ORIGINAL ARTICLE

Sexuality in Later Life: Sexual Desire and Satisfaction among Malay Older Persons in Malaysia

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ABSTRACT

Introduction: Malaysia is known for its shy and prudent community that indirectly causing the stigma and taboos related to later life sexuality. This study aimed to explore the sexual desire and satisfaction in later life among the Malay ethnic elderly in Malaysia who were living in the urban area, where discussions about sexual issues are perceived less sensitive and stigmatized. **Methods:** A total of 234 eligible elderly were approached but only 160 older people completed the questionnaire, sampled using multistage cluster sampling method. Face-to-face interviews were conducted using questionnaires consisted of sociodemographic characteristics, cognitive function, perceived health status, presence of chronic illnesses, smoking history, disability, perceived sexual problems, sexual desire and satisfaction. Multiple logistic regression was conducted to determine the associated factors for sexual desire and satisfaction, respectively. All tests significant level was set at 0.05. **Results:** Majority of the respondents were having sexual desire (53.8%) and not satisfied with their sexual life (51.3%), with elderly women (55.7%) experienced more sexual problems compared to men. The results showed male, being married, good perceived health and absence of arthritis were the significant contributing factors of better sexual desire. Having good health perception, being married and absence of sexual problems were significantly predicting better sexual satisfaction. **Conclusion:** The study emphasized the multifactorial aspects contributed towards the sexual dissatisfaction among the respondents despite having desire for sexual activity. Focus should be given to elderly women who tend to have multiple chronic diseases and more likely a widow due to their longer life expectancy.

Keywords: Sexuality, Desire, Satisfaction, Older persons, Urban

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INTRODUCTION

Population ageing is a global phenomenon that brings along various implications. Many ageing related researches have been conducted to understand better ageing and older persons in order to create a more productive, healthy and active ageing, in line with the WHO recommendations (1). Among other issues related to ageing and older persons is sexuality in later life. Although it is a fundamental human need and living process and linked with better quality of life among older persons (2), it is often a neglected research area especially among the Asian countries including Malaysia.

Older persons are assumed to have less interest and ability in sexual activities, especially with advancing age, which are partly related to the physical, psychological and sociological changes experienced in later life (3). The decline in sexual activity, libido and potency in men was mainly correlated with the reduction of serum total and free testosterone level (4). However, a review on sexual expression in later life suggested that, majority men and women remain sexually active into their 70s and 80s, with aging-related physical changes do not necessarily lead to decline in sexual functioning. However among those who are still sexually active, having good physical and mental status, positive attitudes towards having sex at old age and also presence of healthy partner are necessary in order to continue sexually active in later life (5). Different mortality influenced by gender and widowhood affects partnered heterosexual sexual activity through the availability of potential partners (6). Sexuality is an integral part of human life regardless of age. While much has been written about adult and adolescent sexuality, relatively little is available about the sexuality of older persons especially among the Asian

countries, including Malaysia. Sexuality is a human need for belonging and being close with someone, as a need for affiliation and physical pleasure is typical for all ages in the life span development (7). It may include touching, caressing, fantasy, masturbation, physical closeness and the warmth generated by emotionality (8). Literatures have shown that sexuality has a significant impact on individual's self-esteem, well-being, and functioning; it includes personal, cultural and social identity, and not just sexual orientation and behaviour (9). Most research findings emphasized the need for sexuality and intimacy is maintain in old age but the way they are being expressed may differ and is affected by the taboos of being sexually active in later life.

Older persons are also commonly linked with multiple chronic illnesses and polypharmacy. Not only the illnesses contributed to lack of interest towards sex, but the medications used to treat these conditions are also linked to impaired sexual function, including medications for hypertension (10). Declines in mental health such as depression and cognitive function which again very synonym with older persons can also affect sexual expression (11). However, the stigma and taboos related to sexuality and older persons are causing the issues perceived as less importance and restrain older persons from discussing their sexuality problems with medical personnel, rather than getting counselling and support on how to improve and enjoy their sexual life.

Being a developing country, Malaysia is experiencing rapid ageing and is expected to become an aged nation by 2030. The ageing process is expected to be faster than the development level that makes, facing the population ageing is a big challenge for Malaysia. Therefore, identifying contributing factors that predict sexual desire and satisfaction among older Malaysians are a necessity, in order to ensure older persons can still enjoy their sexual life and also to create better awareness among the elderly and also relevant authorities such as the medical personnel on the importance of these aspects to older persons.

