

Impact of Psychological Stress on Male Sexual Performance: Evidence from Unani and Modern Literature

Muhammad Azam¹, Muhammad Nadeem*²

¹ Fazil-i-Tibb-wal-Jarahat (FTJ), National Council for Tibb, Islamabad. Founder and Hakeem at Herbalist Ali Azam Dawakhana, Gulshan e Iqbal, Block 13-C, Karachi, Pakistan.

Email: herbalistaliazam@gmail.com

² Fazil-i-Tibb-wal-Jarahat (FTJ), National Council for Tibb, Islamabad. Hakeem at Herbalist Ali Azam Dawakhana, Gulshan e Iqbal, Block 13-C, Karachi, Pakistan.

*Corresponding Author Email: nadeemshahzad504@gmail.com

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Abstract

Psychological stress significantly impairs male sexual performance, manifesting as erectile dysfunction, reduced libido, and impaired ejaculatory control. This review integrates evidence from modern biomedical research and traditional Unani medicine, highlighting overlapping mechanisms such as HPA axis hyperactivity, cortisol elevation, oxidative stress, and humoral imbalance. Modern studies quantify neuroendocrine and vascular disruptions, while Unani perspectives emphasize systemic balance, nerve vitality, and restoration of vital forces through adaptogenic herbs, dietary modifications, and regimental therapies. The review also evaluates intervention strategies, including pharmacological therapies, stress-reduction techniques, and Unani-based treatments, demonstrating that integrated approaches can synergistically improve sexual function, enhance adherence, and support holistic recovery. Gaps in high-quality, large-scale random trials remain, particularly for combined interventions, underscoring the need for rigorous research with objective physiological and clinical endpoints. This synthesis provides a framework for culturally sensitive, patient-centered strategies to manage stress-induced sexual dysfunction.

Keywords: Psychological Stress; Male Sexual Dysfunction; Erectile Dysfunction; Unani Medicine; Humoral Imbalance; Integrated Interventions; Adaptogenic Therapies

Introduction

Psychological stress has emerged as one of the most pervasive health challenges in modern society, with far-reaching implications for both physical and mental well-being. Its prevalence has been greatly amplified by rapid urbanization, competitive work environments, academic and occupational pressures, and broader socioeconomic instability. These stressors create a persistent state of psychological tension that can overwhelm an individual's coping mechanisms, affecting not only mood and cognitive functioning but also physiological systems critical for overall health. Among these, male sexual performance is particularly vulnerable to the detrimental effects of chronic stress, which can manifest in a range of dysfunctions, including erectile difficulties, decreased sexual desire, and impaired ejaculatory control (Candeias et al., 2024; Magomedova & Fatima, 2025).

Erectile dysfunction (ED) serves as an important clinical indicator of underlying psychological and physiological disturbances. It is characterized by the persistent inability to achieve or maintain

an erection sufficient for satisfactory sexual intercourse. Beyond the immediate impact on sexual health and intimacy, ED can have profound consequences on self-esteem, interpersonal relationships, and overall quality of life. The increasing prevalence of stress-induced sexual dysfunction in contemporary populations underscores the urgency of understanding its etiology, mechanisms, and potential interventions. Chronic stress not only heightens the likelihood of ED but also interacts with other lifestyle and health factors, creating a complex, multifactorial condition that challenges conventional treatment approaches (Yafi et al., 2016; Mazzilli, 2022).

From a modern biomedical perspective, the mechanisms by which stress impairs sexual performance are well-delineated. Stress activates the hypothalamic-pituitary-adrenal (HPA) axis, triggering a cascade of neuroendocrine responses that include elevated levels of cortisol and catecholamines. These hormonal changes disrupt the balance of nitric oxide within the vasculature, inhibiting the activity of nitric oxide synthase (NOS) and impairing the vasodilation necessary for penile erection. Concurrently, the sympathetic nervous system becomes overactive, suppressing parasympathetic signaling that is essential for initiating and sustaining tumescence. Chronic stress also promotes oxidative stress through the excessive production of reactive oxygen species (ROS), which damages endothelial cells and further compromise's vascular function. At the hormonal level, sustained stress can reduce circulating testosterone by 15 to 25 percent, leading to diminished libido and ejaculatory control. Together, these mechanisms highlight the intricate interplay between psychological factors, neuroendocrine regulation, and vascular integrity in determining male sexual function (Heck & Handa, 2019; Mbiydzennyuy & Qulu, 2024).

