

# Vaginismus in Iran: A Single Center Report of 7 Years Experience

Mohammad Hossein Akhavan-Taghavi,<sup>1</sup> Mohammad Ali Asghari-Moghaddam,<sup>1,\*</sup> Seyed Kazem Froutan,<sup>1</sup> and Maryam Jadid-Milani<sup>1</sup>

<sup>1</sup>Mostafa Khomeini Hospital, Shahed University, Tehran, IR Iran

\*Corresponding author: Mohammad Ali Asghari-Moghaddam, Mostafa Khomeini Hospital, Shahed University, Tehran, IR Iran. Tel: +98-2188985918; +98-2188974925, Fax: +98-2188967573, E-mail: asghari7a@gmail.com

Received 2015 May 30; Accepted 2015 October 27.

## Abstract

**Background:** Vaginismus is a sexual disorder that can cause painful intercourse. Although several studies have shown a relationship between higher education and socio-economic level of women with vaginismus, the relationship between demographic characteristics and other variables remains unclear.

**Objectives:** The present study was conducted to determine the demographic characteristics of women with vaginismus, coming to family health clinic, between 2007 and 2013.

**Patients and Methods:** This study is a cross-sectional study that was conducted on 115 clinical records, from early 2007 until the end of 2013, that have received a diagnosis of vaginismus. In these clinical records, the data on female and male age, education and employment, duration of marriage, type of marriage (traditional, virtual, etc.), being a virgin, erectile dysfunction of husband, information of families, sexual satisfaction, marital satisfaction, residential, non-medical types of medical treatment and hymenectomy were derived.

**Results:** The results showed that the average age of women was  $29 \pm 5$  years and the average age of the spouses was  $33 \pm 6$  years. Undergraduate education most prominent among women (52%) and spouses (42%). In terms of employment status, most women were housewives (54%) and the majority of male were employees (54%). The most frequent form of marriage was traditional (80%). The maximum elapsed time of marriage was between 1 - 3 years (43%). In most women, the first attempt for intercourse was from the second day of marriage to the end of the first week (73%). Hymenectomy was done by 9% of women. Totally, 45% of the men, the wives of whom were suffering from vaginismus, experienced erectile dysfunction. In 37% of couples, their sexual life was satisfactory. The most referred specialist for treatment was the urologist (17%). In 27% of women with vaginismus, numerous references to a variety of medical specialists and psychologists were also recorded. Of the total, 7% of couples experienced traditional and non-academic treatments.

**Conclusions:** As vaginismus can affect the stability of marriage, it is necessary to assess sexual dysfunction from all directions, including demographic characteristics and variables that affect the incidence of vaginismus. Therefore, based on the data obtained, we can diagnose and properly treat sexual dysfunction, in time, and teach couples how to deal with it.

**Keywords:** Vaginismus, Sexual Dysfunction, Physiological, Sexual Dysfunction, Psychological, Erectile Dysfunction

## 1. Background

The field of female sexual dysfunction has not been a focus of research in Iran, probably due to social barriers and women's reluctance to talk about such matters or attend a doctor for the issue. Until recently, only limited studies have reported epidemiology of these disorders in this country (1). Vaginismus, along with dyspareunia, makes one of the most prevalent sexual dysfunctions in women and, according to the most recent definition declared by the diagnostic and statistical manual of mental disorders, fifth edition (2), it has been categorized as "genito-pelvic pain disorder/ penetration disorder". The patients often avoid intercourse, feel involuntary pelvic muscle contraction, and anticipation or fear of pain along with its experience that persists. The definition clarifies that the experience of pain is not essential for the diagnosis. Moreover, the disorder doesn't necessarily impair sexual response or the ability of experiencing pleasure through stimulation.

The relevance of vaginismus is beyond its disabling effect, on the woman's sexual life alone, and these patients are more likely to underrate appropriate health care. Studies report uneasiness in using several types of contraception and tampons (3). Women's complaints in this regard include unsatisfactory sexual relation, painful or difficult penetration, non-consummating marriage, or even just a difficult gynecological examination (4).

Vaginismus is a global health issue, for which community estimates put the prevalence at 0.5 - 1%, while the rates would become as high as 4.2 - 42% in specialist and clinical settings (5). Although cultural and religious backgrounds of the society have been implicated, as a significant factor determining the prevalence (6, 7), the prevalence of this problem is not predictable upon such issues and prevalence reported from different societies show inconsistencies to this conclusion.

