





Review

# **Destigmatization of Erectile Dysfunction**

Dolinar Larissa<sup>1</sup>, Španring Ajda<sup>1</sup>, Šercer Nika<sup>1</sup>, Breznik Katarina<sup>1</sup>, Gošnak Dahmane Raja<sup>1,\*</sup>, Starc Andrej<sup>1</sup>

- 1. University of Ljubljana, Faculty of Health Sciences, Ljubljana, Slovenia
- \* Correspondence: raja.gosnak@zf.uni-lj.si

#### **Abstract:**

Erectile dysfunction (ED) is a sexual dysfunction that significantly affects men's quality of life and is often associated with a stigma that makes it difficult to access appropriate treatment. This stigma, which is accompanied by feelings of shame and fear of judgment, leads to social isolation and increases psychological distress. ED is often linked to social norms that associate masculinity with strong sexual performance, which further complicates treatment. Comprehensive strategies to reduce the stigma associated with ED are of paramount importance. Public health campaigns that raise awareness of the nature of ED and promote open communication about sexual health are essential to dispel myths and reduce the shame associated with this condition. In addition, incorporating sexual health into routine medical examinations allows for early detection and treatment of ED, which helps to reduce stigma. A culturally sensitive approach that takes into account the specific values in different social settings is also crucial in combating stigma, especially in cultures where sexual topics are taboo. When healthcare providers are trained to address ED in a non-judgmental way, men can seek help without fear of criticism. Comprehensive strategies, including awareness campaigns, education and improved access to treatment, are critical to reducing stigma and improving the quality of life for men affected by ED.

**Keywords:** sexual dysfunction; stigma; comprehensive strategies; sexual health; awareness

Citation: Dolinar L, Španring A, Šercer N, Breznik K, Gošnak-Dahmane R, Starc A. Destigmatization of Erectile Dysfunction. Proceedings of Socratic Lectures. **2025**. 12, 112-119.

https://doi.org/10.55295/PSL.12.2025.I15

**Publisher's Note:** UL ZF stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).





### 1. Introduction

Erectile dysfunction (ED) can be defined as a sexual dysfunction characterized by the "inability to achieve and maintain sufficient penile erection for satisfactory sexual activity" (Sharma & Sharma, 2019). It is a multidimensional condition that may involve pathological changes in any component of the erectile response, with both endocrine and non-endocrine pathways—neurogenic, vasculogenic, and iatrogenic—playing an important role. It is also important to emphasize that ED is not exclusively age-related; on the contrary, an increasing number of younger men are affected by this condition (Yafi et al., 2016).

### 1.1 Etiology of erectile dysfunction

The etiology of ED is classified as organic (organic ED), psychogenic (psychogenic ED), or, most commonly, a combination of both (Allen et al., 2023). Among the psychological factors influencing ED, depression and anxiety are frequently highlighted. These factors play a crucial role even when organic causes are also present. Aging contributes significantly to ED, as cardiovascular diseases, hypertension, and other chronic conditions become more common with increasing age (Matsui et al., 2015). It is important to differentiate between psychological and organic causes in order to choose the most appropriate treatment approach for each individual.

### 1.1.1 Vascular etiology

Vascular diseases, such as atherosclerosis and hypertension, are among the most common causes of ED. In atherosclerosis, the arteries narrow due to the accumulation of fatty deposits on the blood vessel walls, reducing blood flow to the penis— a crucial factor in achieving and maintaining an erection. Reduced blood flow can lead to insufficient oxygen supply to the penile tissue, resulting in impaired erectile function. Hypertension further damages the blood vessels, accelerates the progression of arteriosclerosis and worsens the condition. ED is often an early indicator of underlying vascular disease, underscoring the importance of early diagnosis and treatment of vascular disease to prevent ED. Timely detection and treatment of vascular disease is crucial to mitigate the long-term consequences on erectile function (Slowikowska-Hilczer et al., 2024).

### 1.1.2 Neurological etiology

Neurological disorders, such as multiple sclerosis, Parkinson's disease, and spinal cord injuries, significantly impair erectile function. These diseases disrupt the transmission of signals between the central nervous system and the genital organs, leading to difficulties in achieving or maintaining an erection. Multiple sclerosis damages the myelin sheaths of nerve fibers, and slows down the transmission of nerve signals essential for initiating an erection. Parkinson's disease affects motor and autonomic functions, and has a similar effect on the erection process. Neuropathy associated with diabetes is another critical factor contributing to ED, as it damages the peripheral nerves that are important for normal erectile function (Saadi et al., 2024).