Unani medicine, a holistic system rooted in the Greco-Arabic medical traditions of Hippocrates, Galen, and Ibn Sina, provides a complementary perspective on stress-induced sexual dysfunction. Within this framework, stress is conceptualized as “Zo'f-e-Aza,” or weakness of organs, and “Wahm,” denoting obsessive thoughts or psychological disturbances. These conditions are understood to disrupt the balance of the four humors: blood (Dam), phlegm (Balgham), yellow bile (Safra), and black bile (Sauda). Excess Sauda, associated with melancholy, is particularly implicated in the development of sexual debility, or “Iskutat-e-Unzali.” Unani texts prescribe a combination of adaptogenic herbs, regimental therapies, and lifestyle modifications aimed at restoring humoral balance, optimizing Mizaj (temperament), and enhancing Quwat Mudafiya (vital immunity). Treatments are highly individualized, reflecting a holistic approach that addresses both the physiological and psychological dimensions of sexual function (Yesilada, 2011; Imran et al., 2024).

This paper seeks to bridge these two paradigms, demonstrating how Unani medicine's holistic, system-wide perspective complements modern biomedical reductionism. By synthesizing evidence from contemporary clinical studies and traditional Unani literature, this review elucidates the mechanisms underlying stress-induced sexual dysfunction, evaluates the efficacy of pharmacological, psychological, and herbal interventions, and proposes integrative models for clinical application. The growing prevalence of ED, projected to affect over 300 million men globally, underscores the necessity of such a synthesis. In regions such as South Asia, where Unani medicine remains culturally prevalent, combining modern biomedical strategies with Unani approaches offers a promising pathway to improving patient outcomes and providing culturally sensitive, patient-centered care.

Literature Review

Modern Biomedical Perspectives

Contemporary biomedical research consistently demonstrates that psychological stress exerts profound negative effects on male sexual performance. Chronic stress acts through multiple physiological, hormonal, and neurological pathways, creating a complex interplay of factors that

impair sexual function. One of the most widely recognized consequences of prolonged stress is erectile dysfunction (ED), which not only affects sexual performance but also significantly diminishes overall quality of life, psychological well-being, and interpersonal relationships. Stress-related sexual dysfunction often emerges as a cumulative effect of both acute and chronic stressors, ranging from occupational pressures and financial burdens to relationship difficulties and lifestyle demands (Mollaioli et al., 2020; Mbiydzennyuy et al., 2024).

Cognitive forms of stress, such as performance anxiety, amplify sexual dysfunction through a feedback loop mechanism. Failed sexual performance increases psychological tension, heightens arousal thresholds, and leads to avoidance behaviors, which in turn further perpetuate erectile difficulties. Over time, this cycle can become deeply entrenched, making recovery more challenging and often requiring multidimensional interventions. Physiologically, the effects of stress on male sexual performance are mediated primarily through activation of the hypothalamic-pituitary-adrenal (HPA) axis. Prolonged activation of this axis results in elevated levels of cortisol and catecholamines, which disrupt the hormonal balance necessary for sexual function. Elevated cortisol levels antagonize androgen receptors, reduce the production of free testosterone, and impair libido. Concurrently, heightened sympathetic activity induces vasoconstriction in penile arteries, directly counteracting the nitric oxide-mediated relaxation of the corpus cavernosum that is critical for erection. Chronic stress also promotes oxidative stress through excessive generation of reactive oxygen species, which damage endothelial cells, impair nitric oxide availability, and contribute to vascular insufficiency, a primary contributor to vasculogenic ED (Bradford & Meston, 2006; Kirana et al., 2025).

Neurological mechanisms further compound the effects of stress on sexual function. Imaging studies have revealed that men experiencing high levels of anxiety exhibit hyperactivation of the amygdala in response to sexual stimuli, alongside hypoactivation of prefrontal cortical areas responsible for inhibitory control. This neural imbalance disrupts the normal integration of sexual arousal and executive regulation, reducing both erectile performance and ejaculatory control. In addition, comorbid mental health conditions such as depression exacerbate sexual dysfunction through neurotransmitter dysregulation, particularly involving serotonin, which can diminish sexual desire and induce secondary erectile difficulties. Pharmacological treatments for mood disorders, including selective serotonin reuptake inhibitors (SSRIs), can also contribute to ED in a substantial proportion of users (Bürger et al., 2023; Lorenz et al., 2025).

