Scholars Journal of Applied Medical Sciences

Abbreviated Key Title: Sch J App Med Sci ISSN 2347-954X (Print) | ISSN 2320-6691 (Online) Journal homepage: https://saspublishers.com **3** OPEN ACCESS

Dermatology

Association between Premature Ejaculation and Irritable Bowel Syndrome

Dr. Mohd Asaduzzaman Babu^{1*}, Dr. Irana Afrin², Dr. Farial Akshan³

DOI: 10.36347/sjams.2024.v12i05.012 | **Received**: 21.03.2024 | **Accepted**: 02.05.2024 | **Published**: 13.05.2024

*Corresponding author: Dr. Mohd Asaduzzaman Babu

Assistant Professor, Department of Dermatology, North Bengal Medical College, Sirajganj, Bangladesh

Abstract

Original Research Article

Background: Premature ejaculation (PE) is a widespread sexual dysfunction that significantly affects men's quality of life and psychological well-being. Recent interest has emerged in exploring the association between PE and medical conditions like irritable bowel syndrome (IBS). In Bangladesh, both PE and IBS have become significant health concerns, yet research exploring their association within the Bangladeshi context remains limited. Objective: This study aims to investigate the association between premature ejaculation and irritable bowel syndrome among Bangladeshi men. Methodology: A prospective observational study was conducted at a tertiary hospital from June 2021 to July 2022, involving 163 patients. Samples were collected based on a census approach, with participants meeting the Rome-II criteria for IBS and DSM-IV-TR criteria for premature ejaculation disorder. Data collection encompassed demographic details, IBS and premature ejaculation diagnostic criteria, and psychiatric disorder assessments. Data were analyzed using descriptive statistics and inferential tests. Results: Our results indicate that among the participants, 32% were below 30 years old, with 45% falling within the 30-40 age range, 13% between 40-49 years, and only 10% over 50 years old. Regarding irritable bowel syndrome (IBS) duration, 51.3% reported a duration of less than 4 years, 30.9% reported 4-9 years, and 17.8% reported over 10 years. Concerning clinical history, 38.8% reported a history of drug addiction, 44.7% reported a history of psychiatric disorder, 30.3% reported a familial psychiatric history, 43.4% reported recent considerable stressors, and 28.9% reported new sexual contact. In terms of premature ejaculation, 44% attributed it to addiction, with 36% using drugs for its treatment, 83% experiencing it at the start of sexual activity, and only 7% identifying a physical cause. The analysis revealed significant associations between premature ejaculation and variables such as drug addiction (p < 0.001), familial history of psychiatric disorder (p = 0.011), and recent considerable stressors (p = 0.027). However, variables like town, history of psychiatric disorder, and new sexual contact did not show significant associations (p > 0.05) with premature ejaculation, and the duration of IBS also did not demonstrate a significant association (p > 0.05). Conclusion: Premature ejaculation is more prevalent among individuals with IBS compared to the general population. Factors such as drug abuse, familial history of psychiatric disorders, and severe emotional stress contribute significantly to premature ejaculation prevalence. Understanding this association is crucial for holistic management approaches tailored to the unique needs of individuals in Bangladesh.

Keywords: Premature ejaculation, irritable bowel syndrome, association, Bangladesh, psychiatric disorder, drug addiction.

Copyright © 2024 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

Introduction

Premature ejaculation (PE) is a prevalent sexual dysfunction characterized by persistent or recurrent ejaculation with minimal sexual stimulation before, upon, or shortly after penetration and before the person wishes it, leading to distress or interpersonal difficulty. It affects men of all ages and can significantly impact their quality of life and psychological well-being. In recent years, there has been growing interest in exploring the association between PE and various medical

conditions, including irritable bowel syndrome (IBS) [1-3].

