

Prevalence of Vaginismus in Reproductive Age Group: Observational Study

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ABSTRACT

Background: Vaginismus is a multifaceted disorder encompassing increased muscle tension, pain, anxiety, and fear due to psychosocial perspectives which makes vaginal penetration impossible. Vaginismus has irreparable effects on self-identity. It also negatively impacts the quality of life.

Aim: To find the prevalence of vaginismus in the female reproductive age group of 20–35 years.

Materials and methods: The current observational study comprised 160 married females in the age group of 20–35 years residing in Belagavi city in Karnataka, India. Women were screened according to the criteria from a tertiary care hospital.

Outcome measures: The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* by the American Psychiatric Association was used to assess vaginismus.

Results: Females who were sexually active were included in this study. Out of the total sample, 28% were reported with primary vaginismus and 30% with secondary vaginismus. There was no specific relation between age and vaginismus.

Conclusion: The study concludes that vaginismus is a common disorder that is highly prevalent in the Indian population and women hesitate to seek medical attention regarding it.

Keywords: Female sexual dysfunction, Reproductive age group, Prevalence, Vaginal penetration, Vaginismus.

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INTRODUCTION

Vaginismus is a multifaceted disorder which encompasses physical spasm, a phobic response, and fear due to psychosocial perspectives.¹ It is an uncontrollable muscle spasm that prevents penetration. Penetration can be in terms of gynecological examination, sexual intercourse, or usage of tampons or menstrual cups.

It can be primary if it is a lifetime condition, and secondary if it was brought on by a former event or ailment. It is termed as situational if it is not occurring only under specific circumstances. Such impairments in sexual functioning can have deleterious effects on quality of life, mental health, and couple functioning.² Sexual pain disorders can be especially problematic as there is currently little information on etiology and effective treatment.

The worldwide prevalence of vaginismus is reported to be in the range of 1–7%.³ In clinical settings of the USA, the prevalence of vaginismus in the contemporary population ranges from 5 to 17%. Studies conducted in Egypt report vaginismus as 20%.⁴ The prevalence of female sexual problems in the Indian population was determined to be 55.55%.⁵ The frequency of female sexual disorders is as high as 1 in every 7 women, in rural South India.⁶ Studies on female sexual problems are scarce, and yet no study has been conducted to find the prevalence of vaginismus in the Indian population. Vaginismus is a common problem in females, yet they often are reluctant to discuss it.

They are either too shy to discuss it or think it is normal and this happens to most females. Also, the majority of them do not know that it can be treated or compromised with their condition.⁷ Due to cultural ideologies, educated women also tend to step away from talking about vaginismus or seeking help for it. There is a vast

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majority of women who do not come forward for its diagnosis or treatment.¹ The available prevalence rates are from women who faced fertility issues and sought treatment. There is a wide gap in the prevalence rates as not all women come forward to seek help.

The reproductive age group is a crucial period in a woman's life in terms of physical, hormonal, reproductive, and psychological health. Apart from sexual penetration, the usage of tampons, menstrual cups, contraceptive devices, and gynecological examination is also affected. Vaginismus has irreparable effects on self-identity. Also, it increases the rate of cesarean section, avoiding antenatal visits and inability in seeking preventive health care services.⁸ Women who suffer from vaginismus struggle greatly with their sense of self, mental health, and reproductive lives. Most women give themselves negative self-descriptions. Women's self-esteem is impacted by this negative self-perception, which leads to psychiatric problems. Vaginismus has been linked to psychiatric diseases as a cause and effect. Vaginismus and penetration-specific anxiety are connected.

Women with vaginismus have reproductive issues and are hesitant to seek medical attention. This condition grows through the vicious cycle of spasm–pain–fear–anxiety–spasm which continues to worsen.⁹ In females diagnosed with vaginismus, abnormally high muscular tone, pain anxiety, and behavioral avoidance are present.¹⁰ Since the condition is uncontrollable, it creates a sense of helplessness. Vaginismus impairs quality of life and negatively affects the lifestyle and reproductive and psychological well-being of women. It is necessary to diagnose this condition as early as possible and seek treatment to prevent future consequences of fertility-related issues. Despite being a major health condition, it remains under-researched in the field of women's health. There is a paucity of data regarding vaginismus and its prevalence in the Indian community. To overcome these issues, a current study was conducted.

MATERIALS AND METHODS

- Source of data: Tertiary care hospital
- Study design: Observational study
- Study population: Married females in the age group of 20–35 years
- Study type: A cross-sectional study
- Sampling design: Nonprobability sampling
- Sampling technique: Convenience sampling
- Materials used: Informed consent form; data collection sheet

Procedure

- An ethical clearance was obtained from the institutional ethical committee. All the appropriate precautions related to COVID-19 infection were taken according to the Indian Council of Medical Research (ICMR) guidelines.
- Participants were screened for the inclusion and exclusion criteria prior to the enrolment into the study. Married females in the age group of 20–35 years, females who are sexually active, and females willing to participate were included in the study. The purpose of the study was explained, and a written informed consent form was obtained from all the participants.
- Females undergone any pelvic injury secondary to an orthopedic or neurological condition or any recent pelvic surgery were excluded from the study.
- The confidentiality of the participants was maintained. The basic demographic data was taken. Then the participants were screened according to the DSM V criteria.
- Out of 500 females who were approached for the study, only 160 agreed to participate in the study. These 160 females' data were further analyzed. The final results were analyzed and interpreted to find the prevalence of vaginismus.