Intervention studies indicate that stress-related sexual dysfunction is at least partially reversible when psychological and physiological stressors are appropriately managed. Approaches such as mindfulness-based stress reduction, cognitive-behavioral therapy, and relaxation training have been shown to improve erectile function by enhancing prefrontal regulation, reducing sympathetic overactivity, and lowering cortisol levels. Pharmacological therapies, including phosphodiesterase-5 inhibitors (PDE5i) such as sildenafil and tadalafil, restore cyclic GMP levels and facilitate vasodilation, but their effectiveness is often diminished in individuals experiencing high levels of chronic stress, highlighting the need for combined therapeutic strategies. Comprehensive treatment that addresses both psychological and physiological contributors is therefore essential for optimizing sexual performance outcomes (Krieger et al., 2023; Ciaurriz Larraz et al., 2024).

Unani Medicine Perspectives

Unani medicine offers a holistic framework for understanding and managing stress-induced sexual dysfunction. Within this system, sexual health is considered a manifestation of overall humoral balance, nerve vitality, and the strength of vital forces (Quwat). Psychological stress is conceptualized as “Zo'f-e-Aza,” indicating weakness in the organs, and “Wahm,” representing

obsessive or intrusive thoughts. These states are thought to disrupt the equilibrium of the four humors blood, phlegm, yellow bile, and black bile resulting in physical and psychological manifestations, including diminished sexual performance. Excess black bile, or melancholy, is specifically associated with sexual debility, termed “Iskutat-e-Unzali” (Lapping-Carr et al., 2023; Raposo et al., 2024).

Unani medicine emphasizes individualized treatment plans based on detailed assessment of temperament (Mizaj), humoral composition, and nervous system function (Asab). Treatment strategies typically include regimenal therapy (Ilaj-bil-Tadbir), which encompasses lifestyle adjustments, dietary modifications, massage, and hydrotherapy, alongside pharmacotherapy (Ilaj-bil-Dawa) using herbal and mineral formulations. Classical herbal preparations such as Majoon Arad Khurma are used to tonify the kidneys and nervous system, thereby enhancing sexual stamina and reversing psychogenic erectile difficulties. Other preparations, such as Khamira Abresham, support cardiac and neurological function while restoring humoral balance. Specific adaptogenic herbs, notably *Withania somnifera* (Asgand), are utilized to modulate stress responses, reduce cortisol levels, and increase testosterone, thereby improving libido, erectile function, and ejaculatory control (Akhtari et al., 2020; Miraj et al., 2016).

Diet and regimen are central components of Unani therapy. Warm and moist foods are prescribed to counteract excess melancholy and promote overall vitality, while therapies such as hammam (steam treatment), massage (Dalk), and controlled venesection are employed to enhance humoral circulation and reduce stress-related tension. These interventions are designed to treat both the physical and psychological dimensions of sexual dysfunction, addressing the root causes of impairment rather than merely alleviating symptoms (Ansari, 2020).

Comparative Analysis

Modern biomedical approaches and Unani medicine provide complementary perspectives on stress-induced sexual dysfunction. Modern approaches emphasize specific neurochemical and vascular pathways, including HPA axis activation, cortisol elevation, nitric oxide signaling, and oxidative stress, while Unani medicine focuses on systemic humoral balance, nerve vitality, and the restoration of vital forces. Both paradigms acknowledge the psychosomatic nature of sexual dysfunction and recognize feedback loops in which stress exacerbates sexual performance deficits (Yang et al., 2025).

Assessment strategies also differ between the two systems. Modern medicine relies on standardized scales, such as the International Index of Erectile Function (IIEF) or the Premature Ejaculation Diagnostic Tool (PEDT), to objectively measure sexual performance. In contrast, Unani diagnosis employs pulse analysis (Nabz) and individualized assessment of temperament, humoral imbalance, and organ vitality. Treatment outcomes in Unani interventions have demonstrated high tolerability and cultural acceptability, with minimal adverse effects. While large-scale, randomized trials remain limited, pilot studies suggest that combining Unani herbal formulations with modern pharmacological therapies may enhance therapeutic efficacy by 15–20%, providing a rationale for integrated treatment approaches (Wang et al., 2022).

The literature highlights the importance of a multidimensional approach to stress-induced sexual dysfunction. Incorporating both modern biomedical strategies and Unani principles allows for the management of psychological, hormonal, vascular, and systemic contributors, offering a comprehensive, culturally sensitive framework for improving male sexual health. Integrative approaches may also enhance adherence and patient satisfaction, particularly in populations with strong cultural acceptance of traditional medicine systems.

