KNOWLEDGE, ATTITUDE AND PRACTICE ON FEMALE SEXUAL DYSFUNCTION (*MATI PUTIK*) AMONG WOMEN IN KUANTAN, PAHANG

Radiah Abdul Ghani
Department of Biomedical Science
Kulliyyah of Allied Health Sciences
International Islamic University Malaysia, 25200 Kuantan Pahang, Malaysia
Email: radiah@iium.edu.my

Nurul Syazwani Mohd. Nawi
Department of Biomedical Science
Kulliyyah of Allied Health Sciences
International Islamic University Malaysia, 25200 Kuantan Pahang, Malaysia
Email: waninawi96@gmail.com

Tengku Norbaya Tengku Azhar
Centre of Foundation Studies,
Universiti Teknologi MARA, 43800 Dengkil, Selangor, Malaysia
Email: tengku2888@puncakalam.uitm.edu.my

ABSTRACT

Female sexual dysfunction or also known as 'mati putik' can be defined as women with lack of sexual desire, difficulty in arousal, inability to reach orgasm, pain during intercourse, failure to feel pleasure from sex or anxiety about sex performance. In Malaysia, infidelity or sexual relationship was in the top reasons of divorce cases. Hence, this study aimed to determine the level of knowledge, attitude and practice on female sexual dysfunction among female in Kuantan, Pahang. A total sample of 100 married women was randomly selected based on the classification in inclusive and exclusive criteria. The response from participants was analyzed using Statistical Package for Social Science (SPSS) with 95% confidence interval. The result of this study revealed that more than half of the respondents are found to have a high level of knowledge (n=59, 59.0%) only. Other than that, there was no significant association between the scores of knowledges, attitude and practice with socio-demographic characteristics. Besides, the correlation between knowledge-attitude and attitude-practice scores were identified to be significantly associated but not for knowledge-practice scores. In conclusion, this study has revealed that respondents possess good knowledge level regarding female sexual dysfunction differ from the level of attitude and practice. These findings proved that women in Malaysia were not aware of their sexual health and contribute to the number of divorce cases. Hence, it is recommended that future study may be able to increase the sample size and ought to emphasize the rural area more than an urban area for a better outcome. Also, it is also suggested for the upcoming study to discover more factors that may contribute significantly to the level of knowledge, attitude and practice on female sexual dysfunction.

Keywords: *mati putik*, female sexual dysfunction, Malaysia

INTRODUCTION

Female sexual dysfunction (FSD) is defined as persistent or recurrent disorders of sexual interest/desire, disorders of subjective and genital arousal, orgasmic disorders and pain and difficulty with attempted or incomplete intercourse. In Malaysia, FSD is more commonly known among the Malay society as *mati putik*,and perceived as a challenge in sexual function among women.The dissatisfaction in sexual performance is one of the main factors that contributes to divorce cases in Malaysia. Proven by 88% from their study population, which are from newly married women, they had chosen to be divorced due to the problems related to sexual activity (Max, 2019).

Luqman Zakariyah and Siti Nurafiqah Sapardi (2016) stated that the main root of divorcement in Malaysia especially among the Muslims are incompatibility or irreconcilable differences, infidelity, irresponsible husbands, the involvement of in-laws, financial problems and others. Max Tam, a Divorce and Family Lawyer in Selangor and Kuala Lumpur, stated in his webpage, the top five reasons of divorces in Malaysia is due to infidelity, financial, domestic abuse, lack of communication and lack of intimacy (Max Tam, 2019).

Based on the above findings, both stated that the top reason for divorce cases in Malaysia could be related to the problems that arise from sexual lifestyle. The FSD could result from problems related to either physical or psychological causes. Some physical or medical conditions of an individual can lead to sexual dysfunction which comprises of diabetes, heart disease, neurological diseases, hormonal imbalances, menopause, chronic diseases such as kidney disease or liver failure, alcoholism and drug abuse. Other than that, the side effects of a few medications also affecting sexual desire. Certain medicines that might include are antidepressant drugs. Other than that, it is also stated by Sheryl A. K. & Terri W. (2015) that psychiatric conditions and treatments involved are giving effects on sexual desire changes. Therefore by investigating the level of knowledge, attitude and practice of FSD among women are very important which reflects the women awareness regarding their sexual health and function.

