

**A STUDY OF FEMALE SEXUAL DYSFUNCTION BY USING
FEMALE SEXUAL FUNCTIONAL INDEX (FSFI) AMONG WOMEN
AT THE AGE OF 40-55 YEARS OLD IN UNIVERSITI SAINS
MALAYSIA, KUBANG KERIAN, KELANTAN**

BY

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List of Abbreviations

CI	= Confidence interval
DM	= Diabetes Mellitus
DSM IV	= Diagnostic and Statistic Manual
FSD	=Female Sexual Dysfunction
FSFI	= Female Sexual Functional Index
HPT	= Hypertension
HRT	= Hormone Replacement Therapy
HUSM	= Hospital Universiti Sains Malaysia
IHD	= Ischaemic Heart disease
KMO	= Kaiser-Mayer-Olkin
MVFSFI	= Malay version Female Sexual Function Index
OR	= Odds ratio
SPSS	= Statistical package for Social Sciences
T	= Testosterone

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ABSTRAK (VERSI BAHASA MELAYU)

KAJIAN MENGENAI DISFUNGSI SEKSUAL WANITA MENGGUNAKAN INDEK FUNGSI SEKSUAL WANITA (FSFI) DALAM KALANGAN WANITA LINGKUNGAN UMUR 40-55 TAHUN DI HOSPITAL UNIVERSITI SAINS MALAYSIA, KUBANG KERIAN.

PENGENALAN

Kehidupan seksual merupakan suatu isu penting yang boleh mempengaruhi tahap kesihatan seseorang wanita sepanjang kehidupan mereka. Ia merupakan aspek utama yang diperlukan bagi mencapai tahap kualiti kehidupan seseorang wanita itu dan ini dapat digambarkan dalam bentuk fizikal, psikologikal serta kesihatan mental kehidupan seseorang individu. Wanita pada peringkat umur pertengahan banyak dipengaruhi oleh perubahan hormon yang menghampiri menopause dan ini boleh memberi kesan kepada fungsi seksual terutamanya libido (keinginan seks) serta orgasma. Tujuan kajian ini dijalankan adalah untuk mengenalpasti prevalen disfungsi seksual dalam kalangan wanita berumur 40-55 tahun. Selain itu, kajian ini juga bertujuan mengetahui faktor-faktor sosio-demografi serta fungsi seksual lain yang mempengaruhi domain libido dan orgasma serta kesan penggunaan terapi hormon gantikan keatas fungsi seksual.

KAEDAH KAJIAN

Satu kajian keratan rentas telah dilaksanakan keatas 434 wanita tempatan lingkungan umur 40-55 tahun yang datang ke Hospital Universiti Sains Malaysia. Fungsi seksual telah dinilai menggunakan borang kajiselidik versi bahasa Melayu yang telah disahkan (validated) yang mengandungi data sosio-demografi dan 19 soalan pelbagai

dimensi laporan sendiri bagi menilai fungsi seksual wanita. Soalan tersebut meliputi enam soalan asas fungsi seksual wanita yang terdiri daripada keinginan seksual(libido), ghairah(arousal), lelehan cecair faraj, orgasma, kepuasan dan kesakitan. Analisa berkaitan kajian ini telah menggunakan kaedah X^2 test dan analisis regrasi pelbagai (Multivariate regression analysis).

KEPUTUSAN

Purata umur wanita di dalam kajian ini ialah 45.7(SD 4.33) tahun. Keseluruhan prevalens disfungsi seksual adalah 8.0 %. Prevalens untuk setiap pecahan domain fungsi seksual adalah 18.4% untuk keinginan seks, 5.1% keghairahan, 4.4% lelehan cecair faraj, 6.9% kesakitan, 2.1% orgasma (kemuncak seks) manakala 7.4% kepuasan seksual.

Faktor utama secara signifikan yang mempengaruhi keinginan seks (desire) adalah umur 40-45 dan >50-55 (P -value=0.047,0.017), Melayu (P =0.024), Cina (P =0.013), domain keghairahan seks (P <0.001), domain lelehan cecair faraj(P <0.001) dan domain kepuasan seks(P <0.001). Bagi domain orgasma pula, lelehan cecair faraj serta penyakit buah pinggang adalah signifikan mempengaruhi fungsinya. Umur, bilangan anak, serta lelehan cecair faraj adalah signifikan mempengaruhi domain kesakitan (P <0.05). Terapi hormon gantian (HRT) tidak meningkatkan kesan fungsi seksual (P > 0.05). Faktor sosio-demografi yang lain seperti tahap pendidikan, jenis pekerjaan, tempoh perkahwinan seseorang serta jenis penyakit tidak mempengaruhi fungsi seksual seseorang wanita .

