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Study Of Clinical Efficiency and Safety of Femion Capsule in Females with Pyschosexual Disorders

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ABSTRACT

Introduction: **Human sexuality is generally described as the sum total of manner through which people experience and articulate their sexual sensations. Female sexual dysfunction (FSD) is a continuum of psychosexual disorders centered on sexual desire with interrelated problems of arousal, orgasm and sexual pain that impairs quality of life for many women. Female sexual dysfunctions (FSDs) range from short-term aggravations to major emotional disturbances adversely affecting family and workplace. This research article is focus on the herbal treatment of psychosexual disorders of females.** ***Objective:*** **The purpose of this study is to find out the herbal treatment of the psychosexual disorders of females.** ***Method:*** **The duration of the study is 1 year, from July 2013 to June 2014. Total 40 patients randomly collected and divided into 2 groups. One is control group (CG) which received traditional therapy and one is Main group (MG) which received study drug Femion capsule for the 60 days. Patient were collected using female sexual function index (FSFI) and seeing inclusion and exclusion criteria.** ***Results Efficacy:*** **High efficacy 4 point: 86.6%, Moderate efficacy 3 points: 12.4%, low efficacy 2 points: 1.0% women.** ***Tolerance:*** **No side effects and adverse clinical events caused by the administered medicinal product were observed at patients during clinical study and data analysis** ***Conclusion:*** **Female sexual dysfunction in women is reputed to be intractable and difficult to treat. This view has changed. Sexual health does matter. Both psychological and physical factors are predisposing for sexual difficulties. To optimize psychosexual comfort the use of this Femion capsule seems to be very effective and safe.**

Keywords: *Psychosexual disorders, herbal treatment, females sexual problems*

INTRODUCTION

Female sexual dysfunction (FSD) is a highly prevalent disorder, which affects 11%–43% of women [1–4] and has a profound negative impact on a woman's self-esteem, her relationships and overall quality of life [5]. The mechanisms underlying FSD are complex and multi-factorial. It is also dynamic, that at different stages in a woman's life, the reasons underlying sexual problems may vary, taking into account the physiological changes related to aging as well as psychosocial circumstances. An interaction of biological, psychosexual and contextual factors is frequently implicated, and this makes a thorough assessment of FSD imperative [6]. FSD is associated with poor perception of personal health status, lower education level, depression, anxiety, thyroid conditions, urinary incontinence and older age [7]. The effect of drugs like antidepressants on FSD is also significant [8]. Other associated factors for FSD are economic hardship, being unmarried, and having had early traumatic sexual experience. The association between a

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woman's age and her academic status has been inconsistent, with difference in the opinion of various researchers [2,4,9]. Sexuality is an important aspect of human health and quality of life. The data from the National Social Life, Health and Aging Project (NSHAP) show that sexual activity throughout the whole life is beneficial for health, and may extend lifespan. Research conducted by the NSHAP proved that more than a half of people aged 57–85 and about one-third of those aged 75–85 remain sexually active, and their physical health significantly correlates with sexual life [10]. Psychosexual needs are an important part of human life, irrespective of age, culture, place of residence, and life or health situation. Therefore, they are taken into consideration while measuring quality of life [11,12,13]. There is general agreement that sexuality is not merely related to sexual behaviors, but constitutes an inherent part of individual and social identity, and includes both personal and cultural experiences [14]. It is also associated with partner relationships, attitudes, activities, and standards of conduct [15,16,17]. Esmaill, and Munro (2001) indicated to the broad context of human sexuality and psychosexual needs, which comprise five aspects: sensuality (awareness of one's own body), intimacy (the need for emotional attachment and sexual experience, emotional closeness), sexual identity (sexual orientation), reproduction (fertility, conceiving a baby, and its upbringing), and sexualization (using one's sexuality, keeping sex drive under control) [18]. There is consensus that regardless of social and cultural differences, an interest in sex-related issues does not decrease with age, while sexual activity declines as a result of biological changes in human organism [19,14,20,21,22]. Research on the relationship between sexuality and the aging process in the context of biological changes, has been presented in literature for many years [23,11,10,24,25,26]. It was demonstrated that sexual activity is closely related to health and living conditions [27,28,29]. Diseases and disability can reduce the possibility of satisfying needs associated with this sphere of life [27,28]. Unfortunately, information about sexual behaviors of the elderly, and types of changes in their sexual function caused by the aging of an organism and age-related diseases, is limited [30,27,24]. The purpose of this research is to made new ways in the treatment of psychosexual disorders of females. Complex herbal preparation FEMION CAPSULES («Herbion Pakistan Pvt. Ltd») contains extracts of following plants, which make Femion Capsules the unique formulation with aphrodisiac properties and nervine effect, it allows to counteract anxiety and stress and treats frigidity in females.