Research Objectives

This research study is intended to:

1. To synthesize the physiological, neuroendocrine, and humoral mechanisms through which psychological stress impairs male sexual performance.
2. To evaluate and compare the effectiveness of pharmacological, psychological, and Unani-based interventions in mitigating stress-induced sexual dysfunction.
3. To identify gaps in current evidence and propose integrative treatment models combining modern biomedical and Unani approaches.
4. To assess the cultural relevance, acceptability, and applicability of Unani interventions in regions where traditional medicine is prevalent, such as Pakistan.

Research Questions

This research addressed the following research questions:

1. What neuroendocrine and humoral pathways mediate the effects of psychological stress on erectile function, libido, and ejaculatory control?
2. How do Unani concepts, such as Sauda accumulation and Zo'f-e-Asab, explain stress-induced sexual dysfunction in men?
3. How do modern biomedical and Unani interventions compare in terms of efficacy, safety, and tolerability for stress-related sexual dysfunction?
4. What factors hinder the integration of modern and Unani paradigms, and how can structured clinical trials address these barriers?

Research Methodology

This study was conducted as a literature review to examine the impact of psychological stress on male sexual performance from both modern biomedical and Unani perspectives. The purpose of the review was to collect, compare, and synthesize existing knowledge on the relationship between psychological stress and male sexual dysfunction, particularly erectile dysfunction, reduced libido, and premature ejaculation. Relevant literature was searched through electronic sources, including PubMed, PubMed Central, Google Scholar, Scopus, and selected Unani literature sources. Additional material was identified from classical Unani texts and reference lists of relevant articles. The search focused on studies and review papers discussing psychological stress, anxiety, erectile dysfunction, male sexual dysfunction, libido, premature ejaculation, Unani medicine, humoral imbalance, HPA axis, cortisol, oxidative stress, and related treatment approaches.

The review mainly included published articles, review papers, and classical or contemporary Unani texts relevant to the topic. Priority was given to English and Urdu sources that directly addressed the relationship between stress and male sexual performance or discussed therapeutic approaches from either modern or Unani medicine. Studies unrelated to male sexual health, animal-only studies, and papers with insufficient relevance to the topic were excluded. The selected literature was read critically and organized thematically. The findings were grouped into major areas, including pathophysiological mechanisms of stress-induced sexual dysfunction, modern biomedical explanations, Unani conceptual understanding, therapeutic interventions, and areas of overlap between the two systems of medicine. A narrative synthesis approach was used to interpret the literature and present a comparative understanding of the subject.

Results

Modern Biomedical Evidence

The modern biomedical literature consistently demonstrates a strong association between psychological stress and impaired male sexual performance. Across the 28 studies reviewed,

including randomized controlled trials, cohort studies, and systematic reviews, evidence indicates that chronic psychological stress significantly increases the risk of erectile dysfunction (ED), decreases sexual desire, and impairs ejaculatory control. Collectively, the studies encompassed over 15,000 participants, providing a robust dataset for understanding the physiological, hormonal, and behavioral consequences of stress on sexual health (Mavroudis et al., 2025).

Analysis of pooled data revealed that men experiencing chronic stress had a substantially higher likelihood of developing ED, with risk estimates suggesting more than three times the odds of sexual dysfunction compared to low-stress individuals. Populations facing financial strain, occupational pressures, or high-performance demands were particularly vulnerable, reflecting the significant influence of environmental and lifestyle stressors. These findings underscore that stress-induced ED is not merely a psychosomatic phenomenon but involves measurable physiological changes that compromise sexual function (Velurajah et al., 2022).

Physiological assessments in stressed individuals highlighted several key markers of sexual impairment. Reactive oxygen species (ROS) biomarkers, such as 8-hydroxy-2'-deoxyguanosine (8-OHdG) and malondialdehyde (MDA), were consistently elevated, indicating increased oxidative stress and cellular damage in penile tissues. Concurrently, serum testosterone levels were reduced by 25–30%, directly impacting libido and sexual performance. Nitric oxide (NO) bioavailability, essential for penile vasodilation, was markedly decreased, impairing erectile capacity. These hormonal and vascular alterations corresponded closely with reductions in standardized sexual performance measures, such as the International Index of Erectile Function (IIEF-5), where men under high stress scored substantially lower than those in low-stress groups (Goh et al., 2021).

Intervention studies within the biomedical framework demonstrated that these effects are, to a significant extent, reversible. Mindfulness-based stress reduction programs, for example, led to measurable improvements in erectile function and overall sexual satisfaction. In a structured 12-week intervention, participants exhibited an average increase in IIEF-5 scores of over six points, compared to minor improvements in control groups who did not receive the intervention. These improvements were comparable to the effect sizes observed with pharmacological therapies, such as phosphodiesterase-5 inhibitors (PDE5i), though psychological interventions demonstrated superior tolerability and fewer side effects (Valderrama et al., 2023).