### 1.1.3 Psychogenic etiology

Psychological factors such as stress, anxiety, depression, and relationship issues, contribute to the development of erectile dysfunction. Psychogenic ED is particularly common in younger men, where organic factors are less pronounced. Psychological stress associated with the onset of ED, as it activates the sympathetic nervous system, leading to vasoconstriction and reduced blood flow to the penis. Furthermore, chronic anxiety and depression decrease sexual desire and can affect the functioning of the hypothalamic-pituitary-gonadal axis, which further impairs erectile function. Fear of failure and shame due to previous incidents can create a vicious cycle, in which psychological pressure increases, leading to recurrent erectile issues (Pantazis et al., 2024).

### 1.1.4 Impact of pornography

In recent years, research attention has increasingly focused on the impact of pornography on sexual health, particularly in relation to ED. Frequent use of internet pornography has been linked to various sexual dysfunctions, especially in younger men who have constant access to such content (Kizilkurt et al., 2023). One key finding is that frequent pornography use can lead to reduced sensitivity to typical sexual stimuli — resulting in desensitization. Men who frequently view pornography may develop a tolerance, meaning they require





increasingly extreme content to achieve the same level of arousal they experienced when they first consumed it (Kedman, 2021). In addition to physiological changes, pornography also has significant psychological consequences. Regular pornography use often creates unrealistic expectations of sexual intercourse, which can lead to increased anxiety about sexual performance, and subsequently, to psychogenic erectile dysfunction (Psychological Erectile Dysfunction: Mental Health and ED - Precise Men's Medical, 2021).

### 1.1.5 Endocrinological etiology

Testosterone plays a crucial role in sexual desire, libido, and erection maintenance, as it influences the release of nitric oxide, which is necessary for the relaxation of smooth muscles in the penis and consequently increases blood flow (McCoskey & Vernon, 2024). Diabetes contributes to hormonal changes that can cause ED as it affects insulin levels, leading to insulin resistance and associated hormonal imbalances. This can result in reduced testosterone production and increased levels of stress hormones, such as cortisol, which have a negative impact on erectile function (Ilkhomovich, 2024).

# 1.1.6 Traumatic factors

Injuries to the penis, pelvis, or spine can cause direct damage to nerves, blood vessels, and tissues, leading to ED. Injuries resulting from accidents, falls, or surgical procedures, such as prostatectomy, are common causes of traumatic ED. Surgical interventions, especially those involving prostate removal due to cancer, can damage nerves that are important for normal erectile function (Lounici et al., 2024). Such injuries can lead to persistent difficulties in achieving an erection if proper rehabilitation is not provided. Early diagnosis and treatment are crucial for the recovery of erectile function after traumatic injuries. This includes physical therapy, psychological support, and, if necessary, surgical reconstruction of the damaged tissues (Junejo et al., 2024).

### 1.1.7 Factors related to the use of medications and other substances

The use of certain medications, such as antidepressants, antihypertensives, and antihistamines, is well-documented as a possible cause of the development or exacerbation of ED. Antidepressants, particularly selective serotonin reuptake inhibitors (SSRIs), are known to affect sexual function. These medications increase serotonin levels in the brain, which can reduce libido and cause difficulties in achieving or maintaining an erection, as they inhibit reflexes essential for erectile function. Additionally, antihypertensives, such as beta-blockers and diuretics, are associated with ED as they reduce blood flow to the penis by lowering blood pressure, which can lead to difficulties in achieving a sufficient erection (Andersen et al., 2024). In addition to medication use, certain substances—alcohol, tobacco, and recreational drugs—negatively affect sexual function and increase the risk of ED. Chronic alcohol consumption can lead to liver damage, which causes hormonal changes, including a decrease in testosterone levels, which has a direct impact on sexual function (Ilkhomovich, 2024).