Composition:
Each capsule contains dry extract of:

Active ingredients:

Mucuna pruriens	25mg
Asparagus racemosus	25mg
Saraca indica	25mg
Valeriana hardwickii	25mg
Foeniculum vulgare	17mg
Coriandrum sativum	17mg
Vitex agnus castus	16mg
Tribulus terestris	100mg
Withania somnifera	100mg
Zingiber officinalis	50mg

METHODS

Goal of the study

To study clinical efficiency and tolerance of preparation "FEMION" capsules, manufactured by «HERBION PAKISTAN (PVT) LTD», Pakistan, at female psychosexual disorders for opportunity revealing to recommend the preparation for clinical usage in Uzbekistan Republic from July 2013 to June 2014.

Substantiation for study carrying out:

The decision of Presidium of Pharmacological Committee (Protocol No 7, dated 24.06.2012).

Type and design of the study:
Limited. Open, randomized study in two parallel groups.

Selection of patients:
The main group (MG) receiving preparation Femion on the background of basic therapy, as well as the control group (CG) receiving traditional therapy on the background of basic treatment, consisted of 20 patients (total 40 patients in both groups). Groups were comparable by age and diagnosis, in CG (22 – 52 years), in MG (25 -51 years).

Criteria of inclusion
- Females aged 22 to 52 years.
- Documentary signed informed consent for participation in the study.
- Clinical syndrome consistent with psychosexual disorder in the opinion of the investigator.
- FSFI score ≤ 26.55.
- C-section or an episiotomy.
- Trauma (car accident, fall, abuse, etc).
- Prior to contraceptive use.
- Any new or increase pain in area (hip, back, period, ovulation, intercourse).
- Women of reproductive age with negative test for pregnancy, not nursing mothers.
- Safe mental health of patients, capable to complete study procedures.
- Opportunity to have not less than 2 sexual contacts per week.

Exclusion Criteria
- Patients with diagnosed organic sexual dysfunctions and primary infertility.
- Women taking HRT.
- Serious accompanying neurological, cardiovascular, hepatic and renal diseases.
- Cancer of breast, vagina and cervix.
- Anatomical deformations.
- Pregnancy and lactation.
- Polycystic ovarian syndrome.
- Individual intolerance to preparations or their components.
- Patient undergoing any other treatment of psychosexual disorder and not agreeing to stop the treatment for study period were not included in the main group.
- Simultaneous participation in any other clinical study.

Randomization
For group wise distribution of examinees, the method of simple randomization was used. Initial table of group-wise distribution of patients was formed on the basis of random numbers obtained by means of function of random numbers generation in MS Excel; it is available at sponsor. Group-wise distribution was carried out on the basis of sealed envelopes given by the sponsor. After inclusion of patient in the study and assignment of serial number, the envelope corresponding to this number was opened, and the treatment enclosed in this envelope was administered.

Scheme of preparations administration:
To main group (20 patients) with psychosexual disorders preparation Femion was administered in dosage 2 capsules two times a day after meal within 60 days on the background of basic therapy.

To control group (20 patients) with psychosexual disorders traditional therapy was administered within 60 days on the background of basic treatment, without Femion.

Additional treatment:
During all period of the study, any accompanying pharmacotherapy, capable affecting the results of the study, including preparations of similar to Femion action, was not allowed in main group. During the study, administration of preparations for supporting

or prophylactic treatment of accompanying diseases was allowed under the condition that the treatment would not affect the estimation of efficacy and safety of preparation being studied.