In Bangladesh, both premature ejaculation and irritable bowel syndrome have emerged as significant health concerns impacting the overall well-being of individuals. The prevalence of premature ejaculation in Bangladesh is comparable to global estimates, affecting a considerable portion of the male population [4, 5]. Additionally, irritable bowel syndrome is increasingly recognized as a common gastrointestinal disorder, with significant implications for health-related quality of life.

Assistant Professor, Department of Dermatology, North Bengal Medical College, Sirajganj, Bangladesh

²Lecturer, Department of Pharmachology, Dhaka Dental College, Dhaka, Bangladesh

³Assistant Professor, Department of Dermatology, East West Medical College, Dhaka, Bangladesh

However, despite the individual burdens associated with each condition, there remains a dearth of research exploring the potential association between premature ejaculation and irritable bowel syndrome within the Bangladeshi context [6, 7].

Given the cultural context and societal norms in Bangladesh, discussing sexual health issues such as premature ejaculation remains somewhat taboo, leading to underreporting and limited access to appropriate healthcare services. Similarly, irritable bowel syndrome is often underdiagnosed and undertreated due to misconceptions and stigma surrounding gastrointestinal disorders [8-11]. Consequently, there is a critical need for research that delves into the intersection of these two conditions within the Bangladeshi population to better understand their prevalence, risk factors, and potential associations.

the Understanding association between premature ejaculation and irritable bowel syndrome in the Bangladeshi context holds significant clinical implications. It can inform healthcare providers about comorbidities and facilitate holistic potential management approaches tailored to the unique needs of individuals in Bangladesh. Furthermore, shedding light on this association can contribute to destigmatizing discussions around sexual health and gastrointestinal disorders, ultimately promoting greater awareness, early detection, and comprehensive care delivery in the Bangladeshi healthcare system.

Objective

In light of these considerations, this study aims to investigate the association between premature ejaculation and irritable bowel syndrome among Bangladeshi men.

METHODOLOGY

This prospective observational study was conducted at a tertiary hospital spanning from June 2021 to July 2022, where samples were gathered through a census approach. Among men referred to the gastrointestinal clinic, those meeting the Rome-II criteria for IBS were interviewed based on the DSM-IV-TR criteria for premature ejaculation disorder, resulting in the evaluation of 163 patients by the study's end. Prior to participation, written informed consent was obtained

from all individuals. Exclusion criteria encompassed toxic agents, pharmaceutical agents, and chronic diseases potentially mimicking or exacerbating IBS symptoms. Patients aged 18 and above meeting the IBS criteria were included, along with those diagnosed with premature ejaculation who were either under treatment or using medication, grouped as the premature ejaculation cohort.

The data collection process entailed a questionnaire divided into three sections. The first section captured demographic details such as age, education, marital status, and drug addiction status. The second part incorporated the Rome-II diagnostic criteria for IBS, administered by a physician during patient interviews, while the third section included the DSM-IV-TR diagnostic criteria for premature ejaculation, conducted by a psychiatrist. Psychiatric disorders were also assessed through interviews conducted by the psychiatrist.

Data were compiled, encoded, and analyzed utilizing SPSS software, version 16. Descriptive statistics and inferential tests, including the Chi-square test, were employed for data analysis. Descriptive measures determined mean values and standard deviations for quantitative variables like age and frequency of premature ejaculation across different age brackets and demographic factors like education level. The Chi-square test examined the relationship between demographic variables and other factors, with results presented via graphs and frequency tables.

Ethical considerations were paramount throughout the study. Participant recruitment ensured personal satisfaction, with confidentiality maintained by encoding questionnaires without patient names. The study did not disrupt patients' treatment processes; regular treatment continued post-study. Individuals diagnosed with premature ejaculation received assistance in visiting their healthcare practitioner for further management.

RESULTS

32% were below 30 years old, while 45% fell within the 30-40 age range. Additionally, 13% were aged between 40-49 years, and a smaller proportion, comprising 10%, were over 50 years old.

