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# A SURVEY ABOUT THE PREVALENCE OF VAGINISMUS AMONG INDIAN WOMEN IN BENGALURU, KARNATAKA.



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# **ABSTRACT**

**Background:** The aim of this study was to find the prevalence of vaginismus among Indian women in Bengaluru, Karnataka. Vaginismus is a disturbing sexual ailment that can have a serious negative effect on a woman's physical and mental health. Vaginal penetration may be unpleasant or perhaps impossible due to vaginismus, a disorder marked by involuntary pelvic floor muscular spasms. **Methods:** An observational study was conducted in March 2024.128 Bengaluru-based women participated in an online survey administered by Google Forms, which collected data. **Results:** Out of 128 participants, 25% reported having vaginismus concerns. Married women reported a higher prevalence, and marital status also demonstrated a significant connection. **Conclusion:** Marital status is a key predictor in the prevalence of vaginismus among Indian women in Bengaluru, Karnataka. To successfully address this delicate subject, the study emphasizes the necessity for women to have better education and understanding of sexual health. Subsequent investigations are required to explore the psychological and cultural elements impacting vaginismus within this demographic.

## **KEYWORDS**

vaginismus, women's health, prevalence, obstetrics/gynecology, sexual dysfunction

#### INTRODUCTION

Sexual behavior is a psychological reaction. It entails a unique link between the two participants and the mechanical act of peno-vaginal sex. The biological, psychological, and social frameworks of both partners have an impact on the sexual process. The prevalence of sexual dysfunction appears to vary widely, according to the available data. These variables include the age of the participants, the methods used for ascertainment, and the existence or absence of different psychiatric and medical comorbidities. According to general estimates, 43% women and 31% men have some form of sexual dysfunction<sup>[1]</sup>.

Female sexual dysfunction is a multifaceted, multi-cause medical condition that has a negative impact on both mental and physical health. Women's quality of life can be significantly impacted by sexual dysfunction. Women's interpersonal relationships, sense of wholeness, and self-esteem can all suffer from impaired sexual function. It frequently causes emotional anguish. Divorce and family strife are two possible outcomes of disrupted female sexuality, and reproduction is also impacted<sup>[2]</sup>.

One of the most significant conditions that adversely impacts a woman's and her partner's lifestyle, reproductive health, and psychological well-being is vaginismus. The issue of vaginismus significantly lowers women's and their partners' quality of life. Uncontrollable contractions caused by vaginismus can occur during gynecological exams, during sexual activity, and when using a tampon or dilator. It is said that one of the sexual dysfunctions that leaves a woman powerless is vaginismus, since the woman is unable to control her contractions. It is a clinical issue that has a profound impact on health and well-being, but in the field of women's health, it has not received enough attention or study.

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), vaginismus is categorized as a genito-pelvic pain/penetration disorder<sup>[3,4]</sup>. This means that it encompasses a wide range of pain and penetration issues, including failed vaginal penetration, pain during vaginal intercourse, fear of vaginal penetration, dysfunction of the pelvic floor muscles, and medical complications.

The explanation for the reasons for vaginismus is given by the fear-avoidance model [5]. According to this paradigm, a woman's initial effort at penetration is accompanied by a vicious cycle of discomfort, dread (of pain), anxiety, and tense muscles. Genital pain may occur if the woman contracts her pelvic floor muscles during the penetration as a defensive mechanism. She wishes to prevent more penetration attempts as a result of her intense anxiety about the next attempts brought on by this genital discomfort.

The importance of fear was also mentioned by Fadul et al. [6] for

vaginismus sufferers who catastrophize over pain, fear bleeding, fear panic attacks, and fear physical harm. Numerous more variables contribute to vaginismus. A few of these include the nature of the sexual encounter, trauma from sexual abuse, cultural influences, rigid religious beliefs, a lack of sex education, fear of pain, perfectionism, low self-esteem, guilt feelings, and anxiety related to having sex<sup>[7]</sup>.

Women who have never experienced pain-free sexual relations are said to suffer from vaginismus, which can also vary in severity. Sexual activity is typically not possible in severe cases of vaginismus, and for those individuals who do, the burning sensation may persist for several days. In order to distinguish vaginismus from dyspareunia, it is crucial to note a history of never having had comfortable sexual relations<sup>[8]</sup>.