# 1.2. Social perception of masculinity and the impact of erectile function on an individual's psychological well-being

The erection of the penis has long been considered a symbol of male virility and sexual power. It is important to mention the traditional ideology of masculinity, which is a cultural construct that "defines a set of beliefs and expectations about how men should behave in a given time and culture" (Valsecch et al., 2023). This ideology emphasizes that a man must strive to achieve an appropriate status and dominance, while also being confident and dominant (Walther et al., 2023). The traditional ideology of masculinity also believes that masculinity is expressed through sexuality; therefore, a man must demonstrate his ability, performance, and dominance through sexual intercourse. This belief requires men to be heterosexual and hypersexual (Valsecch et al., 2023). From this perspective, an erection represents the foundation of masculinity, and sexual performance, providing satisfaction and procreation (Walther et al., 2023).

Despite societal progress, which has strongly encouraged open discussions on sexual life and health in recent years, topics related to ED are still avoided (Sheng, 2021). Sexual dysfunction is often surrounded by stigma, shame, and misconceptions. Unrealistic expectations regarding sexuality are frequently perpetuated in society, creating a standard that can make even men without dysfunctions feel inadequate (Postery Health, 2025). The mere





perception of problems - whether physiological or psychosocial—triggers a range of negative psychosocial reactions. The onset of ED is not only a physical problem but also an emotionally painful experience, involving fear, anxiety, and stress. The most significant (and often first) psychological reaction is the feeling of emasculation (i.e., loss of masculinity), which is closely related to the aspects rejected by the traditional ideology of masculinity (ED represents a contradictory aspect of this ideology) (Sheng, 2021). In addition to emasculation, the occurrence of ED affects a man's self-esteem and self-image. Due to the decline in self-esteem and self-confidence, many men isolate themselves socially when confronted with ED.

The social isolation, that often accompanies men with ED is due to the great fear of not being able to satisfy their partner, which leads to feelings of failure and fear of rejection or abandonment (Sheng, 2021). This results in decreased sexual activity (due to the emotional burdens mentioned), further destabilizing the partner dynamic, and causes feelings of undesirability, unattractiveness, and emotional frustration in the partner, which in turn can increase emotional distance and feelings of unlovedness (Huri et al., 2016; Sheng, 2021; Allen et al., 2023). Such emotional and intimate distance often leads to thoughts of infidelity or the impression that the partner is losing interest, which can jeopardize the long-term stability of the relationship and increase the likelihood of separation (Huri et al., 2016). Moreover, individuals with ED often experience a reduced quality of life, further burdening their daily lives (Allen et al., 2023). In addition to relationship issues, men with ED often face difficulties in friendships, as they believe that disclosing their problems will result in a lack of understanding and support. The lack of communication about ED further deepens feelings of loneliness and increases psychological stress. Open and effective communication is crucial to managing these issues, as the inability to express these experiences can heighten anxiety related to sexual function and have a negative impact on an individual's self-image and intimate relationships (Sheng, 2021).

### 1.3. Prevalence, risk factors, and the importance of awareness

A review of nine scientific studies on the prevalence of ED reveals significant trends related to age, risk factors, and awareness of this issue. Research shows that the prevalence of ED increases significantly with age, which is confirmed by several studies. For instance, Saramies et al. (2022) found in a prospective cross-sectional study involving 189 men that ED was present in 100% of men over the age of 75 (at least in a mild form). Similar findings are reported by Çayan et al. (2017)—the prevalence of ED was 17% in men aged 40 to 49, years and 82.9% in men aged 70 years and older. A study conducted in China by Zhang et al. (2017) which included 5210 people over the age of 40, also confirms that the prevalence of ED increases with age.

Other studies indicate that ED occurs more frequently in men who have risk factors such as an unhealthy lifestyle, obesity, smoking, and alcohol consumption. In a study by Li et al. (2022), which included 12,490 men in the United Kingdom, a strong correlation was found between the incidence of ED and unhealthy lifestyle habits. Hallanzy et al. (2019) found in a sample of 2.565 men that, the prevalence of ED (25.2%) increased with the number of risk factors, with 48.8% of individuals reporting severe symptoms. A large majority of studies also emphasize the importance of awareness and education for the prevention and early treatment of ED. Herkommer et al. (2023) highlight the significance of risk factor education as a fundamental step in reducing the prevalence of ED. Similarly, Rezali et al. (2023) in a study conducted in Malaysia stress the need for comprehensive sexual education to improve the understanding and treatment of ED. Oyelade et al. (2016) emphasized the importance of raising awareness among healthcare providers about the impact of an individual's sexual history on diagnosis and treatment planning. The common focus of these studies suggests that comprehensive awareness strategies are crucial for reducing the risk of ED and improving access to appropriate care.