General schedule of the study

After initial screening and primary estimation of patients' conformity to inclusion / exclusion criteria for participation in the study, they were provided with verbal or written information about active substance and medicinal form of the preparation being studied, its dozes, scheme and method of administration, the period of treatment and conditions of study carrying out. After decision taking to participate in the study, each patient signed with own hand the Form of written informed consent. After that, the patient became the potential participant of the study. During first visit, all patients were assigned with the least of unused two-digit number, starting from 01. This individual number was used for patients' designation during all study period. Then the preparation being studied was administered to the patient on the background of base treatment or traditional therapy on the background of base treatment, i.e., in both groups. The start point for patient's participation in the study: the day of first reception of preparation being studied (day of preparation handing over) or traditional therapy. The treatment course of all patients included in the study was described in detail.

Any therapy associated with accompanying diseases was registered in medical card and individual registration form.

Record keeping of reception, distribution, storage of tested preparation and control procedures regarding doctor's instructions observance by patients.

The preparation with execution of acceptance-transfer act was provided by the Customer to responsible executor Rakhimova L.Sh. and was stored separately from other medicines in enclosed space, access to which was allowed only to responsible executor. For record keeping of preparation provision to the patients, it was decided that each reception of preparation should be confirmed by patients' signatures in the questionnaire and registration form. In medical history sheet and clinical record, the beginning of trials was fixed (first reception of preparation being studied or preparation of traditional therapy), as well as patient's voluntarily agreement for participation and preparation administration.

Examination

For patients with psychosexual disorders screening was conducted at 1st day of the first week before preparation taking and then after termination of preparation taking during the last visit at 4th week. The following examinations were conducted; urinalysis, blood cell count, hormonal profile and ultrasound (liver, thyroid, uterus and appendages before

Table 1: VISIT PLAN

PARAMETERS	VISITS				
	0 Screening (baseline)	1	2	3	4
General data (anamnesis)	X	X	X	X	X
Criteria of inclusion / exclusion	X	X	X	X	X
Obtaining of inform written consent	X	X	X	X	X
Subjective clinical data	X	X	X	X	X
Data of objective examination	X	X	X	X	X
Laboratory analyses	X	X	X	X	X
Hormonal profile	X	X	X	X	X
Estimation of efficiency	X	X	X	X	X
Estimation of safety	X	X	X	X	X
Accompanying medicinal therapy	X	X	X	X	X

TABLE 2: **Clinical Evaluation**

PSYCHOSEXUAL DISORDERS

HISTORY

Sexual, medical, psychosocial history

1. Sexual history

Basic questions for assessment of sexual functioning; filling in of FSFI questionnaire (appendix II)

2. Psychosocial history

Background variables

Marital status

Children

Educational level

Social status

Occupation

Religion

Psychiatric history

Depression

Anxiety

Sexual History

Childhood and adolescent sexual education

The experience

Masturbation history

Interpersonal sexual activity

Breadth and flexibility of sexual scripts with all partner(s)

Current sexual functioning

- Current masturbatory and interpersonal sexual activities
- Nature of the problem, onset, course, frequency
- Spontaneous sexual experience
- Current 'Time table"

Relationship with partner

- Harmony
- Communication
- Partner's health

Life stresses

- Recent life stress
- Current life stress
- Losses

Life style factors

Smoking

Opioids

Alcohol

3. Medical History

Hypertension

Heart disease

- Diabetes
- Hyperlipidemia
- Vascular disease
- Hormone problems
- Kidney disease
- Neurological problems
- Trauma or injury to: vagina, pelvis, perineum, uterus
- Urinary problems
- Cancer
- Radiation of the bladder, uterus or rectum
- Sleep apnea
- Chronic fatigue or weakness
- Unexplained weight loss
- Joint pains
- Sexually transmitted diseases

PHYSICAL EXAMINATION

GENERAL

Body weight

Temperature

Heart and respiratory rate

BP

GENITAL

Skin color

Texture

Turgor

Thickness

Amount and distribution of pubic hair

Muscle tone

Location of episiotomy scars and strictures

Tissue atrophy

Presence of discharge in vaginal vault

Bimanual examination

Thyroid enlargement, nodules, or tenderness

and after treatment). Tables are included.