MATERIALS AND METHODS

Study setting and respondents

The study was conducted in the Federal Territory of Kuala Lumpur and the locations were selected based on cost effectiveness to conduct a fundamental research on a minimal cost. A total of 191 older adults who live in a public housing in the capital city of Kuala Lumpur, Malaysia starting December 2014 to February 2015 were recruited for the study. Using a multi-stage cluster sampling method, twelve number of neighbourhood associations were randomly selected based on the calculated cluster size, from a listing provided by Kuala Lumpur City Hall People's Housing Project and Public Housing. These associations were contacted to gather residents to participate in a survey at a public area in the neighbourhood. The inclusion criteria for the respondents were: i) community-dwelling older persons Malaysians aged 60 and above, ii) ambulatory, and iii) capable of completing questionnaire orally.

Sample size for this study was calculated based on one proportion formula for prevalence study. The calculation was done for sexual desire and sexual satisfaction, separately. The precision and significant levels were set at 8% and 0.05 respectively, for both calculations. For sexual desire, using prevalence of 45.4% from previous study (12), including 10% non-response rate, a total of 166 respondents were required. For sexual satisfaction, using prevalence from prevalence of 35.0% from prevalence study (12), including 10% non-response rate, a total of 153 respondents were required. Based on largest sample size, sample size of 166 was used in this study.

The study employed a face-to-face interview technique to collect data using standardized questionnaire which has been previously validated in other studies and reliable for use by trained interviewers who are the members of the research team. Informed consent was obtained prior to survey administration in line with the requirements of the university's Ethics Review Board.

Measurement tool

The questionnaire used consisted of 9 sections, namely sociodemographic characteristics, cognitive function, perceived health status, presence of chronic illnesses, smoking history, disability, perceived sexual problems, sexual desire and satisfaction. Cognition was measured using the 10-item Elderly Cognitive Assessment Questionnaire (ECAQ) which was used for screening cognitive impairment among community-dwelling older persons in Malaysia and other developing countries (13). The total score was categorized as normal or cognitive impairment. A score of 6 or less considered as normal while score of 7 or above is consider as having cognitive impairment. Perceived health status was measured by asking the respondents how they rated their current health on a 5-point Likert scale with responses ranging from poor to very good. Assessment of chronic illnesses was done by asking whether they had any of the chronic health problems in the past six months, including hypertension, diabetes, arthritis, and vision and hearing problems. An item measuring whether the person has ever smoked cigarette was used to assess smoking history. The 12-item World Health Organization Disability Assessment Schedule (WHODAS) was used to asses activity limitations and participation restriction (ie. Disability) in the prior month (14).

Data analysis

The data were analysed using IBM Statistical Package for Social Sciences (SPSS) version 21.0. Descriptive analysis was performed on all variables, followed by simple logistics regression to determine the relationship between

sexual desire and sexual satisfaction with study factors. Meanwhile, multiple logistics regression was conducted to develop the predictive model for sexual desire and sexual satisfaction among the participants. Variable with p-value <0.25 at univariate level was considered for variable selection stage. Variable selection was done using stepwise, backward and forward selection. The selected significant variables were then run using enter method as the final model. The level of significance was set at 0.05.

RESULTS

A total 191 respondents participated in this study. However, after the exclusion of cases with incomplete data and missing value, the final sample consists of 160 respondents which represent for 83.7% response rate. The mean age of the respondents was 65.33 (SD = 5.87) years old with 56.9% of the respondents were male. Majority of the respondents were having formal primary education (64.4%), currently working (81.3%) and married (64.4%). Characteristics of the respondents are shown in Table I.

The prevalence of having sexual desire was 53.8%. Among those who having sexual desire, only 2.4% desired sexual intercourse only, 4.7% desired other than sexual intercourse only and 92.9% desired both. The prevalence of sexual satisfaction was 48.8%, corresponding to 51.3% for sexual dissatisfaction. Among those with sexual dissatisfaction, the reason for the dissatisfaction was due to lack/no partner (64.7%), having physical problem (27.1%), partner is not interested (17.6%), partner is ill (9.4%) and have psychological problems (5.9%).

At multivariate level, variable selection analysis using stepwise, backward and forward method revealed gender, marital status, perceived health status and present of arthritis were the significant contributing factors of sexual desire (Table II). Final model using enter method revealed a highly significant model [χ^2(df) = 137.19(4), p-value<0.001] with 76.9% variation of the dependent variable was explained by the model (Nigelkerke R2 = 0.769). The Hosmer-Lemeshow test showed a non-significant p-value and a classification table of 88.8% indicative of model fit. Female and having arthritis were 0.24 (95% CI: 0.07, 0.89; p-value = 0.032) and 0.25 (95% CI: 0.08, 0.79; p-value = 0.018) times the odd less likely to have sexual desire towards their partner respectively. However, being married and having a good perceived health increase of having sexual desire by 290.1 (95% CI: 46.10, 1825.54; p-value <0.001) and 16.28 (95% CI: 4.07, 65.11; p-value<0.001) times the odds respectively.