In 1978, Lamont categorized vaginismus based on the patient's behavior and medical history during a gynecological examination. When a patient has grade 1, the mildest form of vaginismus, they can use the suggestions that were provided during the evaluation to control how their vaginal muscles contract. Despite the suggestions given to them, patients with grade 2 vaginismus keep contracting their pelvic floor muscles during the examination. When a patient has grade 3 vaginismus, she will try to avoid the gynecological examination by pulling her hip to the side or raising it. In cases of grade 4 vaginismus, the patient will elevate her hips, pull herself back, and cross her legs to obstruct the inspection<sup>[9]</sup>.

Variations exist in the global prevalence of vaginismus among research, demographics, and nations. Although the precise prevalence of vaginismus is unknown, reports suggest that it may affect as many as 1-7% of people globally<sup>[10]</sup> and it has been estimated that it ranges from to 17% in clinical settings<sup>[11]</sup>. Women who experience vaginismus often keep quiet about it, find it difficult to talk to friends or family about it, and frequently avoid talking to their doctors about it either.

Consequently, it is unknown how common vaginismus is. Gaber et al. studied the prevalence of vaginismus in Delta, Egypt, and how it affected people's sexual lives. It was discovered that vaginismus is a common and severe sexual disorder that results in distress and discontent for both partners<sup>[12]</sup>. Even though vaginismus has a significant impact on people's mental and physical health, it is still often unreported and misinterpreted. Comprehending its frequency is essential for efficient healthcare delivery.

#### AIM

The survey aims to find the prevalence of vaginismus among Indian women in Bengaluru, Karnataka.

# **METHODS:**

Study Design

An observational single-group cross-sectional survey.

#### **Study Setting And Duration**

The study was entirely conducted online in Bengaluru, Karnataka during the month of March. Bengaluru was chosen as the study setting due to its diverse population being India's fourth most populous urban agglomeration.

#### Sample Size

128 women participated in the study.

#### **Inclusion Criteria**

The study included married females aged 18 years and above, who were residing in Bengaluru, Karnataka.

#### **Exclusion Criteria**

The study eliminated participants who had cognitive impairments that made it difficult for them to complete the questionnaire.

#### METHODOLOGY

### **Data Collection:**

The cross-sectional survey used Google Forms for the research, which has been provided through WhatsApp and social media groups. In order to protect participants' privacy, the questionnaire was intended for anonymous collection of information. The survey questionnaire had 28 questions validated by the guide. The questionnaire consisted of several sections including the demographic data section which included age, gender, marital status, and health status. Awareness and understanding of the vaginismus section which included the symptoms and risk factors. Discomfort section which included their fear and experience during gynecological examinations, and discomforts during coitus. The diagnosis section included questions about whether they had been diagnosed with vaginismus by a healthcare professional.

#### Statistical Methods

This work has used both descriptive and inferential statistical analysis. The results of categorical measures are provided in Number (%), whereas the results of continuous measurements are displayed as Mean  $\pm$  SD (Min-Max). At the five percent significance level, significance is evaluated. The following assumptions on data are made, 1)Dependent variables should be normally distributed, 2)Samples drawn from the population should be random, and Cases of the samples should be independent.

The Chi-square/Fisher Exact test has been used to find the significance of study parameters on a categorical scale between two or more groups, Non-parametric setting for Qualitative data analysis. The Fisher Exact test is used when cell samples are very small.

# Statistical Software

The Statistical software namely SPSS 22.0, and R environment ver.3.2.2 were used for the analysis of the data and Microsoft Word and Excel have been used to generate graphs and tables.

#### RESULTS

With 128 responses, the data collection was halted. Out of 128 women, 14.1% were aged between 18 to 24 years, 50.8% were between 25 to 30 years, 21.1% were between 30 to 40 years, and 14.1% were above 40 years. Among the total participants, 78.9% were married in which 47.7% were married for more than 3 years. This study concludes that out of 128 participants, 32 participants which accounts for 25% of the participants were diagnosed with vaginismus by a healthcare professional (Table 1). A pictorial representation of the same is shown in Figure 1 as a pie chart.