Table 3: Diagnosis

LABORATORY FINDINGS
Total blood count
Urinalysis
Hormonal profile: follicle-stimulating hormone (FSH), luteinizing hormone (LH), testosterone, progesterone, estradiol and prolactin,
The table is attached

EVALUATION & DIAGNOSIS

Criteria of efficiency estimation of tested preparation

The list of efficacy parameters:

Basic parameter

Total score at answer to questions 1 to 19 of FSFI questionnaire.

General estimation of efficacy of preparation being studied was made on the basis of above mentioned criteria in points according to following scale:

RESULTS

4	points	High efficacy	total score at answer to questions 1to 19 of FSFI questionnaire at the end of the treatment was 34-36
3	points	Moderate efficacy	total score at answer to questions 1 to 19 of FSFI questionnaire at the end of the treatment was 31-33
2	points	Low efficacy	total score at answer to questions 1 to 19 of FSFI questionnaire at the end of the treatment was 27-30
1	point	Absence of efficacy	Absence of changes or deterioration of clinical and laboratory parameters by the end of treatment course.

Registration of efficiency parameters was carried out directly after examination of patient and (or) laboratory data reception. The information expressed in score was exposed to statistical processing. Tables are attached.

Criteria Of Tolerance Estimation Of Tested Preparation

Tolerance of preparation being studied was determined on the basis:

1. Objective data obtained by the researcher during the study carrying out.
2. Laboratory data analyzed prior to the beginning and after the end of treatment course.
3. Subjective sensations of the patient

   Tolerance of preparations being studied was estimated by the researcher in points according to the following scale:

4 points	Absence of pathological changes or clinically significant deviations at objective examination and/or laboratory tests in dynamics and/or patient does not have side reactions.
3 points	Presence of insignificant transient changes at objective examination and/or laboratory tests in dynamics not demanding change of treatment scheme and/or patient marks insignificant side reactions, which do not cause serious problems.
2 points	Presence of significant changes at objective examination and/or laboratory tests in dynamics not demanding additional measures and/or the patient marks side reactions rendering negative influence on her condition, but not demanding cancellation of preparation.
1 point	Presence of significant changes at objective examination and/or laboratory tests in dynamics and/or the patient marks side reactions rendering negative influence on her condition, demanding cancellation of preparation.
0 point	Presence of significant changes at objective examination and/or laboratory tests in dynamics and/or the patient marks side reactions rendering negative influence on her condition, demanding cancellation of preparation and additional measures.

Side Effects

No side reactions were observed during the treatment, and the "Report about side effects of medicinal products" was not filled out.

Adverse manifestation (AM). Side reaction (SR) - any adverse clinical event undoubtedly caused by administered medicinal product. AM and SR are considered serious, if: results in death; threatens to life; demands hospitalization or prolongation of hospitalization; results in constant or significant invalidity/ disability; represent congenital anomaly/defect of development.

Such events were not observed during the entire trial.

Statistical Analysis:

Amount of examinees: 20 patients in main group and 20 patients in control group. For comparison of the results obtained for all patients, receiving preparation being studied in relation to initial parameters and comparison group, the significance level (p) was established equal to 0,05 and 0,01. Value p=0,01 was used in this case as additional estimation of expressiveness degree of preparation action or difference of preparations' effects. Presence of authentic differences at two values of significance level specified the significant effect of preparation administration.

Prescheduled discontinuance of participation in the study: No

Estimation of obtained results

Efficacy: Efficacy estimation of preparation was done by the results of patients' examination receiving preparation under the scheme, stipulated by present protocol.

Results: high efficacy 4 points - 86.6%, moderate efficacy 3 points - 12.4%, low efficacy 2 points - 1.0% women.

Tolerance: No side effects and adverse clinical events caused by the administered medicinal product were observed at patients during clinical study and data analysis.

CONCLUSION

Female sexual dysfunction has a definite role in infertility and marriage life and if documented necessary interventions like psychotherapy, lubricants, targeted sexual therapy and pharmacological treatment can be undertaken for the females suffering from female sexual dysfunction along with psychosexual disorders. Sometimes appropriate treatment of female sexual dysfunction can preclude the use of expensive & unnecessary treatment. This study show that treatment with Femion Capsule have very effective and safe results in main group comparing to control group. Further trial on large group of patient can be done to expand the safety and efficacy profile of Femion capsule.