LITERATURE REVIEW

What is 'mati putik'?

Sexual health is a state of physical, emotional, mental and social well-being concerning sexuality where it is not only the absence of disease, dysfunction or infirmity. Sexual health requires an optimistic and courteous approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be achieved and preserved, the sexual rights of all persons must be respected, protected and fulfilled as defined in the WHO webpage in the year 2006 (WHO, 2019).

Ching-Hui Chen et al. (2012) in their article stated that sexual dysfunction or 'mati putik' is referred to a problem that occurs during the sexual response cycle that obstructs the individual from having the satisfaction throughout their sexual activity. Other than that, in WebMD online journal, it stated that sexual dysfunction meant to the difficulty or issue during any phase of sexual response cycle that stops the individual or couple from having satisfaction from the sexual activity. There are four phases of sexual response which are first; excitement, second; plateau, third; orgasm and forth; resolution. Sexual dysfunction is common in 43% women and 31% in male (WebMD, 2019).

Stated by Sheryl and Terri (2015) in their article, throughout their life, 40% of women will be having some types of sexual problems. In the study, the most recent epidemiology regarding the frequency of diagnosable sexual disorder is approaching about 12%. Findings gained by American Psychiatric Association's Diagnostic and Statistical Manual (DSM), at all level of ages, the main prevalence sexual dysfunction in women is low of sexual desire where formerly was referred as hypoactive sexual desire disorder (HSDD) according to DSM 4th Edition, Text Revision (DSM-IV-TR). Other than that, the disorder in female sexual interest and arousal was in the DSM 5th Edition (DSM-5).

A woman with HSDD may describe having less or absence of interest in sexual intercourse which is might due to the inability to reach and response towards the sexual stimuli or due to feeling numbness instead of having a good relationship with a spouse (Sheryl A. K. & Terri W., 2015). There is a misleading concept on "normal" sexual dysfunction because there is no main objective could be measured to describe it. Usually, "normal" sexual dysfunction is explained by a statistical norm, cultural norm or both. Human, as the model of study, leads to varying in the normal function between women and within the same women throughout her lifetime (Sheryl A. K. & Terri W., 2015).

Risk Factors and Prevalence of Female Sexual Dysfunction (*Mati Putik*)

WebMD (2019) stated that sexual dysfunction could result from problems related to either physical or psychological causes. Some physical or medical conditions of an individual can lead to sexual dysfunction which comprises of diabetes, heart disease, neurological diseases, hormonal imbalances, menopause, chronic diseases such as kidney disease or liver failure, alcoholism and drug abuse. Other than that, the side effects of a few medications also affecting sexual desire. Certain medicines that might include are antidepressant drugs. Other than that, it is also stated by Sheryl A. K. & Terri W. (2015) that psychiatric conditions and treatments involved are giving effects on sexual desire changes.

For psychological causes that can affect sexual desire and function are work-related stress and worry, concerning on sexual achievement, marriage or relation problems, depression, feeling of wrongdoings or the past sexual trauma (WebMD, 2019). Sheryl A. K. & Terri W. (2015) also stated that having history on sexual abused and trauma during childhood and puberty has shown adverse effects on the victims' desire. Perceived stress, distraction, self-focused attention or anxiety, personality disorders and body image or self-consciousness are also the causes they have low sexual desire. They are having problems to cope with it.

Other than that, a study done has shown a finding where sexual distress of a woman could lead to female sexual dysfunction too. However, to meet the classification of FSD, a woman needs to have significant distress related to the sexual problems arose. From the study, about 33.6% from the study population felt distressed, and 19.9% of them classified that their condition is an average libido level (Burri, A., & Spector, T., 2011). Also, it is found that age, relationship dissatisfaction and emotional intelligence of an individual also could lead to FSD. Even though the effect between these conditions is small, but it is still significant.