Outcome Measure

The *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* is a reliable and validated manual of disorders by the American Psychological Association.¹¹ It lists four checkpoints to be diagnosed with the condition of vaginismus. DSM is widely used as a diagnostic measure for the majority of the disorders. The criteria further describe the condition as lifelong and acquired and also measure the severity of the condition based on the levels of distress that occurred. The DSM-5 field trials included test–retest reliability which involved different clinicians doing independent evaluations of the same patient—a common approach to the study of diagnostic reliability.¹²

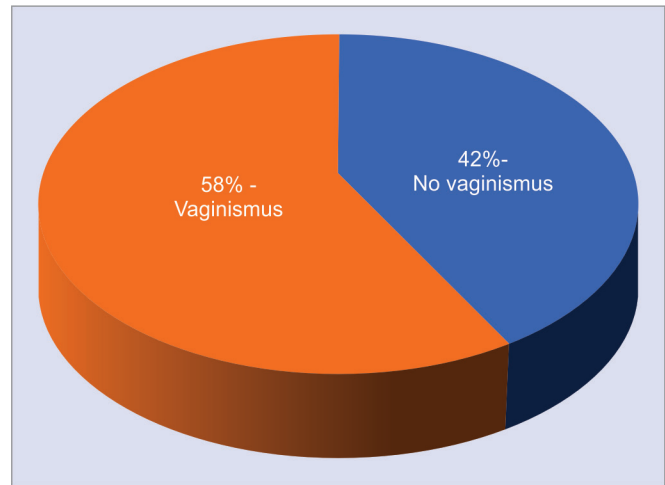


Fig. 1: Prevalence of vaginismus

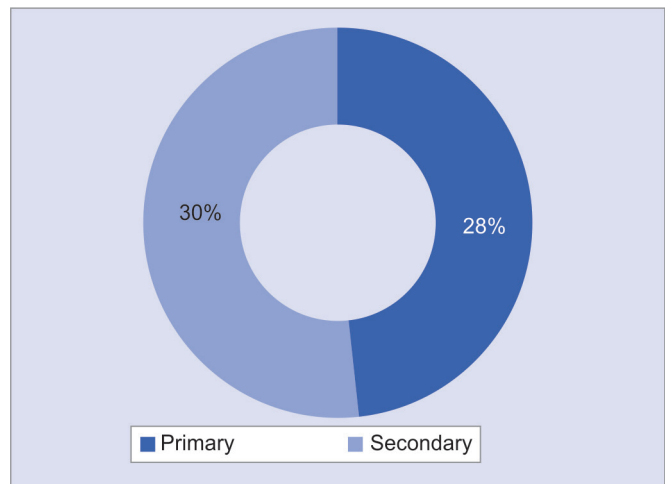


Fig. 2: Primary and secondary vaginismus

RESULTS

Women in the age group of 20–35 years were included in the present study. The mean age of the participants was 27.63 years. Out of the total sample size, 40 were primiparous and 75 were multiparous, while the rest 45 women had never achieved vaginal penetration.

In the present study, out of 160 women who were screened, 58% of them had vaginismus, while 42% did not have vaginismus (Fig. 1). In the 58% who were diagnosed with vaginismus, 30% had secondary vaginismus and 28% had primary vaginismus (Fig. 2).

Out of the total number of women screened (Fig. 3), only 71.88% had achieved vaginal penetration. Moreover, 44% had complaints of vulvovaginal pain, 38% talked about having anxiety or fear associated with the act of vaginal penetration and 45% had tightening or tensing of pelvic floor muscles during attempted vaginal penetration.

DISCUSSION

Vaginismus is a condition characterized by involuntary muscle spasms in the vaginal area, which can make sexual intercourse