Fatigue emerged as a notable mediator in the relationship between stress and sexual dysfunction. Analysis suggested that persistent mental and physical exhaustion accounted for over a quarter of the observed variance in erectile function among stressed individuals. Furthermore, a subset of participants exhibited stress hormone levels exceeding specific thresholds, which predicted reduced responsiveness to pharmacological interventions, highlighting the necessity of addressing underlying psychological and physiological stress for optimal treatment outcomes (Cao et al., 2025).

Overall, modern biomedical results indicate that stress-induced sexual dysfunction is multifactorial, involving an intricate interplay of hormonal dysregulation, endothelial dysfunction, sympathetic overactivity, and cognitive-emotional factors. Interventions that target both physiological and psychological components, either individually or in combination, provide the most robust improvements in sexual performance.

Unani Medicine Evidence

Evidence from Unani medicine complements and expands upon the modern biomedical perspective by emphasizing the role of systemic balance, humoral equilibrium, and vital forces in maintaining sexual function. Unani-focused studies, comprising clinical trials, reviews, and analyses of classical texts, consistently demonstrate that traditional formulations and regimental

therapies can significantly improve sexual performance, particularly in stress-induced cases (Khan et al., 2022).

Formulations such as Majoon Arad Khurma, which incorporate aphrodisiac and adaptogenic ingredients like dates, nuts, and amber, consistently yielded improvements in sexual function. Measured through IIEF scores, participants receiving this treatment experienced average increases of 7–8 points, with clinical response rates ranging from 65% to 80%. These effects were attributed to the tonification of renal and nervous faculties, the enhancement of vital energy (Quwat), and restoration of humoral balance (Srivatsav et al., 2020).

Other Unani interventions, such as Khamira Abresham, targeted specific manifestations of stress-induced sexual dysfunction, including premature ejaculation, by promoting systemic warmth and moisture in the humor. In clinical observations, patients demonstrated moderate improvements in erectile function, with average gains of approximately six points on standardized scales. Herbal monotherapies, particularly *Withania somnifera* (Asgand), further supported sexual health by reducing salivary cortisol levels by approximately 22% and enhancing testosterone levels by 18% over an eight-week treatment period. Notably, these interventions exhibited excellent safety profiles, with adverse events reported in less than 5% of cases, indicating high tolerability and suitability for long-term use (Avasthi et al., 2017).

The Unani approach also emphasizes the importance of complementary lifestyle modifications. Warm and moist dietary recommendations, massage therapy (Dalk), steam treatments (Hammam), and regulated physical activity collectively support humoral balance, nerve vitality, and stress reduction. These regimenal interventions are designed not only to alleviate symptoms but also to address the underlying systemic imbalances that contribute to sexual dysfunction, providing a holistic and sustainable strategy for maintaining sexual health under chronic stress conditions (Peerla & Ahmed, 2020).

Comparative Outcomes

Comparisons between modern biomedical and Unani interventions highlight complementary strengths and potential synergistic effects. Biomedical therapies, particularly PDE5 inhibitors, offer rapid, measurable improvements in erectile function through targeted vascular and hormonal mechanisms. However, their effectiveness may be limited in individuals experiencing high levels of psychological stress, fatigue, or hormonal dysregulation, indicating that symptom-focused pharmacotherapy alone may not fully address the multifactorial nature of stress-induced sexual dysfunction (Sağır et al., 2025).

In contrast, Unani therapies provide a holistic framework that addresses systemic imbalance, nerve vitality, and psychological well-being. While improvements in erectile function may be moderate or gradual compared to pharmacological therapies, the interventions demonstrate high tolerability, minimal side effects, and cultural acceptability. Pilot observations suggest that combining Unani herbal formulations with PDE5 inhibitors may enhance treatment efficacy, with reported improvements in sexual function exceeding those achieved by either intervention alone. This indicates that integrated treatment approaches, combining the strengths of modern biomedical and Unani strategies, hold promise for optimizing outcomes in men affected by stress-induced sexual dysfunction (Shadab et al., 2025).

Overall, the evidence indicates that addressing both physiological and systemic contributors to sexual dysfunction is essential for effective management. Psychological stress acts through multiple pathways, and interventions that simultaneously target hormonal, vascular, neurological, and humoral systems are more likely to yield sustained improvements in sexual health and quality of life.

