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# KNOWLEDGE AND PRACTICE OF PILONIDAL SINUSES AMONG ADULT POPULATION IN ZULFI CITY, SAUDI ARABIA, 2018-2019

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# **ABSTRACT**

**Background:** due to the prevalence of Pilonidal Sinuses among Saudi population accompanied by the lack of studies concerning this topic. This study aims at evaluating population's knowledge and practice regarding pilonidal sinuses in Zulfi City, 2018-2019, in order to improve the knowledge of population about pilonidal disease. **Method:** This study is a cross-sectional study. The study is conducted to evaluate knowledge and practice of general population in Zulfi city. The study-targeted population is all adult males and females who live in Zulfi city. Collected data is analyzed by computer using Statistical

Package for Social Sciences (SPSS) version 22. **Results:** only 14.4% of the sample have good knowledge about Pilonidal Sinuses, while 11.6% have good practice towards the disease. The good knowledge reached the highest level among those who are between (31-45), males, highly educated, and married individuals. On the other hand, The good practice reached the highest level among those who are between (18-35), females, highly educated and single individuals. The results showed that Age, Gender and Marital Status significantly affect both knowledge and practices towards the disease. **Conclusion:** This study concluded that the poor knowledge and moderate practice are the cases in terms of Pilonidal Sinuses disease. This indicates that the light needs to be shed on the disease in order to increase the knowledge about it and how to avoid it and to treat it.

**KEYWORDS:** Knowledge, Practice, Pilonidal Sinuses, Saudi Arabia.

# **INTRODUCTION**

Pilonidal disease is a very common anorectal problem that most often arises in the hair follicles of the natal cleft of the sacrococcygeal area.<sup>[1]</sup> The term pilonidal is derived from the Latin words for hair (pilus) and nest (nidus).<sup>[2]</sup> An incidence of 26 cases per 100,000 people was calculated by Sondenaa and others in a study of 322 patients with pilonidal disease.<sup>[1]</sup> It is, however, more common in young adult men, a population with an incidence of 1.1%.<sup>[3]</sup>

Risk factors of pilonidal sinuses include obesity, smoking, poor hygiene, sedentary life style, African race, family history, and high amount of hair on the body.<sup>[4]</sup> It affects males twice as much as females. Men are thought to be at higher risk because of their more hirsute nature. Most common in young adults of working age.<sup>[1]</sup> Pilonidal disease affects men, between 16-25 years of age most often.<sup>[5,6]</sup>

Pilonidal disease is caused by hair invading the skin at the natal cleft. This hair causes a foreign body reaction that commonly leads to a hair-filled abscess cavity.<sup>[7]</sup>

Pilonidal disease is usually located in the sacrococcygeal area, but is also found at, other sites such as in the umbilicus, the axilla, on the sole of the foot, the penis, the clitoris and in the anal canal. Affected patients are typically in their middle to late 20s and have had Symptoms for 4 to 5 years at initial presentation. [1,9]

Treatment of pilonidal disease depends on the presentation. Intervention may range from simple incision and drainage to wide excision with extensive reconstructive procedures. Ideally, the selected treatment should involve a simple procedure with minimal morbidity, a short healing time, and low recurrence rates.<sup>[7]</sup>

Complications of pilonidal disease include infection, which may exist as an abscess, or it may include cellulites. [10] Chronically draining sinus/fistula. [11] Extremely uncommon, Malignant degeneration occurs in approximately 0.1% of patients with chronic untreated or recurrent pilonidal disease. [12]

As the Pilonidal Disease is common in Saudi Arabia, the assessment of society knowledge about Pilonidal Disease will help the community to set feature plans, which can assist in prevention of the disease. Moreover, the lack of published studies about Pilonidal disease in Saudi Arabia and specifically Al- Zulfi City reduces the amount of information needed to

overcome this disease. Based on this this study aims at evaluating population's knowledge and practice regarding pilonidal sinuses in Zulfi City, 2018-2019, in order to improve the knowledge of population about pilonidal disease.

# **METHODOLOGY**

This study is a cross-sectional study. The study is conducted to evaluate knowledge and practice of general population in Zulfi city, Saudi Arabia about Pilonidal Sinuses.

The study-targeted population is all adult males and females who live in Zulfi city. Total enumeration method was used to include all the adult males and females agreed to answer the questionnaire in this study.

Concerning the questionnaire, a pre-tested questionnaire was used in data collection. The questionnaire consisted of three parts; the first one contained questions about socio-demographic factors, while the second aimed at defining the knowledge of participants and the final section concerned about their practice about Pilonidal sinuses.

In this study, collected data is analyzed by computer using Statistical Package for Social Sciences (SPSS) version 22.

#### **RESULTS**

The majority of the sample (47.6%) were between (18-35) years old, while 34.4% were between (31-45) years, 10.3% were over 45 and 7.8% were less than 18. Females dominated the sample as they represented 61.6%. Almost all of the sample were Saudi individuals as they represented 97.8% of the sample.