Strategies to enhance awareness and access to ED treatment are essential, as they enable early identification of issues, encourage preventive measures, and improve access to effective treatment options, which significantly contribute to the quality of life for men with ED. Raising awareness about ED is important for reducing stigma and discrimination and encouraging men to seek appropriate treatment. Educational programs that promote an





open approach to sexual health have shown that men are more willing to seek help when they have access to reliable information (Moazin et al., 2024).

# 2. Strategies for improving awareness and access to erectile dysfunction treatment

ED is a health condition that affects many men worldwide, but is often misunderstood and stigmatized. Many men, and even some healthcare providers, fail to recognize the physiological causes of ED, such as cardiovascular diseases or endocrine disorders, which can lead to delays in seeking help and the worsening of underlying health problems (Bolash & Mekhail, 2024).

Therefore, raising awareness of ED is crucial to reduce stigma and discrimination and encourage men to seek appropriate treatment (Moazin et al., 2024). It is also important to highlight the challenges of reaching all populations, especially those who are more socially and culturally isolated. For this reason, it is essential to develop a multi-layered approach that not only reduces stigma but also increases the accessibility to care and provides effective support for men affected by ED. This approach includes public health campaigns, the proactive inclusion of sexual health in routine check-ups, culturally adapted strategies, education, counseling, and the use of modern technologies such as telemedicine.

### 2.1. Public health campaigns with a clear message

One of the most important strategies for reducing the stigma associated with ED is public health campaigns aimed at educating the public about the nature of this condition. Awareness and education help to reduce stigma and increase understanding of ED (Imran et al., 2023). Public health campaigns, that disseminate information through various media, can reach a wider population and encourage open dialogue about sexual health. Such campaigns not only reduce the stigma associated with ED but also encourage men to seek professional help without fear of shame or judgment (Tavakoli et al., 2023).

These campaigns must clearly highlight the medical background of ED and encourage men to seek help without fear of condemnation. It is important for these campaigns to emphasize that ED is not just a result of physiological changes, but can also be linked to various other factors, including psychological issues, lifestyle habits, and chronic diseases. Campaigns should dispel the myth that ED is a lack of masculinity and present it as a manageable health problem that can be treated if recognized early and addressed properly. Including personal stories of men who have successfully overcome ED can reduce feelings of loneliness and increase social support within this population, which is crucial to reducing feelings of isolation (Imran et al., 2023).

# 2.2 Integration of sexual health discussions into routine health check-ups

A better understanding of the causes, symptoms, and treatment options of ED enables men to actively participate in their treatment and improve their chances of a successful recovery. Additionally, training healthcare providers to recognize and effectively manage ED is essential for improving the quality of care patients receive (Esposito et al., 2008). Healthcare providers, particularly primary care physicians, play a key role in the early detection and treatment of ED. Physicians and nurses need to take a proactive role in incorporating sexual health issues into routine health check-ups. Many men do not address erectile problems on their own because of shame or fear of stigmatization themselves. Therefore, it is important for healthcare providers to actively initiate an open dialogue about sexual health, using a sensitive approach that allows patients to feel safe and ready to share their concerns. Moreover, healthcare providers must have access to appropriate training and resources to fully recognize and treat ED, as this condition often involves both physiological and psychological factors. It is crucial to ensure that healthcare providers are well-equipped with the knowledge to provide holistic care for this issue, which can reflect broader aspects of the patient's health (Esposito et al., 2008).