The result of the variable selection of multiple logistics regression for sexual satisfaction showed marital status, perceived health status, having sexual problems and

Table I: Characteristics of the respondents (N=160)

Factor	Frequency	%
Age (Year)	65.33(5.87)*	
Gender		
Male	91	56.9
Female	69	43.1
Education level		
No formal education	15	9.4
Primary	103	64.4
Secondary	38	23.8
Tertiary	4	2.5
Working status		
Not working	30	18.8
Currently working	130	81.3
Household income (RM)		
≤1000	51	31.9
1001 – 2000	66	41.3
≥2000	43	26.9
Marital status		
Single/Widowed/Separated	57	35.6
Married	103	64.4
Cognition score(ECAQ)		
< 7	18	11.2
≥ 7	142	88.8
Perceived health status		
Moderate	59	36.9
Good	101	63.1
Chronic disease		
Hypertension		
No	40	25.0
Yes	120	75.0
Diabetes		
No	96	60.0
Yes	64	40.0
Arthritis		
No	102	63.8
Yes	58	36.3
Hearing problem		
No	144	90.0
Yes	16	10.0
Vision problem		
No	132	82.5
Yes	28	17.5
No of disease present		
0	13	8.1
1	47	29.4
≥2	100	62.5
Sexual problems		
Male		
No	65	72.2
Yes	25	27.8
Female		
No	31	44.3
Yes	39	55.7
Smoking status		
Never smoke	83	51.9
Quit smoking	45	28.1
Currently smoking	32	20.0
WHODAS total score	8.46(7.13)	
Sexual activity (with partner)		
Sexual intercourse	85	74.6
Holding hands	111	97.4
Hugging	111	97.4
Kissing	106	93.0
Masturbation	18	15.8
Sexual desire		
Yes		
Sexual intercourse	86	53.8
Any type of contact other than intercourse	2	2.4
Both	4	4.7
No	79	92.9
	74	46.3
Sexual satisfaction		
Yes	78	48.8
No	82	51.3
Physical problems	23	27.1
Psychological problems	5	5.9
Partner is ill	8	9.4
Partner is not interested	15	17.6
Lack/ No partner	55	64.7

* Mean value (Standard Deviation)
Abbreviation: ECAQ = Elderly Cognitive Assessment Questionnaire; WHODAS = World Health Organization Disability Assessment Schedule.

Table II: Association of study factors with sexual desire using simple and multiple logistics regression

Factor	Simple Logistics Regression		Multiple Logistics Regression	
	Crude OR[a] (95 % CI)	p-value	Adj. OR[b] (95 % CI)	p-value
Age	0.86 (0.80, 0.93)	<0.001	-	-
Gender	0.43 (0.23, 0.82)	0.010	0.24 (0.07, 0.89)	0.032
Education level				
Primary	2.8 (0.84, 9.38)	0.094	-	-
Secondary	7.7 (1.99, 29.80)	0.003	-	-
Tertiary	2.75 (0.28, 26.61)	0.382	-	-
Working status	0.29 (0.11, 0.71)	0.007	-	-
Household income				
RM1001 – RM2000	1.48 (0.71, 3.10)	0.299	-	-
≥RM2000	0.84 (0.37, 1.89)	0.666	-	-
Marital status	121.58 (27.23, 54.79)	<0.001	290.10 (46.10, 1825.54)	<0.001
Cognition (ECAQ)	11.59 (2.57, 52.32)	0.001	-	-
Perceived health status	4.69 (2.35, 9.38)	<0.001	16.28(4.07, 65.11)	<0.001
Chronic disease				
Hypertension	1.40 (0.68, 2.86)	0.361	-	-
Diabetes	0.63 (0.33, 1.19)	0.155	-	-
Arthritis	0.25 (0.13, 0.50)	<0.001	0.25 (0.08, 0.79)	0.018
Hearing problem	0.85 (0.30, 2.38)	0.751	-	-
Vision problem	0.49 (0.21, 1.13)	0.095	-	-
Number of disease present				
1	2.50 (0.70, 8.92)	0.158	-	-
≥ 2	0.67 (0.21, 2.15)	0.504	-	-
Sexual problem	0.57 (0.30, 1.07)	0.082	-	-
Smoking status				
Quit smoking	0.86 (0.42, 1.78)	0.685	-	-
Currently smoking	4.66 (1.74, 12.49)	0.002	-	-
WHODAS total score	0.94 (0.89, 0.98)	0.007	-	-

[a]Simple logistics regression
[b]Multiple logistics regression
Abbreviation: ECAQ = Elderly Cognitive Assessment Questionnaire; WHODAS = World Health Organization Disability Assessment Schedule; OR = Odds ratio; 95% CI = 95% confidence interval.
Note: the lowest reference level is used as reference level for the categorical variable, for example: male, no formal education and not working for gender, education level and working status, respectively.