KESIMPULAN

Prevalens disfungsi seksual dalam kalangan wanita tempatan lingkungan umur 40-55 tahun adalah rendah. Domain disfungsi seksual yang paling tinggi adalah keinginan seksual (desire/libido). Adalah dikenal pasti bahawa umur mempunyai kaitan secara negatif terhadap domain seksual dalam kalangan wanita di pertengahan umur. Melalui kajian ini juga menunjukkan bahawa terapi gantian hormon (HRT) tidak memberi kesan terhadap fungsi seksual.

ABSTRACT (ENGLISH VERSION)

A STUDY OF FEMALE SEXUAL DYSFUNCTION BY USING FEMALE SEXUAL FUNCTIONAL INDEX (FSFI) AMONG WOMAN AT THE AGE OF 40-55 YEARS OLD IN HOSPITAL UNIVERSITI SAINS MALAYSIA, KUBANG KERIAN, KELANTAN.

INTRODUCTION

Sexual life is considered crucial issues in determining the well being of women throughout their life. This is the important aspect of quality of life, reflects on physical, psychological and mental well being of the individual. Middle age women are additionally influenced by the hormonal changes surrounding menopause that affects their sexual function especially libido and orgasm. The aim of this study is to determine the prevalence of sexual dysfunction among women at the age of 40-55 years old. To determine which socio-demographic and sexual domain that influence libido or desire and orgasm domain, and the impact on HRT on sexual domain.

METHOD:

A cross-sectional descriptive analysis was conducted on 434 local women at the age of 40-55 years old attending HUSM. Sexual function was measured by using self-administered validated questionnaire Malay version which was Female Sexual Functional Index (FSFI). The questionnaire consist of socio-demographic data, and 19-item, multidimensional self report measure of female sexual functioning. It covers 6 basic domains of female sexual functions: desire, arousal, lubrication, orgasm, satisfaction, and pain. The analysis was performed by using X^2 test and multivariate regression analysis.

RESULTS

The mean age of the women was 47.5 (SD 4.33) years old. The overall prevalence of sexual dysfunction was 8.0%. The prevalence of sexual dysfunction for each domain was 18.4% for desire, 5.1% arousal, 4.4% lubrication, 6.9% pain, 2.1% orgasm, 7.4% satisfaction. The most significant predictor for desire were aged 40-45 and aged >50-55 (p -value=0.047, 0.017), Malays (p -value=0.024), Chinese (p -value=0.013), sexual arousal ($P<0.001$), lubrication ($P<0.001$) and satisfaction domain ($P<0.001$). Lubrication and medical illness (renal disease) had a significant association with the lack of orgasm. ($p<0.05$). Aging, parity 2-5 and >5 and lack of lubrication significantly associated with sexual pain disorders ($P<0.05$). Hormone replacement therapy (HRT) did not significantly improved any sexual domain. Other socio-demographic variables such as level of education, type of occupation, duration of marriage and medical illness were less likely to result in disturbances on sexual function.

CONCLUSION

The prevalence of sexual dysfunction among local women at the age of 40-55 years old was not high. The most affected sexual function domain was desire. There is a negative association between age and sexual response in middle age women and from this study we found that HRT did not have any impact on the sexual domain.

INTRODUCTION

CHAPTER 1. INTRODUCTION

Sexual life is considered a crucial issue in determining the well being of woman through out her life span. This is an important aspect for quality of life, and reflects on physical, psychological and mental well being of the individual. Middle age women are additionally being influenced by the hormonal changes surrounding menopause which is affecting libido and orgasm. Menopause is a time of physiological adjustment as well as of physical and anatomical changes that often influence sexuality in the aging female (Palacios S et al, 2002). In Kelantan, mean age of menopause was 49.4 years old while both median and mode were 50 years old (Dhillon H.K et al, 2006).

Today sexuality is viewed holistically comprising biological, physiological, emotional qualities that may impact overall health and well being and social. Additional to the hormonal changes, there are other factors that may influence on sexuality such as the partner availability, past psychological history, socio-cultural influences, medical illness and related treatment. The difference between aging and sex in men and women is that women experiencing menopausal transition in which the hormone change will occur in a relatively short period; and in men the hormonal changes occur gradually over a longer period. It is important to determine whether changes in women's sexual functioning during midlife are due to aging or to menopause.

Aging also contribute to much of the reduction in both ovarian and adrenal androgen.

libido. Chronic illness, anxiety, depression may interfere with peripheral pathways contributing the development of sexual dysfunction among women.

Most types of sexual dysfunction can be corrected by treating the underlying physical and psychological problems. The first step is to realize that a problem exists and seek help from a professional.

LITERATURE

LITERATURE REVIEW

CHAPTER 2. LITERATURE REVIEW

2.1 Prevalence of female sexual dysfunction and associated factors.

Sexual health has been a taboo subject in many quarters—most people preferring to keep their sexual problems to themselves for fear of incurring disapproval or worse, ridicule.