Moreover, ageing is affecting sexual desire too. Proven by the previous study, middle-aged women had the highest frequency of decreased desire with distress (Sheryl A. K. & Terri W., 2015). The intensity of women towards the sexual desire they experienced declining as they are ageing. This is due to the changes in the neuroendocrine which are in decreasing the level of testosterone, changes in neurochemistry and accident change from losing of estrogen. Due to these changes, genital sensation is affected. Individual needs much more significant and extended stimulation to achieve arousal. The decline in estrogen levels may cause vulvovaginal atrophy and dyspareunia, which is related to decreased desire. During the menopause transition, the sexual desire of a woman is affected too. Menopause is a natural occurrence that related to the physical and psychological changes in women. These changes caused a complex phase or stage in life where among the women, the sexual function is affected. (Soheila N., Masoumeh S. & Fahimeh R. Tehrani., 2016). Stated in their article that the prevalence of sexual dysfunction among postmenopausal women is at high rates which is between 68% and 86.5%.

Effect of social factors needed to be included as cause an individual having low sexual desire. Cultural, social and religious values gave unfavorable influence in women's sexual desire, especially those that grew up in very strict and highly restricted cultures or surroundings. Besides, the relationship between partners is also giving effect on women to having low sexual desire. Conflicts that appeared in a relationship, partner's sexual dysfunction such as erectile dysfunction or premature ejaculation in male partner,

stressors that couples are facing such as hardship in finance, career-related factors and family obligations lead to decreased in sexual desire too (Sheryl A. K. & Terri W., 2015).

A study done in a population of women in Iran, using Iranian Female Sexual Function Index (FSFI) in evaluating and examining female sexual dysfunction, it is found that overall prevalence of 31.5% of female sexual dysfunction, 35% incidence of desire problem, 30% incidence of arousal problems, 26.7% incidence of pain problems and 37% incidence of orgasm problems (Molouk Jaafarpour, Ali Khani, Javaher Khajavikhan & Zeinab Suhrabi, 2013). Another survey done by other researchers stated in the article, 20% having problems in desire, 56.7% having problems in arousal sensation, 33.3% having problems in arousal lubricant, 36.7% having problems in orgasm, 6.7% having issues in pain and 20% having issues in enjoyment.

Maria Ida Maiorino, Giuseppe Bellastella & Katherine Esposito (2014) stated in their article that diabetes is an established risk factor in men, but for women, it is not conclusive even though a study has done proved that higher prevalence in women with diabetes compared to women without diabetes. Diabetes mellitus is a common disease in Malaysia; thus, it can be an important study to proceed and discover the relation between the disease and sexual dysfunction. In addition, a study is done involving women that are in the obese category being compared with a control group (women with normal BMI) related to their score on Female Sexual Function Index (FSFI). However, the result showed that women that are obese were not the major contributor to have sexual dysfunction because the percentage of women having FSD only showed a small difference (normal BMI: 83%, obese: 86%). However, changes in weight either increase or decrease could alter the level of sex hormones such as estrogen and androgen which somehow affect the sexual function of an individual (Yaylali, G., Tekekoglu, S. & Akin, F., 2010).

A survey finding done in Klang, Selangor identified other risk factors of female sexual dysfunction. The risk factors listed are the wife's age, husband's age, duration of the marriage, medical illness, menopause, family planning and the frequency of the couple having sexual intercourse (Ishak, I. H., Low, W.-Y., & Othman, S., 2010). A different survey done involved female with gynaecological or rectal cancer. A comparison was made between the survey's results by participants with those cancer and participants without cancer. Results reported that 82.0% of women with gynaecological cancer were having sexual dysfunctions. These women with cancer where having problems with worse in sexual desire, arousal, lubrication, orgasm, satisfaction and pain during sexual intercourse (Li C. C., Rew L. & Chen L., 2014).