Figures 2 to 4 represent the association of age, relationship status, and duration of marriage or relationship with the diagnosis of vaginismus by a healthcare professional. Out of 32 participants who were diagnosed by vaginismus 30(93.8%) were aged between 25-30 years and only 2(6.3%) were aged between 18-24 years. All 32(100%) participants were married, in which 27(84.4%) were married for 1 to 3 years, and 5(15.6%) were married for more than 3 years.

Figures 5 to 14 represents the discomfort factors associated with a diagnosis of vaginismus by a healthcare professional. Out of 32 participants who were diagnosed with vaginismus 31(96.9%) have experienced anxiety or fear related to vaginal penetration, and 31(96.9%) have experienced involuntary tightening or spasm of the vaginal muscles during attempted penetration. Out of 32 participants, 1(3.1%) has rarely experienced pain or discomfort during vaginal

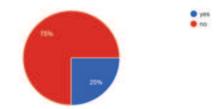
penetration and 31(96.9%) have always experienced pain or discomfort during vaginal penetration. 31(96.9%) have experienced changes in their sexual relationship or intimacy due to difficulties with vaginal penetration. Among them, 29(90.6%) have discussed their concerns about vaginal penetration with a healthcare professional. When questioned about their discomfort or pain during vaginal penetration and discomfort or pain following vaginal penetration over the past 4 weeks 27(84.4%) have almost always or always had experienced discomfort or pain and 4(12.5%) have experienced it most times(more than half the time). Out of 32 participants, 25(78.1%) have rated a very high level of discomfort or pain during or following vaginal penetration, 6(18.8%) rated to have a high level of discomfort or pain during or following vaginal penetration, and 1(3.1%) rated to have very low or no level of discomfort or pain during or following vaginal penetration. 28(87.5%) have sought treatment or counseling for difficulties with vaginal penetration or other symptoms related to that. Among these 32 participants, 31(96.9%) had an inability to have vaginal intercourse penetration on at least 50% of attempts for 6 months or more.

Table 1: Diagnosis Of Vaginismus By Healthcare Professional

Identified as having vaginismus by a medical expert	No. of Participants	%
No	96	75.0
Yes	32	25.0
Total	128	100.0

Have you ever been diagnosed with vaginismus by a healthcare professional?

128 responses



**Figure 1:** Pie Chart Representation Of Participants Diagnosed With Vaginismus By A Healthcare Professional.

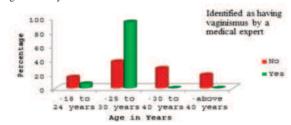
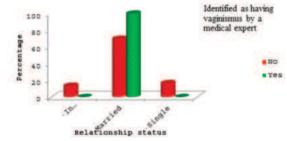
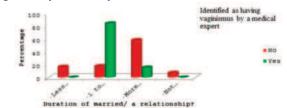


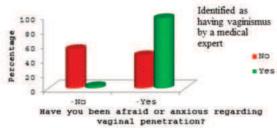
Figure 2: Association Of Age With A Diagnosis Of Vaginismus By A Healthcare Professional



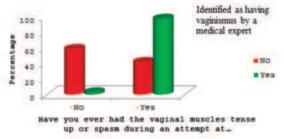
**Figure 3:** Association of relationship status with a diagnosis of vaginismus by a healthcare professional



**Figure 4:** Association of relationship or marriage duration with the diagnosis of vaginismus by a healthcare professional.



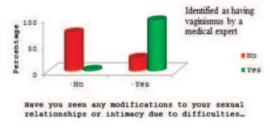
**Figure 5:** Association of anxiety or fear related to vaginal penetration with the diagnosis of vaginismus.



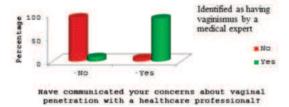
**Figure 6:** Association of involuntary tightening or spasms of vaginal muscles while attempting penetration with diagnosis of vaginismus.



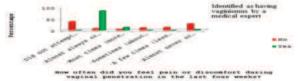
Figure 7: Association of frequency of experiencing pain or discomfort during vaginal penetration with the diagnosis of vaginismus.



**Figure 8:** Association of any changes in their sexual relationships or intimacy with the diagnosis of vaginismus.



**Figure 9:** Association of discussion of concerns about vaginal penetration with a healthcare professional with the diagnosis of vaginismus.