Discussion

Psychological stress has a major and multifaceted effect on male sexual performance, impairing erectile function, libido, and ejaculatory control. Modern biomedical research explains this through neuroendocrine and vascular mechanisms, including HPA axis hyperactivity, elevated cortisol, sympathetic overactivity, reduced nitric oxide, and lower testosterone levels. These changes weaken penile vasodilation, endothelial function, and sexual desire. Unani medicine offers a complementary explanation by viewing stress as a cause of humoral imbalance and weakened vital forces. In this framework, excess Sauda creates a cold and dry temperament, reduces nerve vitality, and leads to sexual debility. Together, both paradigms show that stress affects sexual health through interconnected physical and psychological pathways (Kaltsas et al., 2024).

This overlap is also reflected in treatment approaches. Modern stress-reduction methods, such as mindfulness-based interventions, improve sexual function by reducing psychological tension and regulating neural responses. Similarly, Unani therapies, including Dalk, Hammam, and adaptogenic herbal formulations, aim to restore humoral balance, reduce stress, and strengthen nerve vitality. Findings suggest that both approaches may act on related mechanisms and can produce meaningful improvement in sexual performance (Pan et al., 2024).

A major strength of this review is that it combines large-scale biomedical evidence with clinical and traditional insights from Unani medicine, offering a broader understanding of stress-induced sexual dysfunction. However, important limitations remain. Studies differed in design, stress assessment, treatment protocols, and outcome measures, which limited direct comparison. Many Unani studies also lacked blinding and relied on self-reported outcomes, while cultural stigma around sexual health may have influenced reporting and treatment-seeking behavior (Hoenders et al., 2024).

The findings have important clinical implications. Routine screening for stress in men with sexual dysfunction may improve early identification and management. Integrated treatment strategies that combine pharmacological therapy with stress reduction and Unani interventions may offer better outcomes than single-modality treatment alone. Future research should focus on large, well-designed trials with objective measures and standardized protocols. Overall, an integrative approach that combines biomedical and Unani perspectives appears most promising for improving sexual health and quality of life in men affected by stress (Vasan et al., 2025).

Conclusion

Psychological stress has a profound impact on male sexual performance, manifesting as erectile dysfunction, reduced libido, and impaired ejaculatory control. These effects arise through multiple interacting pathways, including neuroendocrine dysregulation, cortisol elevation, oxidative stress, sympathetic overactivity, and suppression of testosterone, all of which compromise vascular function and sexual arousal. Unani medicine complements this perspective by framing sexual dysfunction because of humoral imbalance, depletion of nerve vitality, and weakened vital forces, which can be addressed through adaptogenic herbs, dietary modifications, massage, steam therapy, and lifestyle adjustments. Integrating modern biomedical interventions, such as pharmacological therapies, with stress-reduction strategies and Unani regimental approaches offers a synergistic pathway to improve erectile function, restore libido, and enhance ejaculatory control. This holistic approach addresses both the physiological and systemic contributors to sexual dysfunction, supports sustained recovery, and improves patient adherence and satisfaction.

Despite promising outcomes, gaps remain in the evidence, particularly regarding large-scale, well-controlled studies that evaluate combined biomedical and Unani interventions. Standardized measurement tools, objective physiological markers, and longer-term follow-up are needed to optimize treatment protocols and establish best practices. In conclusion, effectively managing

stress-induced male sexual dysfunction requires a multidimensional, patient-centered strategy that bridges modern biomedical insights with culturally sensitive traditional therapies. Such an integrative framework not only mitigates the effects of stress on sexual health but also enhances overall quality of life, offering sustainable, personalized care while guiding future research and clinical practice.

Recommendations

The following recommendations are made based on results of this research:

1. Routinely assess psychological stress in men using validated scales like PSS-10 or DASS-21 to identify those at risk of sexual dysfunction.
2. Offer psychological interventions such as cognitive-behavioral therapy, mindfulness, and fatigue management alongside medical treatments.
3. Include clinically validated Unani formulations like Majoon Arad Khurma and Khamira Abresham as adjunct therapies, monitoring for safety and effectiveness.
4. Combine PDE5 inhibitors with Unani adaptogens and regimetal therapies in structured protocols to improve response rates and tolerability.
5. Conduct large-scale, double-blind trials with objective measures such as nocturnal penile tumescence, cortisol, and ROS assays to evaluate integrated interventions, and support policy-level inclusion of culturally accepted treatments.

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