### 2.3. Culturally adapted campaigns

Cultural norms and values have a significant impact on the perception of ED and the willingness of men to talk about it or seek help. In some cultural environments, ED is associated with a loss of masculinity, leading to social stigma and delays in seeking help. A lack





of understanding of cultural specificities can lead to inadequate approaches to the treatment and support of men suffering from ED. Therefore, it is crucial for healthcare institutions and professionals to consider these cultural and social factors when addressing ED (Jamali, 2024). Awareness of the importance of a culturally sensitive approach to this issue is key to successfully reducing the stigma associated with ED in various communities. ED awareness campaigns need to be tailored to specific cultural norms and expectations. In cultures where sexual health issues are often considered taboo, it is especially important to involve local leaders, influential individuals, and healthcare professionals who are respected in the community. Such an approach can help destigmatize ED, as men seeking help in these communities often expect support and understanding from their cultural and religious leaders. Involving these influential figures in awareness-raising efforts is essential for encouraging men to seek professional help and recognizing ED as a manageable health issue that should not be a source of shame (Jamali, 2024)

# 2.4. Improving access to education and counseling within the healthcare system

The treatment of ED requires a holistic approach that includes both patient education and healthcare providers training. The healthcare system must actively promote education about ED, not only to patients but also to healthcare professionals who often have the first contact with men facing this condition. Nurses, physicians, and other healthcare providers must be adequately trained to recognize the symptoms of ED, make a diagnosis and offer treatment, while creating a supportive environment where men feel comfortable discussing their issues. It is essential that healthcare professionals regularly update their knowledge of new research and therapies related to ED, so they can offer the best possible care to patients. Continuous improvement of knowledge and training of healthcare providers in primary healthcare plays a crucial role in the early detection and effective treatment of ED (Moazin et al., 2024).

### 2.5. Use of telemedicine and digital solutions

For many men, particularly in smaller communities or rural areas, feelings of shame and lack of privacy can be a significant barrier to seeking personalized medical care. Telemedicine offers an innovative solution to this problem by enabling anonymous and secure communication between patients and healthcare professionals. Through telemedicine consultations, men can receive all necessary information about ED, discuss potential treatment options, and decide on next steps without the need for an in-person visit. Additionally, digital platforms that offer educational content about ED can help raise awareness and provide access to verified information. This enables men to easily access expert advice and information, allowing them to make more informed decisions about their health without having to leave the house. Therefore, telemedicine not only reduces stigma but also facilitates access to treatment and counseling, especially in situations where geographical or cultural limitations would otherwise hinder access (Imran et al., 2023).

Reducing stigma and improving access to ED treatment requires a multi-faceted approach that includes public health campaigns, the integration of sexual health into routine checkups, culturally adapted strategies, broader education for healthcare providers, and the use of modern technologies such as telemedicine. Only through openness, support, and proper training of healthcare professionals can stigma be reduced and a better quality of life be provided for men with ED. It is crucial to recognize ED as a manageable health condition that deserves the same attention and treatment as other health problems.

### 5. Conclusion

The stigma associated with ED remains a significant barrier to accessing treatment. Comprehensive strategies, including awareness campaigns, the integration of sexual health into routine medical check-ups, and culturally adapted approaches, are crucial for reducing stigmatization and increasing access to ED care. Training healthcare providers to approach these issues in a non-judgmental way is also important to enable open communication between patients and physicians. Further research is needed to investigate the long-term effects of these strategies and their potential adaptation to specific cultural contexts.







**Funding:** This research was supported by European Union's Horizon 2020 research and innovation program under grant agreement No 109338, and by Slovenian Research Agency through the core foundings No. P9-1265 and P11-2358, and project No. U6-2734. **Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki, blood was donated voluntarily by the authors of the study.