Pathophysiology of 'mati putik'

Pathophysiology related to low sexual desire is complex and might appear to involve few aspects which are biological, psychological and social factors that interact with health and illness (Sheryl A. K. & Terri W., 2015). In addition, biological factors cause a decrease in sexual desire by either direct or indirect mechanism. For example, common medical states of an individual, for instance, diabetes mellitus and hypertension and the treatment involve including medication such as antihypertensive giving consequence on having low sexual desire. Other than that, distress associated with sexual symptoms should be present, and most symptoms should last at least for three months and occur at least in 75% of sexual experiences in order to formulate a diagnosis of FSD (Nappi, P. R. E., Cucinella, L., Martella, S., Rossi, M., Tiranini, L., & Martini, E., 2016).

Sexual desire is understood to be regulated by the neuromodulators such as the neurotransmitters and hormones of the excitatory pathway and inhibitory pathway. Excitatory pathway may involve dopamine, norepinephrine, melanocortins and oxytocin meanwhile in inhibitory pathway may include serotonin, opioids and endocannabiniods. The decreasing in the neural activation of the brain parts or regions will associates with the sexual arousal. Besides, insufficient of disinhibition of the brain regions will involves in cognitive processing in women with hypoactive sexual desire disorder where it can reduce in vaginal vasocongestion and lubrication. This possibly will decline the female orgasm (Anita H. C., Sheryl A. K. & Irwin G., 2018).

METHODOLOGY

Study Ethics

The ethical approval was obtained from InternationalIslamic University Malaysia Research Ethical Committee (IREC), [IIUM/504/14/112/REC-2020-BS (KAHS)] to conduct this study.

Study Design and Respondents' Recruitment

This is cross-sectional study in Kuantan, Pahang and the respondent were employed through convenient sampling. Women involved in this study was within the age of 18 to 50 years old and had married. Women that had menopause (average age >50 years old) and having pathological conditions will be excluded. The sample size was be calculated using single proportion formula to calculate the number of respondents needed in this study. The proportion in the population used for this study was from the prevalence of Asian people having sexual dysfunction (FSD) which was 12.0% (Shifren J. L., 2019). The sample size of this study is calculated as below:

$$n = \frac{Z^2 p(1-p)}{d^2}$$

n = sample size
$Z_{1-}\alpha^2$ = 1.96; significant value of p ($p<0.05$)
p = 0.12; expected proportion of population from previous study

d = 0.05; precision decide

Therefore, n = 83. However, this study involved answering the questionnaire, and 10% from the sample population was expected to drop out from this study which gave a total of approximately 9 respondents. Therefore, the total sample size calculated was n = 92 and reached to 100 as a maximum number of respondents.

Study Tools

The questionnaire was divided into three sections namely Section A, Section B and Section C. Section A consisted of demographic data including age, marital status, religion, race, demographic area, educational level, educational stream, employment status and monthly income. Next, Section B consisted of the questions related to knowledge toward female sexual dysfunction (FSD) such as related problems they encounter during sexual activity. This section was providing several options that represent their understanding. Lastly, Section C that consisted of questions related to attitude towards FSD. This section ranked on scale 1 to 5, which indicates strongly disagree to strongly agree. Answers given were given points, and the level of knowledge and attitude were being evaluated based on the percentage (%) of points gained. The questionnaire was being prepared in both English, and Malay language as the expected respondents can be from different races that live in Kuantan, Pahang.

Data Analysis

The data gained was interpreted by using Statistical Package for Social Sciences (SPSS). All data was being checked for its normality before pursuing any statistical analysis. In determining the level of knowledge towards female sexual dysfunction (FSD) among women in Kuantan, Pahang, descriptive frequency table was used. While in determining any significant differences in knowledge, attitude and practice level between different groups of socio-demographic characteristics, Mann-Whitney U Test and Kruskal-Wallis Test were used. Lastly, to determine the correlation/association between knowledge, attitude and practice of FSD, Spearman Correlation Coefficient was being used.