## 2. Objectives

In this single center report, we aim to evaluate the demography of vaginismus among women attending the family health clinic at Shahed university, Tehran, Iran, between years 2007 - 2013, starting and ending in March.

## 3. Patients and Methods

The study was conducted through a cross-sectional methodology, using data from 115 women consecutively attending the family health clinic at Shahed university general hospital, Tehran, Iran, between March 2007 and March 2013, that were all diagnosed as having 'vaginismus', after the clinical investigation. To gather the data, patients' files at our clinic have been searched and the information has been documented, using a standard questionnaire. No particular inclusion or exclusion criteria were employed in this study. Due to the retrospective nature of the study and anonymous report of the analyses, any permission attainment from the ethical committees was out of commission.

### 3.1. Data Collection and Analysis

The following data have been collected from the patients' files: age of the woman, age of the husband, education level of the woman and her husband, woman's and husband's occupation, engagement duration, marriage duration, marriage type (traditional, friendship before marriage, internet), woman's virginity at the marriage, erection disorder in the husband, maternal family acknowledgement of the problem, sexual pleasure, marriage satisfaction, living place, any history of medical and non-medical treatments and hymenectomy. The SPSS version 17.0 (SPSS Inc., Chicago, IL, USA) was used for data analysis.

## 4. Results

### 4.1. Demographic Characteristics

Mean age of the women studied was  $29 \pm 5$  (range: 19 - 45) and for their husbands was  $33 \pm 6$  (range: 25 - 55) years. A bachelor degree was the most prevalent education level

for either the women (52%) and their husband (42%); 1% of the women were also illiterate (there was missing data for 11 men and 12 women on their educational level). Most of the investigated women were not active in outdoor occupation and categorized themselves as 'housewives', while 54% of the husbands were 'employees' (missing data existed for 10 men and nine women, on their occupation status). From 115 couples with vaginismus in the women, 83 (83%) were living in the Tehran capital city, and the remaining were from other parts of the country (15 missing data). Table 1 summarizes demographic data of the study population.

### 4.2. Marriage and Sexual Information

Table 2 summarizes sexual and marriage data of the study population. The most frequent marriage type was traditional (80%), of which four (7%) couples were relatives. For 46 women, missing data existed on the marriage type. Most of the marriages' duration was between 1 to 3 years (43%). Most of the couples (73%) had started intercourse between the second night of the marriage to the end of the first week. Most of the participating women reported that their maternal families have not mentioned about their problem. From the participating women, 113 (98%) were virgins at the time of marriage. Erection problems existed in husbands of 45.1% of the women with vaginismus. Data of marriage and sexual satisfaction are summarized in Table 3.

### 4.3. Past Therapeutic Approaches and Consultation Information

Eight (9%) of the couples had only used traditional (non-academic) medicine for their problem. Only 9% had undergone hymenectomy, as a therapeutic approach to vaginismus. A total of 26 (27%) of the couples had been attending the family health clinic for the first time and the remaining had histories of attending specialist clinics before, with the highest share for the urologists (19%), followed by gynecologists (13%). Only 1% of the participants had ever consulted a general practitioner.

**Table 1.** Demographic Data of the Study Population<sup>a</sup>

Demographic Data	Women	Husbands
<b>Education level</b>		
Illiterate	1 (1)	0
Under diploma	5 (5)	7 (7)
Diploma or associate's degree	27 (26)	30 (28)
Bachelor degree	53 (51)	44 (42)
Master of science	14 (14)	13 (13)
Doctorate	2 (2)	7 (7)
Religious education	1 (1)	3 (3)
<b>Occupation status</b>		
Employee	31 (29)	57 (54)
Military service	0	4 (4)
Business	11 (10)	34 (32)
Worker	0	7 (7)
Retired	0	1 (1)
University student	7 (7)	2 (2)
House maker	57 (54)	0

<sup>a</sup>Values are presented as No. (%).