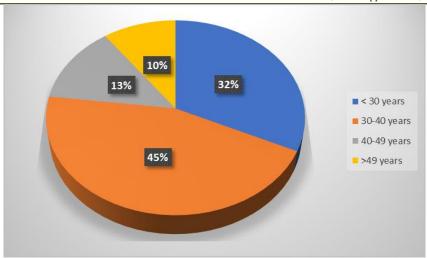


Figure-1: Age Distribution of the Study group

Among individuals seeking treatment for irritable bowel syndrome (IBS), 51.3% reported a duration of less than 4 years, while 30.9% reported a duration of 4-9 years, and 17.8% reported a duration of over 10 years. Additionally, 38.8% of respondents reported a history of drug addiction, while 61.2% did not. Furthermore, 44.7% of participants reported a history of psychiatric disorder, while 55.3% did not. Regarding

familial psychiatric history, 30.3% reported a positive history, with 69.7% reporting no familial psychiatric history. Moreover, 43.4% reported recent considerable stressors, whereas 56.6% did not. Notably, 12.67% reported Premature ejaculation and 28.9% reported new sexual contact, while 71.1% did not report such activity. Besides those who have Premature ejaculation and IBS had 15.33% DM and 7.36% HTN.

Table-1: Distribution of the patients according to clinical history

Variable	Percent	
IBS duration	<4	51.3
	4-9	30.9
	>10	17.8
Premature ejaculation	Yes	12.27
Drug addiction	Yes	38.8
	No	61.2
History of psychiatric disorder	Yes	44.7
	No	55.3
Familial history of psychiatric disorder	Yes	30.3
	No	69.7
Recent considerable stressors	Yes	43.4
	No	56.6
New sexual contact	Yes	28.9
	No	71.1
DM	Yes	15.33
	No	84.67
HTN	Yes	7.36
	No	92.64

44% of individuals experiencing premature ejaculation attribute it to addiction, while 56% do not. Furthermore, 36% of respondents reported using drugs for the treatment of premature ejaculation, whereas 64% did not. Interestingly, a significant majority (83%)

acknowledged experiencing premature ejaculation at the start of sexual activity, with only 17% denying such occurrences. Additionally, only 7% of participants identified a physical cause for premature ejaculation.

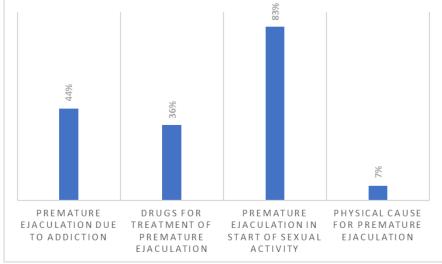


Figure-2: Distribution of variables in patients with premature ejaculation

The results reveal that among participants, 38.2% reported engaging in sexual activity once a week, while 31.5% reported engaging in sexual activity twice a

week. Additionally, 15.7% reported engaging in sexual activity three times or more per week.

Table-2: Distribution of the patients according to frequency of sexual activity in a week

Variable		%
Frequency of sexual	Once a week	38.2
activity in a week	Two times	31.5
	Three times or more	15.7

The analysis of premature ejaculation in relation to various variables indicates significant associations. Drug addiction showed a statistically significant association (p < 0.001) with premature ejaculation, with 78% of individuals with drug addiction experiencing premature ejaculation compared to 46.2% of those without. Similarly, familial history of psychiatric disorder was significantly associated (p = 0.011) with premature ejaculation, with 48.5% of individuals with a familial history experiencing premature ejaculation compared to 51.9% of those

without. Additionally, recent considerable stressors showed a significant association (p = 0.027) with premature ejaculation, where 68.2% of individuals experiencing stressors reported premature ejaculation compared to 66.3% of those without. However, variables such as town, history of psychiatric disorder, and new sexual contact did not show significant associations (p > 0.05) with premature ejaculation. The duration of irritable bowel syndrome (IBS) also did not demonstrate a significant association (p > 0.05) with premature ejaculation.

