Available online on 15.08.2026 at <http://jddtonline.info>

Journal of Drug Delivery and Therapeutics

Open Access to Pharmaceutical and Medical Research

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Research Article

Consumption of aphrodisiac drugs without erectile dysfunction among men in the city of Dakar, Senegal: a cross-sectional study

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Article Info:



Article History:

Received 17 May 2026

Reviewed 26 June 2026

Accepted 22 July 2026

Published 15 August 2026

Cite this article as:

Diaw NA, Diouf I, Diop ABA, Fall YT, Sene M, Sarr M, Kane MO, Consumption of aphrodisiac drugs without erectile dysfunction among men in the city of Dakar, Senegal: a cross-sectional study, Journal of Drug Delivery and Therapeutics. 2026; 16(8):48-51 DOI: <https://doi.org/10.22270/jddt.v16i8.7910>

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Abstract

Background: Sexual well-being is a key component of quality of life, yet the use of aphrodisiacs remains a largely understudied phenomenon in West Africa.

Objective: This study aimed to explore the sociodemographic characteristics, usage patterns, perceived effects, and product preferences of 218 adult men residing in Dakar who have consumed aphrodisiacs without presenting erectile dysfunction.

Methods: Data were collected via an anonymous, structured online questionnaire distributed through Google Forms.

Results: The majority of users were young adults aged 18–29 years, predominantly single and students, mirroring demographic trends reported in similar regional studies. Natural products were the most frequently used (41.7%), followed by pharmaceutical agents (35.3%), with 23% reporting a combined use of both categories. The most frequently perceived positive effects were improved sexual performance (67.2%) and increased endurance (57%), while 43% reported enhanced self-confidence. The main motivations for use were personal curiosity (36%), the desire to improve sexual performance (22%), and partner influence (23%). The most reported side effects included headaches, cardiac palpitations, and dizziness.

Conclusion: These findings highlight the cultural, behavioral, and psychological dimensions of aphrodisiac use and underscore the need for further research into its physiological, psychological, and public health implications.

Keywords: Self-medication, Natural aphrodisiacs, sexual enhancers, sexual health, substance use.

INTRODUCTION

A fulfilling sexual life relies on a complex interplay of physiological systems, including neurovascular, hormonal, and muscular components. Sexual dysfunctions, such as erectile dysfunction in men, often arise from disruptions within these mechanisms, negatively impacting sexual response and overall well-being ¹.

To address these issues, men frequently turn to various aphrodisiacs—both natural and pharmaceutical—that work by influencing libido, muscle contractility, or blood flow through specific pathways, notably phosphodiesterase type 5 (PDE5) inhibition ².

Since the introduction of sildenafil in the 1980s, these substances have revolutionized treatment approaches for sexual dysfunction. However, their use has extended beyond medical settings, often without supervision.

Recreational consumption, especially of plant-based products marketed as "natural," raises significant concerns regarding their composition, true efficacy, and potential physiological side effects ^{3,4}.

This study aims to explore the motivations, user profiles, and physiological consequences associated with aphrodisiac use among men without diagnosed sexual dysfunction, shedding light on public health implications and guiding prevention strategies.

MATERIALS AND METHODS

Design, duration, and study venues

A cross-sectional study was conducted for 4 months (December 2024 – April 2025) in the form of a survey among 218 adult men who did not have a diagnosed erectile dysfunction but reported using aphrodisiacs. The venue of the study was the city of Dakar, Senegal

and the questionnaire was distributed online via platform namely Google Forms.

Participants' eligibility criteria

Men over the age of 18 years, who acknowledged having used aphrodisiacs were invited to participate in the study and adult males with clinically confirmed erectile dysfunction were not included. Incomplete survey forms were excluded.

Study outcomes

The primary objective of this study was to assess the patterns of use and associated factors related to the non-prescription consumption of sexual enhancers among adult men in Dakar, Senegal. The specific objectives of this study were to:

- Identify the most commonly used types of aphrodisiacs.
- Describe the motivations and factors influencing their consumption.
- Report the side effects experienced by users.
- Analyze the relationship between social factors (such as age, marital status, educational level) and the use of aphrodisiacs.

Participant consent and ethical clearance

Participants were informed about the study and asked to give their consent. Consent was implied, meaning no personal identifiers were collected. Those who agreed to participate received the questionnaire. Additionally, they were informed that their responses would be recorded anonymously, and as such, it would not be possible to withdraw their data after submission. The study was started after the approval of the Cheikh Anta Diop university's ethics committee.