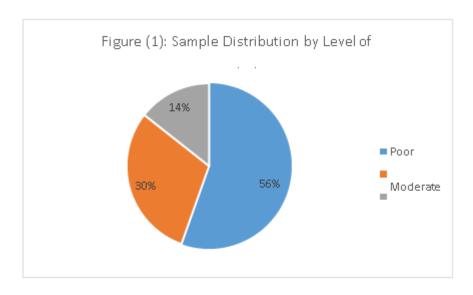
60.1% of the sample were highly educated while 23.4% reached secondary education and 10.7% have a diploma. Concerning marital status, 57.2% were married, while 42.8% were single.

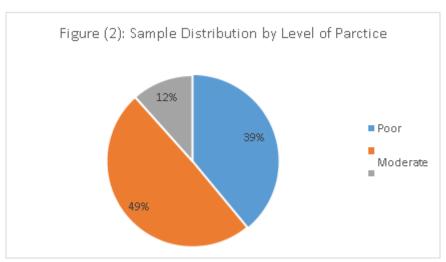
The scoring system results show that 55.5% of the sample have poor knowledge about pilonidal sinus, 30.2% have moderate knowledge and only 14.4% have good knowledge. On the other hand, 49.4% demonstrate moderate practice, 39% demonstrate poor practice and only 11.6% demonstrate good practice towards pilonidal sinus.

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The results in Table (1) show that good knowledge reached the highest level among those who are between (31-45) years old (40.9%), males (59.9%), highly educated (65.7%) and married individuals (67.2%). On the other hand, the good practice reached the highest level among those who are between (18-30) years old (52.3%), females (74.8%), highly educated (65.8%) and single individuals (53.2%).

The key factors having significant relationships with both knowledge of and practice towards pilonidal sinus were the same. The key factors are age, gender and marital status. In case of knowledge, the p-values for age, gender and marital status were (0.001), (0.00) and (0.008) respectively. On the other hand, In case of practice, the p-values for age, gender and marital status were (0.008), (0.00) and (0.00) respectively.





Knowledge **Practice** Variables **Total Poor** Moderate Good **Poor** Moderate Good 74 <18 8.90% 6.20% 6.60% 5.40% 8.50% 12.60% 454 18-30 52% 43.80% 38.70% 43% 50.10% 52.30% Age 31-45 32.10% 35.40% 40.90% 38.70% 32.50% 27.90% 328 >46 7% 14.60% 13.90% 12.90% 8.90% 7.20% 98 28.70% 45.80% 59.90% 53.50% 29.50% 25.20% 366 Male Gender Female 71.30% 54.20% 40.10% 46.50% 70.50% 74.80% 588 Saudi 97.50% 97.90% 98.50% 98.10% 97.70% 97.30% 933 Nationality 2.30% 2.70% Other 2.50% 2.10% 1.50% 1.90% 21 Vil 0.30% 0.20% 1 0.90% Primary 1.30% 1% 0.70% 0.80% 1.50% 11 6.20% 2.40% 2.90% 4% 5.50% 2.70% 44 Inter-mediate Education Level 223 High school 25.50% 22.20% 17.50% 24.20% 22.70% 23.40% **Diploma** 9.60% 11.50% 13.10% 12.10% 10.40% 7.20% 102

Table 1: Level of Knowledge and Practice among different variables.

Table (1): Level of Knowledge and Practice among different variables

57.30%

53.30%

Variables		Knowledge			Practice			Total
		Poor	Moderate	Good	Poor	Moderate	Good	Total
Marital Status	Single	46.70%	40.30%	32.80%	35.20%	46.30%	53.20%	408

62.50%

59.70%

65.70%

67.20%

58.90%

64.80%

59.70%

53.70%

65.80%

46.80%

573

546

# **DISCUSSION**

Bachelor or high

Married

The results of this study suggest that despite the high spread of good knowledge and good practices among highly educated individuals, the level of education is not a significant factor concerning knowledge and practices. However, Dancer et al (1991) suggested that patient education is aimed at self-management keeping the NC skin clean, removing unwanted peripilonidal sinus skin hair, which often carries S aureus.<sup>[13]</sup>

# **LIMITATIONS**

The researcher faced a limitation represented in the lack of practical studies tackling the knowledge and practices of population concerning pilonidal sinus. Moreover, most of the available studies are generally theoretical ones. Based on this, the study recommends the support directed to the practical studies concerning pilonidal sinus to be increased.

# **CONCLUSION**

This study concluded that the poor knowledge and moderate practice are the cases in terms of Pilonidal Sinuses disease. This indicates that the light needs to be shed on the disease in order to increase the knowledge about it and how to avoid it and to treat it. The study also concludes

that Age, gender and marital status have a significant relationship with both the level of knowledge and practice among population of Zulfi City.

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