Table-3: Comparison of frequency of premature ejaculation based on demographic variables

Variable		Premature Ejaculation		<i>p</i> -value	df	Chi- square
		Yes	No			
	Town	(58.7%)	(41.3%)45			
	Yes	(78%)	(22%)13			
Drug addiction		< 0.001	1	14.975		
	No	(46.2%)	(53.8%)50			
	Illiterate	(50%)	(50%)1			
	Yes	(58.8%)	(41.2%)28			
History of psychiatric disorder		0.951	1	0.004		
	No	(58.003%)	(41.7%)35			
	Yes	(73.9%)	(26.1%)12			
Familial history of psychiatric disorder		0.011	1	6.413		
	No	(51.9%)	(48.1%)51			
	Yes	(48.5%)	(51.5%)34			
Recent considerable stressors		0.027	1	4.872		
	No	(66.3%)	(33.7%)			

Variable		Premature Ejaculation		<i>p</i> -value	df	Chi- square
		Yes	No			
	Yes	(68.2%)	(31.8%)			
New sexual contact		0.124	1	2.366		
	No	(54.6%)	(54.4%)			
	<4	(55.1%)	(44.9%)			
IBS duration	4-9	(61.7%)	(38.3%)	0.675	2	0.785
	>10	(63%)	(37%)			

DISCUSSION

A study conducted at Shohada Hospital during 2002 and 2003 examined patients with premature ejaculation, assessing them for psychiatric disorders and IBS. Among the 41 patients studied, 40% exhibited symptoms of IBS, while 59.5% showed psychiatric issues like stress, obsession, and restlessness [12]. Their findings revealed a statistically significant association between IBS and premature ejaculation, aligning with our study where the majority of the 163 evaluated men met DSM-IV-TR criteria for premature ejaculation disorder.

In another study involving 683 patients and 247 controls in Germany, researchers explored the prevalence of sexual dysfunction in individuals with gastrointestinal problems. Approximately 43.3% of patients experienced sexual dysfunction, with no significant correlation observed with sex, age, or type of disease (IBS and dyspepsia) [13]. However, premature ejaculation disorder was commonly associated with gastrointestinal issues, mirroring our findings where no significant differences in premature ejaculation were observed based on residential regions, education level, history of psychiatric disorder, new sexual contact, age, or duration of IBS.

A study comparing women with IBS, with and without sexual dysfunction, found no significant relationship between IBS severity and sexual dysfunction [14]. This contrasts with our results indicating a higher prevalence of premature ejaculation among IBS patients compared to the general population, potentially influenced by psychological and social factors unique to different societies.

A South Korean study in 2011 involving 956 men over 20 years old reported a 10.5% prevalence of premature ejaculation, with approximately 25.4% exhibiting psychiatric problems [15]. This corresponds with our findings, suggesting a significant correlation between premature ejaculation and factors like family history of severe stress and psychiatric disorder.

Consistent with prior research, our study demonstrated a higher prevalence of premature ejaculation in patients with IBS compared to the general population. This suggests a possible psychological link between both conditions, as stress and emotional distress may exacerbate symptoms of both IBS and premature

ejaculation. The high prevalence of premature ejaculation in IBS patients with a family history of psychiatric disorder and severe stress further underscores the potential interplay between psychiatric factors and premature ejaculation.

CONCLUSION

Premature ejaculation appears to be notably prevalent among individuals with irritable bowel syndrome (IBS) compared to the general population. Factors such as drug abuse, a familial history of psychiatric disorders, and experiencing severe emotional stress within the past year may substantially elevate the likelihood of developing premature ejaculation.