Information about preparation

The preparation for the study was provided by the Customer to the Executor in amount of 40 bottles per 60 capsules for main group of patients. The preparation for the study was given by the Customer to the Executor on a gratuitous basis.

Filling out of individual registration forms of patients

All data obtained during the present study, were entered in corresponding forms. Originals are attached and provided to the sponsor and should be accessible to representatives of the sponsor. Executor has questionnaires of all patients for own archive.

The researcher should keep records and documents concerning the study carrying out and tested preparation provision, such as patients' Individual registration forms and questionnaires, whereas consent of patient, laboratory data and information concerning movement of preparation (other important information) are provided to the customer.

Ethical aspects of the study

The study is carried out according to the principles reflected in Helsinki declaration of World medical association «Recommendations for doctors engaged in biomedical researches with participation of people» (1964 - 1996), requirements of RUz Law «About medical products and pharmaceutical activity" and "Instruction for clinical trials carrying out of medicinal products and expertise of trials' materials» (appendix No1 to the order MOH RUz No 334 dated 25.07.01).

Final variant of Study Protocol, Information for the patient and written form of consent for participation in the study, were approved by Ethics committee MOH RUz and authorized by Pharmacological committee GUKKLS&MT MOH RUz prior to the beginning of patients' inclusion in the study. All subsequent amendments to the Protocol and Information for the patient also were presented to Ethics committees MOH RUz for approval reception and to Pharmacological committee GUKKLS&MT MOH RUz for authorization.

Patients satisfying inclusion criteria were included into the study only after obtaining full information about the preparation and the study and giving written approval for participation. Patient gave the consent by means of personal signature and date indication on the document of Informed consent. The consent for participation in the study was obtained prior to the beginning of any procedures of the study.

Data confidentiality

After the protocol signing, the researcher observed strict confidentiality of all information concerning the study. The documentation concerning the study (protocol, brochure of the researcher, individual patient's card and other materials) were stored appropriately to provide confidentiality.

Registration of the report

Clinical and analytical data obtained during the given study, were estimated and presented in tables with subsequent summation and average numbers calculation in the report, made according to appendix 2 to order MOH RUz No334 dated July 25, 2001.

REFERENCES

1. Laumann EO, Paik A, Rosen RC. Sexual dysfunction in the United States: prevalence and predictors. JAMA 1999,281(6):537-44.
2. Christensen BS, Gronbaek M, Osler M, Pedersen BV, Graugaard C, Frisch M. Sexual dysfunctions and difficulties in Denmark: prevalence and associated sociodemographic factors. Arch Sex Behav 2011,40(1):121-32.
3. Valadares AL, Pinto-Neto AM, Osis MJ, Sousa MH, Costa-Paiva L, Conde DM. Prevalence of sexual dysfunction and its associated factors in women aged 40–65 years with 11 years or more of formal education: a population-based household survey. Clinics (Sao Paulo) 2008,63(6):775-82.
4. Worly B, Gopal M, Arya L. Sexual dysfunction among women of lowincome status in an urban setting. Int J Gynaecol Obstet 2010,111(3):241-4.
5. Vahdaninia M, Montazeri A, Goshtasebi A. Help-seeking behaviors for female sexual dysfunction: a cross sectional study from Iran. BMC Womens Health 2009,9:3.
6. Graziottin A, Serafini A, Palacios S. Aetiology, diagnostic algorithms and prognosis of female sexual dysfunction. Maturitas 2009,63(2): 128-34.
7. Shifren JL, Monz BU, Russo PA, Segreti A, Johannes CB. Sexual problems and distress in United States women: prevalence and correlates. Obstet Gynecol 2008,112(5):970-8.
8. Hatta S, Asmidar D, Hod R, Guan NC. Female sexual dysfunction in patients

treated with antidepressant—comparison between escitalopram and fluoxetine. J Sex Med 2011, http://dx.doi.org/10.1111/j.1743-6109.2011.02256.x.