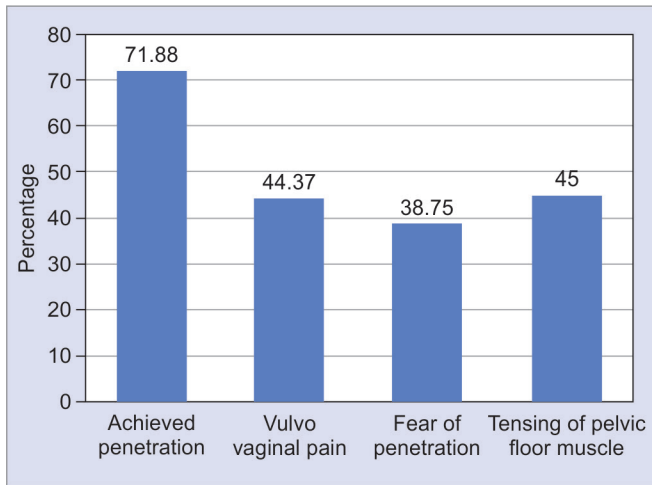


Fig. 3: Common complaints of vaginismus

and even gynecological exams painful or impossible. While the condition has likely existed throughout human history, it was not recognized as a medical condition until relatively recently. The only rational treatment for this disorder was surgery. Vaginismus has been documented as far back as ancient Greece, where it was believed to be caused by a fear of penetration and associated with hysteria.¹³ In the 19th century, vaginismus was often attributed to moral or psychological failings on the part of women, and treatments ranged from marital counseling to clitoridectomy.¹⁴ In the early 20th century, Freudian psychoanalysis became a popular treatment for vaginismus, with the condition being seen as a symptom of sexual repression or anxiety.¹⁴ In the mid-20th century, behavioral therapy approaches to treating vaginismus became popular, with a focus on gradually desensitizing women to vaginal penetration through the use of dilators or other techniques.¹⁵ More recently, there has been a growing recognition of the role of physiological factors in vaginismus, and treatments have expanded to include a range of interventions, including pelvic floor physical therapy, vaginal trainers, and medications such as botulinum toxin injections.^{15,16}

A study published in the *Journal of Sexual Medicine* in 2018 found that the prevalence of vaginismus among women attending a gynecology clinic in Turkey was approximately 5%.¹⁷ A study published in the *Archives of Sexual Behavior* in 2020 found that the prevalence of vaginismus among women in Iran was 3.3%.¹⁸ A study published in the *International Journal of Impotence Research* in 2011 found that the prevalence of vaginismus among Egyptian women was 5.5%.¹⁹ A study published in the *Indian Journal of Psychiatry* in 2018 found that the prevalence of vaginismus among women in India was 8.5%.²⁰ While data on the prevalence of vaginismus in the United States are limited, a study published in the *Journal of Sexual Medicine* in 2016 found that the prevalence of sexual pain disorders, which could include vaginismus, was approximately 12% among women in the United States.²¹ These studies suggest that vaginismus is a relatively uncommon but not rare condition that affects a significant number of women. However, the prevalence rates vary depending on the population studied. It is important to note that vaginismus is not a standalone diagnosis of exclusion, and can coexist with other medical or mental health conditions.

Studies have consistently found a correlation between vaginismus and anxiety or stress, with some researchers suggesting

that anxiety may be a contributing factor in the development of the condition.²² Research has suggested that women who have experienced childhood sexual abuse may be more likely to develop vaginismus, possibly due to trauma-related psychological or physiological factors.^{23,24} Cultural and religious factors may play a role in the development and expression of vaginismus, with some studies suggesting that women from certain cultures or religious backgrounds may be more likely to experience the condition.^{25,26} Pelvic floor dysfunction, including issues such as muscle spasms or weakness, has been identified as a potential contributing factor in the development of vaginismus, and pelvic floor physical therapy is often a recommended treatment.^{16,27}

A study conducted in India found that the prevalence of vaginismus in females aged 20–35 years was 12.8%.²⁸ Another study conducted in Delhi found a similar prevalence rate of 12.9%.²⁹ These findings suggest that vaginismus is a prevalent condition among young women in India. Vaginismus is a common sexual disorder that affects women worldwide. In India, the prevalence of vaginismus has been found to be relatively high in recent studies. A study conducted among undergraduate female students in a tertiary institution in South India found the prevalence of vaginismus to be 8.7%.³⁰ Another study conducted in an urban population of Delhi found the prevalence of vaginismus to be 10.8%.³¹ A cross-sectional study conducted in Eastern India found that psychosocial factors such as anxiety, fear of sex, and lack of sexual knowledge were significantly associated with vaginismus.³² Additionally, cultural, and religious factors have also been found to contribute to the development of vaginismus in Indian women.^{33,34}

The current study provides significant information on the prevalence of vaginismus among women in India. The prevalence rate is relatively high, especially when considering the negative impact that vaginismus can have on sexual function, mental health, and quality of life. One of the strengths of this study is that it used a well-validated diagnostic tool, the DSM-5 criteria for sexual dysfunction, to assess the presence of vaginismus. This increases the reliability of the findings and allows for comparisons with other studies that have used similar diagnostic criteria. Since the sample was drawn from a specific geographic area, it may not be representative of the entire population of young adult women in India.

Despite the limitations, the study highlights the need for greater awareness of vaginismus in India. The diagnosis and treatment of vaginismus in India can be challenging due to the lack of awareness and education about this disorder. However, it is important for healthcare providers to screen for and diagnose vaginismus in women, as it can have a significant impact on their sexual and emotional well-being.

The prevalence of vaginismus in India is a significant concern, and efforts should be made to increase awareness and education about this disorder. Further research is needed to identify the factors contributing to the high prevalence of vaginismus and to develop culturally sensitive interventions for the treatment of this disorder.

CONCLUSION

- Primary vaginismus was found to be 28% and secondary vaginismus was found to be 30%.
- Considerable involvement of fear of penetration, vulvovaginal pain, and tensing of pelvic floor muscles is seen in this condition.

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