Data collection

Data collection was carried out using a structured questionnaire designed via the Google Forms platform. This anonymous questionnaire was distributed online to a targeted population of adult men residing in Dakar, who did not present with erectile dysfunction but reported having used aphrodisiacs.

The tool included both closed-ended and semi-open questions, focusing on sociodemographic characteristics, patterns of aphrodisiac use, types of products consumed, motivations for use, as well as the effects perceived by the respondents.

The data collected were exported in Excel format for descriptive analysis, including the creation of frequency tables and graphs.

RESULTS

Socio-demographic characteristics

Of the 226 individuals approached, 218 completed the survey, resulting in a 96.4 % response rate. Table 1 provides a comprehensive overview of the frequency distribution within the studied sample concerning socio-demographic characteristics, encompassing 500

participants. The majority of respondents were between the ages of 19 and 24 years (40.8%), followed closely by those aged 25 to 29 years (39%). The majority of participants were single (69.3%), followed by those in an unmarried couple (22%). Only 8.7% of the respondents were married.

Table 1: Socio-demographic characteristics

Variable (N = 218)	n (%)
Age group (years)	
18	4 (1.8)
19 - 24	89 (40.8)
25 - 29	85 (39)
30 - 35	37 (17)
> 35	3 (1.4)
Marital Status	
Single	151 (69.3)
Married	19 (8.7)
Co-habiting	48 (22)
Professional occupation	
Student	133 (61)
Worker	85 (39)

Consumption habits

The survey questioned the participants about their consumption habits, specifically the types of aphrodisiacs used, their sources of supply, the frequency of use, and the duration of consumption.

Figure 1: Type of sexual enhancer used highlights a clear preference for natural products, used by 41.7% of participants. Pharmaceutical products account for 35.3% of usage, while 23% of participants report consuming a combination of both natural and pharmaceutical aphrodisiacs.

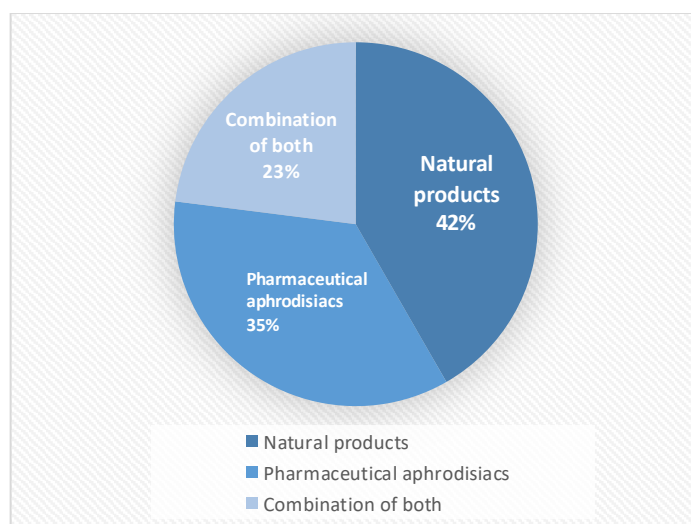


Figure 1: Type of sexual enhancer used

Analysis of the data reveals that the market constitutes the primary source of aphrodisiac acquisition, cited by 63.3% of respondents [Table 2]. Pharmacies represent the second most common source, accounting for 25.7% of reported supply. The data also indicate that a majority of respondents (62.0%) report using aphrodisiacs on a regular basis, defined as once per week or more. Occasional use (1–2 times per month) was reported by 25.2% of participants.

Table 2: Usage patterns

Variable (N = 218)	n (%)
Supply location	
Pharmacy	56 (25.7)
Market	138 (63.3)
Online / social media	24(11)
Frequency of use	
Regularly (once per week or more)	55 (25,2)
Occasionally (1–2 times per month)	135 (62)
Daily	28 (12.8)
Duration of consumption	
Less than 6 months	36 (16.5)
Between 6 and 12 months	49 (22.5)
Between 1 and 2 years	70 (32)
More than 2 years	63 (29)

The main motivations reported by participants are personal curiosity (36%), desire to improve sexual performance (22%) and partner influence (23%) [Figure 2].