REFERENCE

- Brandt, L. J., Chey, W. D., Foxx-Orenstein, A. E., Quigley, E. M., Schiller, L. R., Schoenfeld, P. S., ... & Moayyedi, P. (2009). An evidence-based position statement on the management of irritable bowel syndrome. *American Journal of Gastroenterology* (Springer Nature), 104(Suppl 1), S1-35.
- Ishihara, S., Yashima, K., Kushiyama, Y., Izumi, A., Kawashima, K., Fujishiro, H., ... & Kinoshita, Y. (2012). Prevalence of organic colonic lesions in patients meeting Rome III criteria for diagnosis of IBS: a prospective multi-center study utilizing colonoscopy. *Journal of gastroenterology*, 47, 1084-1090.
- 3. Aguas, M., Garrigues, V., Bastida, G., Nos, P., Ortiz, V., Fernandez, A., & Ponce, J. (2011). Prevalence of irritable bowel syndrome (IBS) in first-degree relatives of patients with inflammatory bowel disease (IBD). *Journal of Crohn's and Colitis*, 5(3), 227-233.
- Schmulson, M., Vargas, J. A., López-Colombo, A., Remes-Troche, J. M., & López-Alvarenga, J. C. (2010). Prevalence and clinical characteristics of the IBS subtypes according to the Rome III criteria in patients from a clinical, multicentric trial. A report from the Mexican IBS Working Group. Revista de Gastroenterología de México, 75(4), 427-438.
- 5. Mykletun, A., Jacka, F., Williams, L., Pasco, J., Henry, M., Nicholson, G. C., ... & Berk, M. (2010). Prevalence of mood and anxiety disorder in self reported irritable bowel syndrome (IBS). An epidemiological population based study of women. *BMC gastroenterology*, 10, 1-9.
- 6. Stanisic, V., & Quigley, E. M. (2014). The overlap

- between IBS and IBD—what is it and what does it mean?. Expert review of gastroenterology & hepatology, 8(2), 139-145.
- Hungin, A. P. S., Chang, L., Locke, G. R., Dennis, E. H., & Barghout, V. (2005). Irritable bowel syndrome in the United States: prevalence, symptom patterns and impact. *Alimentary pharmacology & therapeutics*, 21(11), 1365-1375.
- 8. Hungin, A. P. S., Whorwell, P. J., Tack, J., & Mearin, F. (2003). The prevalence, patterns and impact of irritable bowel syndrome: an international survey of 40 000 subjects. *Alimentary pharmacology & therapeutics*, 17(5), 643-650.
- Arun, P., Vyas, J. N., Rai, R. R., Kanwal, K., & Sushil, C. S. (1993). Psychological and sociodemographic correlates of the irritable bowel syndrome. *Indian Journal of Psychiatry*, 35(4), 193-196.
- Walker, E. A., Roy-Byrne, P. P., Katon, W. J., Li, L., Amos, D., & Jiranek, G. (1990). Psychiatric illness and irritable bowel syndrome: a comparison with inflammatory bowel disease. *The American*

- journal of psychiatry, 147(12), 1656-1661.
- Gwee, K. A., Siah, K. T. H., Wong, R. K., Wee, S., Wong, M. L., & Png, D. J. (2012). Prevalence of disturbed bowel functions and its association with disturbed bladder and sexual functions in the male population. *Journal of Gastroenterology and Hepatology*, 27(11), 1738-1744.
- Gurkan, L., Oommen, M., & Hellstrom, W. J. (2008).
 Premature ejaculation: current and future treatments. *Asian journal of andrology*, 10(1), 102-109.
- 13. Patrick, D. L., Althof, S. E., Pryor, J. L., Rosen, R., Rowland, D. L., Ho, K. F., ... & Jamieson, C. (2005). Premature ejaculation: an observational study of men and their partners. *The journal of sexual medicine*, 2(3), 358-367.
- Rezakhaniha, B. N. (2005). Prevalence of sexual dysfunction and related factors in patients during an army of 501 men referred to urology 2004- 2005 to Military. Med J Islamic Republic of Iran, 3, 1354-1358.
- 15. Carson, C., & Gunn, K. (2006). Premature ejaculation: definition and prevalence. *International journal of impotence research*, *18*(1), S5-S13.