RESULTS

Sociodemographic and Characteristics of Participants

There was 100 total number of respondents that had participated in this study. The mean of age of respondent is 30 and the respondents were all female with different ethnicity, where 81% of respondents were Malay.More than half of the respondents undergo the secondary level of education with 68.0% who had certificate, diploma or degree than followed by 25% tertiary educational level who had Master or PhD. A total of 74 respondents were employed and most of the respondents that had participated in this study were from B40. For geographical characteristics, 60% from the total number of respondents were staying in an urban area, 26% were staying in a sub-urban area, and 13% were staying in the rural area.

Level of Knowledge, Attitude and Practice on Female Sexual Dysfunction

Table 1 represents the scores category for knowledge, attitude and practice on female sexual dysfunction among the respondents. In term of knowledge, it was recorded that the majority of respondents had a high level of knowledge on female sexual dysfunction (*mati putik*) with 59 respondents. For attitude scores, most of the respondents were with a moderate level of attitude towards female sexual dysfunction, with 85 respondents (85.0%). Next, for practice scores, most of the respondents constituted with a low level of attitude, which n=65 (65.0%).

Table 1: Category of knowledge, attitude and practice scores on female sexual dysfunction

Category	Percentage (%)
Knowledge scores	
Low	6.0
Moderate	35.0
High	**59.0**
Attitude score	
Low	9.0
Moderate	**85.0**
High	6.0
Practice score	
Low	**65.0**
Moderate	31.0
High	4.0

Table 2: The correlation of knowledge, attitude and practice

Variables	Correlation coefficient, r_s	*p*-value
Knowledge scores - Attitude scores	+0.316	0.001**
Knowledge score - Practice scores	+0.085	0.042
Attitude score - Practice score	+0.398	0.000**

Note: r-value which is positive correlation; (**) *p*-value is statistically significant (<0.05)

According to Table 2, there is a significant, positive but week strength of correlation of Spearman's correlation coefficient, r_s = 0.316 between knowledge and attitude scores. As for knowledge and practice, the correlation coefficient, r_s = 0.085, shows that there is no correlation between the knowledge and practice scores. Similar to the association between knowledge and attitude scores, the r_s value indicates that the relationship is positive. The result of this association is not significant with the *p*-value of 0.402. As for attitude and practice, r_s, is 0.398 indicates that the correlation is positive with fair strength of the correlation with *p*-value=0.000 shows the result is highly significant.

DISCUSSION

Female sexual dysfunction or also known as 'mati putik' is a condition where women having arousal problem, feeling the need of sexual desire, inability to gain orgasm, experienced pain during sexual intercourse, unable to feel pleasure and having anxiety about their sexual performance. Apart from that, according to statistic made by National Registration Department (JPN), Malaysia recorded a high number of divorce cases and research made by Max Tam (2019), the divorce cases that happened mostly related with problem arose in a sexual relationship between the married couples. Female sexual dysfunction has become one of the maternal problems in Malaysia, where it contributes to the increase in the number of divorce cases. Therefore, this study intended to investigate the level of knowledge, attitude and practice on FSD or mati putik among women in Kuantan Pahang as the case study population.

It has been revealed that the scores for the level of knowledge, attitude and practice illustrated Table 1 is good, moderate and low respectively. This finding can be related with results by Anita et al. (2017) where basic education and information pertaining to any abnormalities or unusual condition regarding sexual health somehow can give a huge impact especially in improving women sexual lifestyle. Besides, by this approach, women with FSD or called patients will provide motivation for them to seek medical help and support. However, from this data findings, can be observed that healthcare providers and social networks were giving least contribution in delivering facts and information related to FSD when these two mediums were the easiest to be reached among people nowadays. On the other hand, finding by Nurgi et al. (2017) stated that social network and mass media helped in delivering health information which then resulting in an improved level of knowledge on health issues in the society.

A large proportion (90.0%) of the participants correctly believed that reduced sexual desire is the primary symptom of female sexual dysfunction (FSD). Meanwhile, majority of participants found that female with sexual dysfunction concern with women that have arousal issues. Other than that, 91.0% of respondents agree that one of the leading causes of high divorce cases in Malaysia is due to problems related to sexual activity as stated by Luqman Zakariyah & Siti Nurafiqah Sapardi (2016) and Max Tam (2019). This proved that majority of the respondents were aware of the current situation regarding divorce cases rate in Malaysia. However, almost all respondents (98.0%) did not know that psychological factors influencing female sexual dysfunction. Proved by finding from Fritzer et al. (2013), distress had shown a statistically significant correlation with sexual dysfunction.