**Table 2.** Marriage and Initial Sexual Data of the Study Population

Demographics	No (%)
<b>Marriage type</b>	
Traditional	55 (80)
Friendship <sup>a</sup>	13 (19)
Internet	1 (1)
<b>Marriage duration</b>	
Under one year	27 (24)
1 - 3 years	49 (43)
4 - 5 years	21 (18)
6 - 10 years	11 (10)
> 10 years	5 (5)
<b>First intercourse</b>	
During engagement	2 (3)
Marriage night	21 (18)
First marriage week	84 (73)
First month	5 (4)
Others	2 (2)

<sup>a</sup>Friendship before marriage.**Table 3.** Marriage and Sexual Satisfaction Data in the Study Population

Demographics	No (%)
<b>Marriage satisfaction</b>	
Very satisfactory	16 (15)
Satisfactory	51 (47)
Not bad	13 (12)
Not good	4 (4)
Unsatisfactory	13 (12)
Very unsatisfactory	12 (11)
<b>Sexual satisfaction</b>	
Very satisfactory	6 (6)
Satisfactory	31 (30)
Not bad	22 (22)
Not good	3 (3)
Unsatisfactory	35 (34)
Very unsatisfactory	5 (5)

## 5. Discussion

This cross-sectional observational study, on the demographic data of women with vaginismus, is consistent with the reports from other parts of the world. In the current study, the mean age of the women with vaginismus and their husbands is 29 and 33 years, respectively. This finding is in accordance to a similar study, conducted in another Muslim society, Turkey, in which Munasinghe et al. (8) reported a mean age of  $29.8 \pm 5.4$  years for women and  $33 \pm 5.9$  years for their husbands. A study from Neth-

erlands also reported similar results, with mean age of about 29 for their women with vaginismus (9). However, a study from Britain, by Konkan et al. (10), also reported a lower age for women with vaginismus, with mean age of 24.9 years for their patient population. This result is consistent with a report by Ghazizadeh et al. (11), in another report from Iran.

The educational level of our study population was quite higher than that of the general population, with over two

thirds of the investigated women having a bachelor degree or higher and over 60% of that same status for their husbands. Similar findings have been reported by Tugrul et al. (7), from Turkey. Interpretation of this finding may raise several controversies, because this study only reports data of those who have attended our clinic and represents no data on the problem's status in the general population. Therefore, on the one hand, several may propose that vaginismus is more prevalent among people of higher socioeconomic levels, while on the other hand, others would debate that people of higher education levels are more meticulous in their sexual health and are more likely to attend a clinic for lesser levels of problem. Moreover, shyness of talking about such issues, in people of lower socioeconomic levels, might also provide another explanation. Similar reports from other countries support our conclusion and consistency of this finding, in a global perspective (8, 12-15).

In the current study, the most prevalent time duration between marriage and attending the clinic was 1-3 years (43% of the total population), which is consistent to the existing literature. For instance, in two Turkish studies By Munasinghe et al. (8) and Dogan et al. (15), the mean marriage time before the physician consultation was 26 and 15 months, respectively. The long time duration of symptoms, without attending a doctor, can be explained by shyness to consult for such an issue with someone else, a belief of spontaneous improvement of the illness with cooperation of the couple, disappointment of finding a successful treatment, absence of special centers for sexual complaints or being unaware of their existence, or a combination of the mentioned factors. It is worthy to note that the more vaginismus becomes a chronic issue, the more it would be harder to treat (10). The reason for this situation is the development of secondary sexual complications, including erection disorder in the husband and female, sexual desire disorders, depression and anxiety disorders. Moreover, perversion in sexual relations effectively disturbs marital relations, which itself augments anxiety levels in women with vaginismus and complicates the therapeutic process. For the same reason, it is generally believed that women with vaginismus need couple therapy.

In most of our patient population, parents of the couples were not aware of their problem. This finding is in concordance with reports from different cultural societies, as Eserdag et al. (14) and Konkan et al. (10) reported similar results, from Turkey and London, respectively. Therefore, reluctance of the couples to share such a problem, with their more experienced relatives would alarm us about the formation of a vicious circle that more deeply complicates the problem. Although, one may debate that this may also be considered a positive issue that could perfectly prevent maltreatment of the condition that can make things even worse. All these evidences would more remarkably show the necessity and relevance of consultation and therapeutic centers for sexual

disorders to be easily accessible for the families.