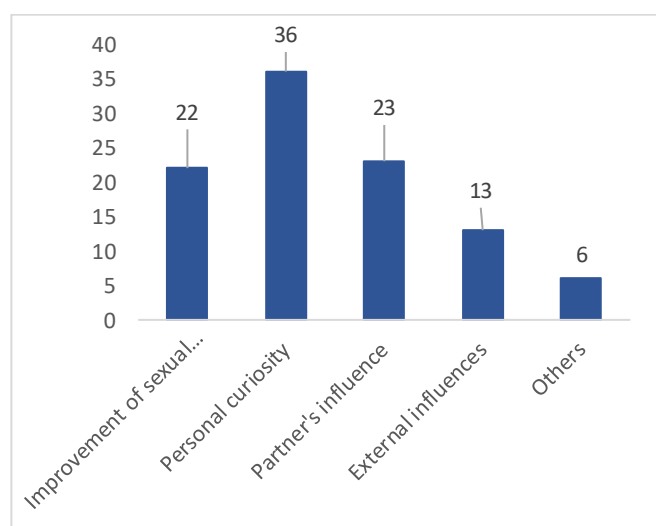


Figure 2: Main motivations for use

Perceptions after the use of sexual enhancers: feelings of dependence, positive effects, side effects.

This section presents the effects experienced by users following the consumption of aphrodisiacs, whether positive) or negative. The results reveal that the most frequently perceived positive effects among participants are improved sexual performance (67.2%) and increased endurance (57%). Self-confidence is also reported by 43% of participants, highlighting the psychological impact of aphrodisiacs beyond their physiological effects [Table 3].

Table 3: Experienced effects following the consumption of sexual enhancers

Variable (N = 218)	n (%)
Feeling of dependance	
Yes	93 (42.7)
No	125 (57.3)
Perceived benefits	
Improved sexual performance	146 (67.2)
Increased endurance	124 (57)
Better self-confidence	94 (43)
Firmer erection	74 (34)
No benefit perceived	19 (8.9)
Perceived side effects (multiple choice question)	
Headaches	188 (83.3)
Lower abdominal pain	79 (36.3)
Pain associated with erection"	75 (34.5)
Cardiac palpitations	153 (70)
Digestive issues	93 (42.7)
Respiratory disorders	178 (74.7)
Blurred vision	131 (60)
Dizziness	167 (77)
No side effect experienced	23 (10.5)

DISCUSSION

The findings indicate that most aphrodisiac users are young adults aged 18–29, predominantly single students, a profile consistent with observations in Kinshasa, where high consumption was reported among men aged 15–49, influenced by youth and social pressures ⁵. Marital status appears influential, as single men may face greater societal expectations regarding sexual performance, facilitating experimentation with such products.

Personal curiosity emerged as the leading motivation, followed by the desire to enhance sexual performance. Similar results were reported in Saudi Arabia, where curiosity (38%) and increased self-confidence (25.6%) were principal motives for using phosphodiesterase type 5 inhibitors (PDE5Is) ⁶. Partner influence and peer

pressure, also observed here, have been widely documented as drivers of normalizing performance-enhancing substance use ⁷.

While most participants reported perceived benefits—improved performance, greater endurance, and increased self-confidence—these findings align with an Egyptian study in which use was largely recreational and non-prescribed ⁸. Notably, 43% of users reported feeling a need to rely on aphrodisiacs to achieve sexual competence, which may indicate a process of normalization and raise concerns about psychological dependency.

High rates of adverse effects were reported, chiefly headaches, dizziness, palpitations, and respiratory disorders, often lasting more than three hours, with some persisting until the next day. Such effects raise concerns, particularly among users with chronic conditions (asthma, sickle cell disease, hypertension, diabetes). Most users consumed natural aphrodisiacs, yet adverse event rates remained high. Lack of quality control in informal markets exposes consumers to serious health risks.

Evidence from Bamako showed that over 60% of natural aphrodisiacs contained undeclared PDE5Is such as sildenafil or tadalafil ⁹. Similarly, FDA alerts (2021) reported undeclared PDE5Is in commercial “aphrodisiac honeys” sold online ^{10, 11}, marketed as “100% natural” but containing high concentrations of pharmaceutical compounds involved in serious adverse events, such as myocardial ischemia, stroke, and even death ^{12,13}. These findings highlight the dangers of uncontrolled “natural” products and the urgent need for tighter regulation of parallel aphrodisiac distribution channels.

CONCLUSION

The present study demonstrates that aphrodisiac use in Dakar is concentrated among young, predominantly single, student populations, with a clear preference for natural products. These results corroborate patterns reported in other urban African contexts, underscoring the influence of sociocultural norms and perceptions of safety on consumption choices. From a physiological and public health standpoint, the findings point to the necessity of targeted educational initiatives and evidence-based guidelines to mitigate potential health risks and to foster informed, safe sexual practices.

Acknowledgments: The authors would like to thank all the participants who took part in this study. No other individual who did not meet the authorship criteria contributed to this work.

Conflicts of Interest: The authors declare that they have no conflicts of interest regarding the publication of this paper.

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