Sexual difficulties are common among women, but whether a problem causing distress is a “dysfunction” as opposed to a normal or logical response to difficult circumstances (e.g., a problem with the relationship, sexual context or cultural factors). Sexual difficulties are particularly prevalent among women seeking routine gynaecological care.

There is limited information on the prevalence, incidence and antecedents of female sexual dysfunction. Community based- studies indicate that the prevalence of sexual dysfunction among all women is between 25-63% (Addis L.B et al, 2006).

Its prevalence in Asian countries, including Hong Kong, Japan, Korea, Taiwan, and Singapore, is reported to be as high as 30% (Nicolosi A et al, 2005).

The National Health and Social Life did a survey in the USA in 1992 involving 1749 women and 1410 men, aged between 18-59 year. The result showed a prevalence of sexual dysfunction of 43% in women and 31% in men. Twenty percent reported no pleasure with sex, 20% of them had lubrication difficulties and 25% of menopausal women unable to experience orgasm. In a prospective multi-ethnic cohort study of US premenopausal and early perimenopausal women, about 40% of middle-aged women reported that they never or infrequently felt desire, but nevertheless, most reported that they were capable of arousal and only 13% reported reduced sexual satisfaction.

One of the recent studies in our country conducted by Sidi H et al (2007) regarding the prevalence of sexual dysfunction and potential risk factors that may impair sexual function in Malaysian women found that the prevalence of FSD in the primary care population was 29.6%. The prevalence of women with lack of orgasms, low sexual arousal, lack of lubrication, sexual dissatisfaction, sexual pain were 59.1%, 60.9%, 50.4%, 52.2%, and 67.8%, respectively. The risk factor for FSD are older age, Malays, married longer (more than 14 years), having less sexual intercourse (less than 1-2 times a week), having more children, married to an older husband (age more than 42 years), and having a higher academic status. Lack of lubrication is found to be the main predictor for FSD in this study.

Another study was conducted by Gonzalez M et al (2003) using FSFI to determine the relationship between menopausal sexual activity and impact of the HRT on sexual function among 230 Colombian women. Results from the study showed that 38.1% of women showed sexual dysfunction in desire, and 25% in arousal. These two being the most affected domain. Eventhough menopause marginally decrease all stages of sexual function, this association was statistically significant only for lubrication and pain domains. HRT improves some factors of sexual function (lubrication, orgasm and pain) but it does not improve desire and arousal. Female sexual dysfunction (FSD) is a multifactorial condition that involves biological, medical and psychological factors.

A study by Tomic. D et al in 2006 regarding factors associated with determinants of sexual functioning in midlife women concluded that older age, higher education, alcohol intake and vaginal dryness are significantly associated with lower levels of passionate love for the partner, while older age and vaginal dryness are significantly associated with lower levels of satisfaction in middle life

Hormonal transition with decreasing level of estrogen and testosterone produce a clinical effect. The three critical physiologic requirements for female sexual function are intact sex steroid, autonomic / somatic nerves, arterial inflow and perfusion pressure to genital organ. Sex steroid play a crucial role in maintaining the anatomical and functional integrity of all structures involved in female sexual function. Epidemiologic and double blind clinical trials have focused on the role of estrogen (alone or in combination with progestins) and the androgen testosterone. (Dennerstien L et al, 2005).

Testosterone is an important component of female sexuality and alteration in its circulating levels play an important role in physiological and sexual changes that occur in menopause. Estrogens enhance the sense of well-being and maintained healthy genitalia thus contributing to a vital sexual life. Androgens mediate the promotion of sexual drive in central nervous system (CNS), the physiology of genitalia, nipples, and pelvic muscles and their sensitivity to erotic stimulation. Alteration in the circulation levels of androgen play an important role in psychologic and sexual changes in menopause.

Middle aged and older women are engaged in satisfying sexual activity, and one third reported problem with sexual function .Demographic factors as well as some issues associated with aging can adversely affect sexual frequency, satisfaction and function (Addis, Van den Eeden and Wassel-Fyr, 2006).

Dennerstein L et al (2001) conducted a study among Australian –born women aged 45-55 years to determine whether changes in women’s sexual functioning during midlife are due to aging or menopause. They found that sexual responsivity was adversely affected by both aging and the menopausal transition. Other domains of sexual functioning were also adversely affected significantly when women became postmenopausal. The relationship with the partner and his ability to performed sexually is adversely affected by menopausal transition.

The study conducted by Gondalez M et al (2006) entitled “Libido and Orgasm in Middle Age Woman ”showed that the women with high level of education and with a good perception of their satisfaction with their partner reported better performance in the desire domain. Age and non existence of sexual partner influence in the negative way on the desire.

Hallstrom T et al (1990) in their study using 677 urban middle-aged women reported that although sexual desire showed considerable stability over time, a substantial proportion of married middle-aged women experienced major changes, mostly decreases. Age and psychosocial factors are associated with quality of marital relationship but insufficient

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