High scores gained in knowledge regarding FSD in this present study was similar to a study done by Asisuodionoe (2011) where she stated that more than half of the respondents in her research also showed a good level of knowledge regarding their sexual health and more than 70.0% of women participated throughout the study are willing to seek for medical help and support after being exposed to female sexual health. As compared to these findings, an increase in knowledge together with an increase in awareness in FSD can improve the level of attitude and practice among women.

Prior to having a good knowledge of FSD, it is indicated that the scores of attitudes were at moderate level. Approximately 61.0% strongly agreed that FSD should be taught to all women, proven that women mostly did not sufficient information and fact regarding their sexual health which is crucial to be implemented after they are getting married or experienced sexual intercourse. Nicolai et al. (2014) mentioned in their finding that lack of knowledge is a reason not to inquire about sexual problems which can be implemented with present results. It has also been found that respondents did not seem aware that chronic diseases and a healthy diet will influence the contribution of having sexual dysfunction. However, Nicolai et al. (2014) stated in their findings that there was a relationship between chronic diseases with sexual dysfunction in both women and men as their study involved participants with cardiac conditions and endometriosis. In addition, Artini Abidin et al. (2016) also stated in their findings where overweight and obese women reported to have sexual dysfunction even though the probability was low.

More than half of the women involved in this study demonstrated a poor level of practice on female sexual dysfunction with n=65 (65.0%). This finding, in some respect contradicting with the results of the level of knowledge and attitude regarding FSD. Overall, the findings presents that majority of the respondents never encounter practices relating to FSD, which results in a poor level of practice scores.

Yet, there is no study present about KAP on female sexual dysfunction solely especially in Malaysia; thus, no comparison can be made over this issue. Therefore, the findings from this study revealed that women in Kuantan, Pahang possess an excellent knowledge of FSD but not promising positive attitude and practice in seeking medical care and treatments to encounter this issue. The importance of exposure and awareness regarding FSD was emphasized by Aisuodionoe (2011), where it can improve women's perception of this issue.

Besides that, the correlation between KAP scores, were evaluated. Knowledge-attitude scores and attitude-practice scores with *p*-value of 0.001 and 0.000 respectively had shown a positive correlation. Similarly, a study done by Sung et al. (2015) showed a positive correlation in the relationship between knowledge-attitude scores too. However, the correlation between knowledge-practice scores cannot be proven in this study as the *p*-value was more than 0.05. According to Pallant (2010), the strength of the correlation was highly influenced by the sample size of the study. To compare this finding with present study, there was a clear concept or idea where when a woman was prepared by a good level of knowledge on FSD, and it will influence the level of attitude and practice too. This is because women with lack of knowledge regarding their sexual health were less aware of their sexual lifestyles and they have the possibility to deny and refuse to seek for treatments thus no improvement can be made relating with the attitude and practice (Jeroen et al., 2015). Furthermore, Malaysian people were not being exposed enough with matters associated with female sexual dysfunction, and their awareness is still low which manifest unsatisfactory outcomes in the level of knowledge, attitude and practice.

CONCLUSION

The participants in this study demonstrated a high level of knowledge in female sexual dysfunction or *mati putik*, but moderate and low scores of attitudes and practice. Significant correlations were identified between elements of knowledge and attitude suggesting that increases awareness on the risk factors on FSD or *mati putik* are vital. Future research on FSD among women in Malaysia should be conducted in order to understand the internal and external risk factors which leads to better quality of female sexual health in Malaysia.

ACKNOWLEDGEMENT

The authors would like to express the gratitude to the management of Kulliyyah of Allied Health Sciences, IIUM Kuantan and participants of this study. This research was supported by the IIUM Flagship-Research Initiative Grants 2019 (IRF19-019-0019).

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