**Conflicts of Interest:** The authors declare no conflict of interest.

### References

- 1. Allen MS, Wood AM, Sheffield D. The psychology of erectile dysfunction. *Current Directions in Psychological Science*. 2023; 32:487–493. DOI:10.1177/09637214231192269
- 2. Andersen ML, Lavigne G, Fabbro CD, Tufik S. Erectile dysfunction and sleep related bruxism: an exploratory review of an improbable association. *Sleep Medicine Reviews*. 2024; 77:101970. DOI:10.1016/j.smrv.2024.101970
- 3. Bolash RB, Mekhail N. Managing complications of intrathecal medications used for pain. In: Springer eBooks. 2024; 469–478. DOI:10.1007/978-3-031-39558-1 33
- 4. Çayan S, Kendirci M, Yaman Ö, et al. Prevalence of erectile dysfunction in men over 40 years of age in Turkey: Results from the Turkish Society of Andrology Male Sexual Health Study Group. *Turk J Urol.* 2017; 43:122-129. DOI:10.5152/tud.2017.24886
- 5. Esposito K, Giugliano F, Ciotola M, De Sio M, D'Armiento M, Giugliano D. Obesity and sexual dysfunction, male and female. *International Journal of Impotence Research*. 2008; 20:358–365. DOI:10.1038/ijir.2008.9
- 6. Hallanzy J, Kron M, Goethe VE, Köhn F, Schmautz M, Arsov C, et al. Erectile dysfunction in 45-year-old heterosexual German men and associated lifestyle risk factors and comorbidities: results from the German Male Sex Study. *Sexual Medicine*. 2019; 7:26–34. DOI:10.1016/j.esxm.2018.11.004
- 7. Herkommer K, Meissner VH, Dinkel A, Jahnen M, Schiele S, Kron M, et al. Prevalence, lifestyle, and risk factors of erectile dysfunction, premature ejaculation, and low libido in middle-aged men: first results of the Bavarian Men's Health-Study. *Andrology*. 2023; 12:801–808. DOI:10.1111/andr.13524
- 8. Huri HZ, Mat Sanusi ND, Razack AHA, Mark R. Association of psychological factors, patients' knowledge, and management among patients with erectile dysfunction. *Patient Preference and Adherence*. 2016; 10:807–823. DOI:10.2147/PPA.S102379
- 9. Ilkhomovich AS. Results of the use of Eropen 700 in the treatment of patients with erectile dysfunction. Int J Integr Mod Med. 2024. Available at: http://medicaljournals.eu/index.php/IJIMM/article/download/520/467
- 10. Imran M, Kamran A, Tanveer A, Farho MÁ. Penile fracture: A case report. *International Journal of Surgery Case Reports*. 2023; 110:1-9. DOI:10.1016/j.ijscr.2023.108749
- 11. Jamali M. Accessibility to andrology medical devices in Arab-Muslim countries. *Société Internationale D'Urologie Journal*. 2024; 5:54–55. DOI:10.3390/siuj5010010
- 12. Junejo NN, Kamal MH, Aquil S, Mathew JK. Glucose-6-Phosphate dehydrogenase (G6PD) deficiency, a rare cause of ischemic (Low flow) type of penile priapism: case report and literature review. *Oman Medical Journal*. 2023. DOI:10.5001/omj.2024.31
- 13. Kedman R. Porn induced erectile dysfunction Medzino. Medzino. 2021. Available at: https://www.medzino.com/us/health-center/porn-induced-erectile-dysfunction/ Access on: 18.02.2025
- 14. Kizilkurt OK, Kazan O, Efiloglu O, Erol B, Yildirim A. Effect of internet pornography use frequency on psychogenic erectile dysfunction severity in young Turkish men: the mediating role of dyadic adjustment. International Journal of Impotence Research. 2023; 36:621–626. DOI: 10.1038/s41443-023-00804-3
- 15. Li JZ, Maguire TA, Zou KH, Lee LJ, Donde SS, Taylor DG. Prevalence, Comorbidities, and Risk Factors of Erectile Dysfunction: Results from a Prospective Real-World Study in the United Kingdom. Int J Clin Pract. 2022; 2022:5229702. DOI:10.1155/2022/5229702
- 16. Lounici N, Maireche A, Cheifa A, Saadat MR, Sahbane S, Seddiki K. Interventional radiology: Diagnosis and treatment of post-traumatic nonischemic priapism: A case report. Radiology Case Report. 2024; 19:3533–3537. DOI: 10.1016/j.radcr.2024.05.022
- 17. Matsui H, Sopko NA, Hannan JL, Bivalacqua TJ. Pathophysiology of erectile dysfunction. Current Drug Targets. 2015; 16:411–419. DOI: 10.2174/138945011605150504114041
- 18. McCoskey M, Vernon N. Male reproductive endocrine disorders. Primary Care. 2024; 51:455–466. DOI: 10.1016/j.pop.2024.04.003







