

# Reviews of articles on medicinal herbs

Jodie Tester

These abstracts are brief summaries of articles which have appeared in recent issues of herbal medicine journals, some of which may be held in the NHAA library.

## ***Tribulus terrestris* in women with hypoactive sexual desire disorder**

Akhtari E, Raisi F, Keshavarz M, Hosseini H, Sohrabvand F, Bioos S, Kamalinejad M, Ghobadi A. 2014. *Tribulus terrestris* for treatment of sexual dysfunction in women: randomized double-blind placebo-controlled study. *Daru* 22(1):40 doi:10.1186/2008-2231-22-40

Hypoactive sexual desire disorder (HSDD), a common sexual complaint affecting approximately 1 in 10 women in the USA, Europe and Australia, is a multifactorial and multifaceted disorder with biological, psychological and interpersonal relationships all being potential contributing factors.

*Tribulus terrestris* (tribulus) has long been attributed to influencing libido and boosting sex drive in humans according to traditional herbal medicine texts. Studies investigating tribulus have reported an influence on women's sex drive and animal studies have reported effects of tribulus on luteinizing hormone, follicle-stimulating hormone, and developing follicles. The researchers of this paper aimed to investigate the effect of tribulus on women of childbearing age with HSDD in a randomised, double blind, placebo-controlled clinical trial performed across two medical centres in Tehran, Iran.

In total, 67 women with HSDD were randomly assigned to received *Tribulus terrestris* 7.5mg (dried herb in ethanolic extract) twice daily or placebo for four weeks, commencing the day after the completion of their menstruation period. Inclusion criteria into the study included being married and living with the partner for at least 15 days/month, being of childbearing age (not defined), having lack and or loss of libido which caused distress, normal pelvic and breast exam and a negative pap smear test conducted within the 6 months prior. Exclusion criteria included lack of steady sexual partner, active plans for divorce, husband's sexual problems, menopause, pregnancy, history of breast or genital cancers, major depression and/or other psychiatric disorders. Participants who forgot to use more than three doses of their drugs were also excluded.

The primary outcome of the study was the assessment of desire and total sexual activity function score as assessed using the Female Sexual Function Index (FSFI), a self-reported questionnaire that was completed at the beginning of the study and four weeks after finishing the study medication. The FSFI questionnaire, which

assesses sexual function for the four weeks prior, has 19 questions pertaining to six domains of sexual function including desire, arousal, lubrication, orgasm, satisfaction and pain. Secondary outcome measures in the study were the domains other than desire. Face to face interviews based on the DSM-IV codes for HSDD were also conducted at the beginning of the study and four weeks after completion of drug therapy to compare the results of the self-administered questionnaires.

Of the 67 participants, 60 women (30 in the tribulus arm and 30 in the placebo arm) completed their treatment protocol with results available for analysis. Variables including age, pregnancy rate, method of birth delivery and method of contraception were adjusted for. The study found that after four weeks supplementation with tribulus or placebo, significant improvement was seen in the primary outcomes of desire ( $p<0.001$ ) and general FSFI score ( $p<0.001$ ) with the tribulus intervention.

Additionally, secondary outcomes of arousal ( $p=0.037$ ), lubrication ( $p<0.001$ ), orgasm ( $p<0.001$ ), satisfaction ( $p<0.001$ ) and pain ( $p=0.041$ ) were all significantly improved in the tribulus arm. The results were confirmed by interviews using the DSM-IV codes for HSDD.

Limitations of the study include the small sample size and authors noted that Iranian women are generally modest and shy about sexual concepts because of their cultural beliefs, which may have influenced questionnaire responses. Researchers concluded that *Tribulus terrestris* was effective in improving sex drive in women of childbearing age based on the questions of the FSFI questionnaire, confirming the libido boosting effects described in traditional texts. Further investigation of tribulus in women is warranted, with future studies ideally recruiting greater study numbers from a broad range of cultural backgrounds to confirm these observed effects.

## **Tongkat Ali for physically active seniors**

Henkel RR, Wang R, Bassett SH, Chen T, Liu N, Zhu Y, Tambi MI. 2014. Tongkat Ali as a potential herbal supplement for physically active male and female seniors – a pilot study. *Phytother Res* 28:544-550

*Eurycomalongifolia*, also known as Tongkat Ali (TA) or long Jack, is a common herbal Malaysian shrub, the roots of which contain a variety of phytochemical compounds including eurycomaside, tannins, polysaccharides,