Although most of the study participants were satisfied with their marriage, the majority of them were reporting unsatisfactory sexual relations. It has been shown that unsatisfactory sexual relations between the couples can finally end in unsatisfactory marriage relations, as well, which will increase the risk of divorce (16). In a study on the couples who had been attending the courts in a divorce trial, over 60% reported unsatisfactory sexual relations with their spouse (17).

Most of the participating women, in the current study, were virgins before marriage. Only 8.7% of the women had undergone hymenectomy for their problem. A similar observation has been reported from Turkey (8). Such non-scientific procedures, like undergoing hymenectomy for vaginismus (18), reveal inadequate knowledge and wrong ideas, either among the couples, or even the health professionals, in managing the problem and evidence the necessity of public education and providing potent health service, in order to initiate interventions in such problems and prevention of complications arising, due to inappropriate therapeutic endeavors.

In the current research, 45% of the husbands of women with vaginismus developed erection disorders, which is consistent to the report by Munasinghe et al. (8) in Turkey. However, these are higher than a report by Eserdag et al. (14), again from Turkey. Moreover, in our study, the most frequent subspecialties, which were consulted by couples with the problem, were urology and gynecology. On one hand, this fact shows development of the impotency in men, in a mutual association with vaginismus in their wives, and, on the other hand, unveils the high proportion of patients who consult with not-related specialties, which we believe can substantially worsen their problem. Our study also reveals that general practitioners had the lowest share of getting consulted by the couples, and this is a very alarming issue that should be highly regarded because, to prevent malpractices and development of complicated illness, general practitioners act as the frontline interveners that would best serve to treat or refer the couples to the right specialists. The high number of patients coming from other parts of the country also reveals the necessity of expanding family health clinics, on a nationwide scale.

This study has several limitations. First of all, the study population had been collected from women attending our family health clinic. This can put a certain type of bias on the demography of our patient population, compared to its real status. Moreover, our study methodology is unable to provide the prevalence of vaginismus among the Iranian people, and it requires further population-based studies, with powerful designs, to attend this issue.

In conclusion, the current study showed that vaginismus, in Iran, is more observed among women of mean age of 29 years, higher socioeconomic levels and mostly with marriage duration of 1-3 years. Vaginismus was also associated with a high rate of erectile dysfunction, in the

husbands. Moreover, most of the investigated couples had been getting consultation from unrelated specialties, for their problem, before they attend the family health clinic. Also, several of them went under hymenectomy, which is considered a wrong therapeutic intervention. All these should alert us to pay more attention to the critical issue of sexual and family health, and expand such centers around the country.

## Acknowledgments

All the people and organizations, which helped us to do this survey.

## Footnotes

**Authors' Contribution:** Study concept and design: Mohammad Hossein Akhavan-Taghavi, Mohammad Ali Asghari-Moghaddam, Seyed Kazem Froutan, Maryam Jadid-Milani; acquisition of data: Mohammad Hossein Akhavan-Taghavi, Mohammad Ali Asghari-Moghaddam, Seyed Kazem Froutan, Maryam Jadid-Milani; analysis and interpretation of data: Mohammad Hossein Akhavan-Taghavi, Mohammad Ali Asghari-Moghaddam, Maryam Jadid-Milani; drafting of the manuscript: Mohammad Hossein Akhavan-Taghavi, Mohammad Ali Asghari-Moghaddam, Maryam Jadid-Milani; critical revision of the manuscript for important intellectual content: Mohammad Hossein Akhavan-Taghavi, Mohammad Ali Asghari-Moghaddam, Seyed Kazem Froutan, Maryam Jadid-Milani; statistical analysis: Mohammad Hossein Akhavan-Taghavi, Mohammad Ali Asghari-Moghaddam, Maryam Jadid-Milani; administrative, technical, and material support: Mohammad Hossein Akhavan-Taghavi, Mohammad Ali Asghari-Moghaddam, study supervision: Mohammad Ali Asghari-Moghaddam.