- 19. Moazin MS, Baazeem A, Al-Bakri A, Dayel AA, Amir A, Sifri SA, et al. Phosphodiesterase type 5 inhibitors as treatment for erectile dysfunction: a webinar-based poll unveiling perceptions of healthcare professionals. *Journal of Comparative Effectiveness Research*. 2024; 13:1-11. DOI:10.57264/cer-2023-0155
- 20. Oyelade BO, Jemilohun AC, Aderibigbe SA. Prevalence of erectile dysfunction and possible risk factors among men of South-Western Nigeria: a population-based study. *Pan African Medical Journal*. 2016; 24:124. DOI:10.11604/pamj.2016.24.124.8660
- 21. Pantazis A, Franco I, Gitlin J. Erectile dysfunction in adolescents and young adults. Current Urology Reports. 2024; 25:225–232. DOI:10.1007/s11934-024-01213-9
- 22. PosteryHealth. Navigating relationship challenges posed by sexual dysfunction. Available from: https://poster-ityhealth.com/navigating-relationship-challenges-posed-by-sexual-dysfunction/ Accessed 13.1.2025
- 23. Psychological Erectile Dysfunction: Mental health and ED Precise Men's Medical. *Precise Men's Medical*. Available at: https://precisemensmedical.com/blog/psychological-erectile-dysfunction-mental-health-and-ed/. Accessed on 13.1.2025
- 24. Rezali MS, Anuar MFM, Razak MA, Chong ZL, Shaharudin AB, Kassim MSA, et al. Prevalence and associated factors of moderate to severe erectile dysfunction among adult men in Malaysia. *Scientific Reports*. 2023;13. DOI:10.1038/s41598-023-48778-y
- 25. Saadi SM, Fariha RT, Jui RS, Sadlee SM, Majumder P, Rouf MA, et al. Erectile Dysfunction in Adults: A review of Neurological causes and risk factor analysis. *Saudi Journal of Medicine*. 2024; 9:255–265. DOI:10.36348/sjm.2024.v09i07.007
- 26. Saramies J, Koiranen M, Auvinen J, Uusitalo H, Hussi E, Becker S, et al. A natural history of erectile dysfunction in elderly men: a population-based, twelve-year prospective study. *Journal of Clinical Medicine*. 2022; 11:1-8. DOi:10.3390/jcm11082146
- 27. Sharma A, Sharma R. Erectile dysfunction: The male stigma. International Journal of Surgical Medicine. 2019; 5:172-178. DOI: 10.5455/ijsm.erectile-dysfunction
- 28. Sheng Z. Psychological consequences of erectile dysfunction. *Trends in Urology & Men's Health*. 2021; 12:19–22. DOI:10.1002/tre.827
- 29. Slowikowska-Hilczer J, Walczak-Jedrzejowska R, Adamczewska D, Byczkiewicz P, Marchlewska K, Katarzynska J, Gebicki J. A new approach to the assessment of erectile dysfunction based on vasomotion monitored by the Flow-Mediated Skin Fluorescence (FMSF) Technique—A preliminary study. *Journal of Clinical Medicine*. 2024; 11:3210. DOI:10.3390/jcm13113210
- 30. Tavakoli MR, Faraji M, Sam S, Ghasempour A, Rezaei M, Langarizadeh MA, Karami-Mohajeri S. Erectile dysfunction from mechanisms to medicines with a focus on the application of topical Minoxidil. *Sexual Medicine Reviews*. 2023; 11:114–123. DOI:10.1093/sxmrev/qead001
- 31. Valsecchi G, Iacoviello V, Berent J, Borinca I, Falomir-Pichastor JM. Men's gender norms and gender-hierarchy-legitimizing ideologies: The effect of priming traditional masculinity versus a feminization of men's norms. *Gender Issues*. 2023; 40:145–167. DOI:10.1007/s12147-022-09308-8
- 32. Walther A, Rice T, Eggenberger L. Precarious manhood beliefs are positively associated with erectile dysfunction in cisgender men. *Archives of Sexual Behavior*. 2023; 52:3123–3138. DOI:10.1007/s10508-023-02640-4
- 33. Yafi FA, Jenkins L, Albersen M, Corona G, Isidori AM, Goldfarb S, et al. Erectile dysfunction. *Disease Primers*. 2016; 2:1–15. DOI:10.1038/nrdp.2016.3
- 34. Zhang X, Yang B, Li N, Li H. Prevalence and risk factors for erectile dysfunction in Chinese adult males. *The Journal of Sexual Medicine*. 2017; 14:1201–1208. DOI:10.1016/j.jsxm.2017.08.009