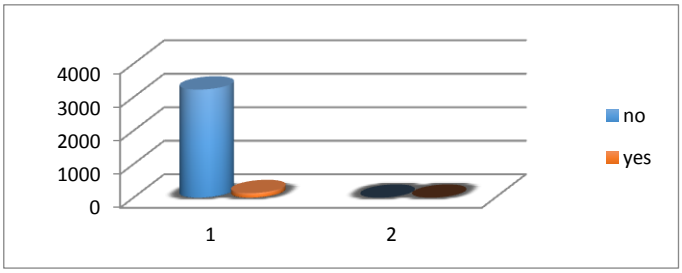
27- Distribution of the sample by whether there is advocacy of education and awareness about appendicitis by the media and the press in Saudi Arabia:

Table (3–27) Distribution of the sample according to by whether there is advocacy of education about appendicitis by the media in Saudi Arabia

N	In your opinion, is there advocacy of education and awareness about appendicitis by the media and the press in Saudi Arabia?	Frequency	Percentage
1	No	2941	87.3%
2	Yes	427	12.7%
Total		3368	100%

Table (3-27) shows that (95.9%) of respondents do not believe that there is advocacy of education and awareness about appendicitis by the media in Saudi Arabia, while (4.1%) believe that there is advocacy of education about appendicitis by the media in Saudi Arabia.

Figure 27 shows the distribution of the sample according to by whether there is advocacy of education about appendicitis by the media in Saudi Arabia



Discussion

After the statistical analysis The following results illustrate:

1) 55.4% of the sample were females.
2) (77.6%) of the respondents were between 18-29 years old.
3) (71.3%) of the sample are college graduates.
4) (52.3%) of the respondents live in the Middle region.
5) (39.5%) of the sample believed that the appendix was in the intestinal tract.
6) (49.7%) of the sample believe that the appendix has no benefits.
7) (45.6%) did not have any background about appendicitis.
8) (95.4%) of the sample never had appendicitis.
9) (64.6%) of the sample know a person or relative who has suffered from appendicitis.
10) (96.1%) of the sample did not think that appendicitis was hereditary.
11) (71.3%) of the sample believes that appendicitis often affects people from 10 to 30 years old.
12) (47.2%) of the sample did not know the cause of appendicitis.
13) (64.1%) of respondents do not think that food poisoning can cause appendicitis.
14) (50.9%) of the respondents believe that the appendicitis pain occurs on the right lower side of the abdomen.
15) (60.3%) of the respondents believe that appendicitis can be prevented.
16) (43.2%) of the sample believed that appendicitis occurs at the same rate for males and females.
17) (88.2%) of respondents believe that appendicitis is an emergency.
18) (47.6%) Of respondents do believe that appendicitis may lead to death.
19) (87.1%) of the sample believe that there are complications if the appendicitis is not treated.
20) (64.5%) of the respondents believe that the symptoms of appendicitis are: Fever, abdominal swelling, paraumbilical pain shifted to right iliac fossa, nausea and vomiting.
21) (56.9%) of the sample did not know what are the risks of appendectomy?
22) (61.0%) of the respondents believe that in the case of perforated appendicitis there is a risk of pus collection septicemia and death will occur.
23) (87.3%) of the respondents believe that appendicitis cannot heal itself.
24) (70.8%) of the respondents believe that acute appendicitis can be treated surgically.
25) (34.1%) of the sample did not know how long does it take to full recovery after treating the appendicitis?
26) (68.6%) first impression when hearing appendicitis is Severe pain.
27) (95.9%) of respondents believe that there is no advocacy of education and awareness about appendicitis by the media in Saudi Arabia.

Limitations

There are several limitations in our study, in particular, the nature of any electronic questionnaire data collection. We couldn't find any similar study that to measure the rate of difference between the two studies.

While there are many positives to questionnaires, dishonesty can be an issue, because there is no way to tell how truthful a respondent is being. This can happen for a variety of reasons, including social desirability bias and attempting to protect privacy.

The trouble with not presenting questions to users face-to-face is that each may have different interpretations of the questions and there is no way of telling how much thought a respondent has put in. Also, people may read differently into each question and therefore reply based on their own interpretation of the question - i.e. what is 'good'

to someone may be 'poor' to someone else, therefore there is a level of subjectivity that is not acknowledged

Research Recommendations

- It's crucial to develop a plan to raise the awareness of the Saudi society using various media outlets about the causes of appendicitis and how to deal with it.
- It's important to conduct more similar studies in other Saudi regions, environments and professional communities then compare their results with the results of the present study.
- it would be beneficial to also conduct more studies aimed at measuring the readiness of the various Saudi media outlets to educate the community about the causes of appendicitis and how to deal with it.

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