**Funding/Support:** This study was supported, in part, by Shahed University General Hospital, Tehran, Iran.

## References

- Farnam F, Janghorbani M, Merghati-Khoei E, Raisi F. Vaginismus and its correlates in an Iranian clinical sample. *Int J Impot Res*. 2014;**26**(6):230-4. doi: 10.1038/ijir.2014.16. [PubMed: 24830673]
- Association AP. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5®)*. 5th ed. Virginia: American Psychiatric Publishing; 2013.
- Reissing ED, Binik YM, Khalife S, Cohen D, Amsel R. Vaginal spasm, pain, and behavior: an empirical investigation of the diagnosis of vaginismus. *Arch Sex Behav*. 2004;**33**(1):5-17. doi: 10.1023/B:ASEB.0000007458.32852.c8. [PubMed: 14739686]
- Crowley T, Goldmeier D, Hiller J. Diagnosing and managing vaginismus. *BMJ*. 2009;**338**:b2284. doi: 10.1136/bmj.b2284. [PubMed: 19541697]
- Simons JS, Carey MP. Prevalence of sexual dysfunctions: results from a decade of research. *Arch Sex Behav*. 2001;**30**(2):177-219. [PubMed: 11329727]
- Reissing ED, Binik YM, Khalife S, Cohen D, Amsel R. Etiological correlates of vaginismus: sexual and physical abuse, sexual knowledge, sexual self-schema, and relationship adjustment. *J Sex Marital Ther*. 2003;**29**(1):47-59. doi: 10.1080/713847095. [PubMed: 12519667]
- Tuğrul C, Kabakci E. Vaginismus and its correlates. *Sexual and Marital Therapy*. 1997;**12**(1):23-34. doi: 10.1080/02674659708408199.
- Munasinghe T, Goonaratna C, de Silva P. Couple characteristics and outcome of therapy in vaginismus. *Ceylon Med J*. 2004;**49**(2):54-7. [PubMed: 15334800]
- Borg C, de Jong PJ, Schultz WW. Vaginismus and dyspareunia: automatic vs. deliberate disgust responsivity. *J Sex Med*. 2010;**7**(6):2149-57. doi: 10.1111/j.1743-6109.2010.01800.x. [PubMed: 20367766]
- Konkan R, Bayrak M, Gönüllü OG, Şenormancı O, Sungur MZ. Sexual function and satisfaction of women with vaginismus. *Düşünen Adam: J Psychiatry and Neurol Sci*. 2012;**25**(4):305-11. doi: 10.5350/DAJPN2012250402.
- Ghazizadeh S, Nikzad M. Botulinum toxin in the treatment of refractory vaginismus. *Obstet Gynecol*. 2004;**104**(5 Pt 1):922-5. doi: 10.1097/01.AOG.0000141441.41178.6b. [PubMed: 15516379]
- Sadock BJ. *Kaplan and Sadock's Comprehensive Textbook of Psychiatry*. 9th ed. Philadelphia: Wolters Kluwer Health; 2012. p. 4884.
- Kaplan HS. *The New Sex Therapy: Active Treatment of Sexual Dysfunctions*. illustrated ed. Levittown, PA: Brunner/Mazel; 1974.
- Eserdağ S, Zülflükaroğlu E, Akarsu S, Mıcozkadioğlu S. Sexual Dysfunction in Male Partners of 580 Women with Vaginismus: Is It a Result of or a Reaction to Vaginismus? *Eur J Surg Sci*. 2012;**3**(2):51-5.
- Dogan S, Dogan M. The frequency of sexual dysfunctions in male partners of women with vaginismus in a Turkish sample. *Int J Impot Res*. 2008;**20**(2):218-21. doi: 10.1038/sj.ijir.3901615. [PubMed: 17882229]
- Aghamohmadiyan H, Rezagholizade T, Avazi M, Poshtiban H, editors. Satisfaction of sexual function in family and its coloration with divorce.; First Congress in Family and Sexual Dysfunction; 2003.; 2003; Shahed University, Tehran, Iran. Shahed University;
- Saber Mahani A, Nourani Motlagh S, Vaez Mahdavi M, Hadrian M, Asadi Lari M. Involvement of families from Tehran to astonishing levels of health costs and relating factors: Justice evaluation project in Tehran (Urban HEART 2010). *Razi Med Sci J*. 2014;**21**(126):15-26.
- Pacik PT. Vaginismus: review of current concepts and treatment using botox injections, bupivacaine injections, and progressive dilation with the patient under anesthesia. *Aesthetic Plast Surg*. 2011;**35**(6):1160-4. doi: 10.1007/s00266-011-9737-5. [PubMed: 21556985]