9. Laumann EO, Waite LJ. Sexual dysfunction among older adults: prevalence and risk factors from a nationally representative U.S. probability sample of men and women 57–85 years of age. J Sex Med 2008,5(10):2300-11.
10. Lindau, S. T., & Gavrilova, N. Sex, health, and years of sexually active life gained due to good health: Evidence from two US population based cross sectional surveys of ageing. British Medical Journal, 2010, 340, c810 http://dx.doi.org/10.1136/bmj.c810.
11. Hodson, D. S., & Skeen, P. Sexuality and aging: The hammerlock of myths. Journal of Applied Gerontology, 1994, 13, 219–235.
12. Lew-Starowicz, Z., & Lew-Starowicz, M. Sexual health. Psychiatry in General Practice, 2003, 3, 1–3.
13. S´lo´ sarz, W. Relations between sexual need and determinants of sexual activities. Polish Sexuology, 2003, 1, 64–68.
14. [14] Elias, J., & Ryan, A. A review and commentary on the factors that influence expressions of sexuality by older people in care homes. Journal of Clinical Nursing, 2011, 20, 1668–1676.
15. Lagana` , L., & Maciel, M. Sexual desire among Mexican-American older women: A qualitative study. Culture, Health and Sexuality, 2010, 12, 705–719.
16. Lindau, S. T., Laumann, E. O., Levinson, W., & Waite, L. J. Synthesis of scientific disciplines in pursuit of health: The Interactive Biopsychosocial Model. Perspectives in Biology and Medicine, 2003, 46(Suppl. 3), 74–86.
17. Radomski, D. Sexual impairment factors in physically disabled people. Polish Sexuology, 2005, 3, 8–12.
18. Esmaill, S., Esmaill, Y., & Munro, B. Sexuality and disability: The role of health care professionals in providing options and alternatives for couples. Sexuality and Disability, 2001, 19, 267–287.
19. Bortz, W. M., Wallance, D. H., & Wiley, D. Sexual functioning in 1.202 aging males. Journal of Gerontology, 1999, 54, 237–241.
20. Madsen, T. Nursing home caregivers' attitudes regarding sexual behavior of nursing home residents: A cross sectional survey. Master of Social Work Clinical Research Papers. 2012, Paper 55.
21. Robinson, J. G., & Molzahn, A. E. Sexuality and quality of life. Journal of Gerontological Nursing, 2007, 33, 19–27.
22. Wiley, D., & Bortz, W. M. Sexuality and aging – Usual and successful. Journal of Gerontology, 1996, 51, 142–146.
23. Hartmann, W., Philippsohn, S., Heiser, K., & Ruffer-Hesse, C. Low sexual desire in midlife and older women. Personality factors, psychosocial development, present sexuality. Menopause, 2004, 11, 726–740.
24. Lindau, S. T., Schuman, L.Ph., Laumann, E. O., Levinson, W., O'Muircheartaigh, C. A., & Waite, L. J. A study of sexuality and health among older adults in the United States. The New England Journal of Medicine, 2007, 357, 762–774.
25. Stusin´ ski, J., & Lew-Starowicz, Z. Sexual functioning in middle-aged women – A review of the literature. Menopause Review, 2012, 2, 87–92, [in Polish].
26. Wespes, E. The aging penis. World Journal of Urology, 2002, 20, 36–39.
27. Addis, I. B., Van Den Eeden, S. K., Wassel-Fyr, C. L., Vittinghoff, E., Brown, J. S., & Thom, D. H. Sexual activity and function in middle-aged and older women. Obstetrical & Gynecological Survey, 2006, 107, 755–764.

28. Laumann, E. O., Nicolosi, A., Glasser, D. B., Paik, A., Gingell, C., & Moreira, E. Sexual problems among women and men aged 40–80: Prevalence and correlates identified in the Global Study of Sexual Attitudes and Behaviors. International Journal of Impotence Research, 2005, 17, 39–57.

29. Nicolosi, A., Laumann, E. O., Glasser, D. B., Moreira, E. D., Paik, A., & Gingell, C. Sexual behavior and sexual dysfunctions after age 40: The global study of sexual attitudes and behaviors. Urology, 2004, 64, 991–997.

30. Araujo, A. B., Mohr, B. A., & McKinlay, J. B. Changes in sexual function in middleaged and older men: Longitudinal data from the Massachusetts Male Aging Study. Journal of the American Geriatrics Society, 2004, 52, 1502–1509.