**Figure 10:** Association of discomfort over the past 4 weeks with the diagnosis of vaginismus.

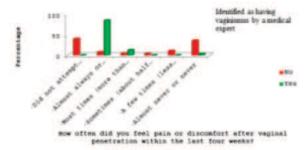
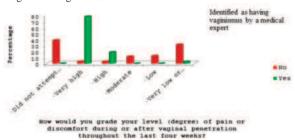
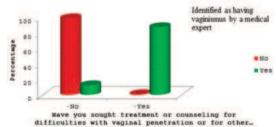


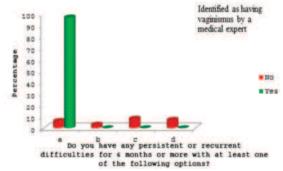
Figure 11: Association of discomfort over the past 4 weeks with the diagnosis of vaginismus.



**Figure 12:** Association of the level of discomfort with the diagnosis of vaginismus by a healthcare professional.



**Figure 13:** Association of seeking treatment or counseling for difficulties with vaginal penetration or other symptoms with the diagnosis of vaginismus.



**Figure 14:** Association of persistent difficulties for 6 months or above with the diagnosis of vaginismus.

## DISCUSSION

Vaginismus is a disturbing and frequently neglected sexual ailment that can have a significant negative effect on women's physical and mental health [13,14]. Healthcare providers must be aware of the prevalence and contributing factors of vaginismus in order to treat and support afflicted patients appropriately [15,16]. The purpose of this cross-sectional study was to find out how common vaginismus is among Indian women in Bengaluru, Karnataka. The study's findings provided light on the prevalence and awareness of vaginismus in this area.

One of the primary findings of this study is the prevalence of vaginismus among Indian women in Bengaluru, Karnataka. The data showed that 32 participants(25%) of the surveyed women were diagnosed with vaginismus by a healthcare professional. This prevalence rate did not align with existing literature on vaginismus, which suggests that it is a relatively rare condition compared to other sexual dysfunction (12,17].

Age emerged as a significant factor in this study. Women aged between 25 to 30 years had a significantly high prevalence of vaginismus about 93.8%. This result is in line with earlier studies suggesting that vaginismus may increase in frequency as people age<sup>[18]</sup>. Another demographic component that was strongly linked to vaginismus was marital status. Compared to unmarried women, married women reported a higher prevalence of vaginismus complaints. This finding raises the possibility that marital status, possibly in conjunction with relationship dynamics, sexual norms, or cultural influences, maybe a major predictor of vaginismus<sup>[15]</sup>. Nevertheless, more investigation is required to fully understand the intricate relationship between vaginismus and married status.

Out of 128 participants, 96(75.0%) were not diagnosed with vaginismus by the healthcare professional but still reported to have few symptoms and discomforts related to vaginismus.

Among these 96 participants, 44(45.8%) have reported having experienced anxiety or fear related to vaginal penetration, and 40(41.7%) had experienced involuntary tightening or spasms of the vaginal muscles during attempted penetration. But only 7(7.3%) out of 96 participants have discussed their concerns about vaginal penetration with a healthcare professional. It is important to note that cultural norms that limit open discussions about sexual matters and the delicate, stigmatized nature of vaginismus may contribute to the underreporting of the condition's frequency.

#### **Limitations And Suggestions**

The present study provides significant insights into the prevalence and awareness of vaginismus among Indian women residing in Bengaluru, Karnataka. Nonetheless, it is important to recognize a few restrictions. The capacity to determine causality and monitor changes over time is restricted by the cross-sectional design. Furthermore, the study utilized self-reported data, which can be prone to social desirability or recollection bias when it comes to sensitive subjects like sexual health. Future studies should examine how marital dynamics, sexual education, and access to healthcare services affect vaginismus in this community, in addition to psychological and cultural issues.

## CONCLUSION

Women frequently experience vaginismus, yet they are hesitant to tell doctors about it. The present study provides significant insights into the awareness and prevalence of vaginismus among Indian women residing in Bengaluru, Karnataka. The results stress the significance of age as a predictor of vaginismus complaints and emphasize the need to raise awareness and educate people about vaginismus, especially young women. Patients who get education on vaginismus and its treatment options respond well to their medical interventions. It should be underlined that detecting vaginismus early on will help avoid mental health issues and sexual problems down the road.

## Conflict Of Interest

The authors affirm their absence of conflict of interest.

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