Table III: Association of study factors with sexual satisfaction using simple and multiple logistics regression

Factor	Simple Logistics Regression		Multiple Logistics Regression	
	Crude OR[a] (95 % CI)	p-value	Adj. OR[b] (95 % CI)	p-value
Age	0.82 (0.76, 0.89)	<0.001	-	-
Gender	0.50 (0.27, 0.95)	0.035	-	-
Education level				
Primary	2.13 (0.64, 7.15)	0.219	-	-
Secondary	6.75 (1.76, 25.83)	0.005	-	-
Tertiary	2.75 (0.28, 26.61)	0.382	-	-
Working status	0.34 (0.14, 0.79)	0.012	-	-
Household income				
RM1001 – RM2000	1.58 (0.76, 3.30)	0.222	-	-
≥RM2000	1.15 (0.51, 259)	0.743	-	-
Marital status	77.41 (17.66, 339.24)	<0.001	174.40 (30.43, 999.65)	<0.001
Perceived health status	6.39 (3.05, 13.37)	<0.001	12.91 (4.23, 39.42)	<0.001
Chronic disease				
Hypertension	1.22 (0.60, 2.51)	0.582	-	-
Diabetes	0.47 (0.24, 0.89)	0.021	-	-
Arthritis	0.32 (0.16, 0.62)	0.001	-	-
Hearing problem	0.60 (0.21, 1.74)	0.347	-	-
Vision problem	0.52 (0.23, 1.22)	0.133	-	-
Number of disease present				
1	3.05 (0.86, 10.80)	0.084	-	-
≥ 2	0.72 (0.22, 2.29)	0.572	-	-
Sexual problem	0.47 (0.24, 0.89)	0.021	0.24 (0.08, 0.74)	0.013
Smoking status				
Quit smoking	0.72 (0.34, 1.51)	0.383	0.63 (0.18, 2.19)	0.463
Currently smoking	3.03 (1.25, 7.32)	0.014	3.92 (1.01, 15.24)	0.049
WHODAS total score	0.91 (0.86, 0.96)	0.001	-	-

[a]Simple logistics regression
[b]Multiple logistics regression
Abbreviation: ECAQ = Elderly Cognitive Assessment Questionnaire; WHODAS = World Health Organization Disability Assessment Schedule; OR = Odds ratio; 95% CI = 95% confidence interval.
Note: the lowest reference level is used as reference level for the categorical variable, for example: male, no formal education and not working for gender, education level and working status, respectively.

smoking status were the significant contributing factors for sexual satisfaction when other factors were controlled among the respondents (Table III). The final model using enter method, consisting on all significant variables showed highly significant model [χ^2(df) = 124.76(5), p-value<0.001] with 72.2% variation of the dependent variable was explained by the model (Nigelkerke R^2 = 0.722). The Hosmer-Lemeshow test showed a non-significant p-value and a classification table of 86.9% indicative of model fit. Married respondents increase sexual satisfaction by 174.4 times the odds compared to being single (95% CI: 30.43, 999.65; p-value <0.001). Having good perceived health increase sexual satisfaction by 12.91 times the odds compared to moderate health (95% CI: 4.23, 39.42; p-value <0.001). Respondents with sexual problem decrease sexual satisfaction by 0.24 times the odds compared to respondents without sexual problem (95% CI: 0.08, 0.74; p-value = 0.013). Smoking status was marginally significant contributing factor towards sexual satisfaction. Respondents who currently smoking were 3.92 times the odds more likely to have sexual satisfaction compared to respondents who never smoke (95% CI: 1.01, 15.24; p-value = 0.049).

DISCUSSION

Sexual desire, or commonly refer as libido, is an intense sexual feeling that a person has for another person, which can be driven by both physical and psychological factors. It can vary greatly between individual people, between men and women and also person of different age which lead to no agreement on "normal" level of sexual desire. Although available researches consistently suggest that increasing age is associated with a decreased interest in sex (15-17), the findings of this study highlighted

the presence of sexual desire among more than half of the respondents. However, the sexual dissatisfaction experienced by them indicates the presence of barriers towards the expression of their sexual activity, which require more exploration and attention (18). A study among individuals 50 years old and above in Mumbai, India reported that, although majority of sexually active respondents were those aged 60 years old and younger, more than 50% of those older were also sexually active, with as high as 70% subjects perceived that their age negatively affected their sexuality (19). Additionally, the same study also found the significant role of gender and health status in affecting sexual desire, with a greater number of women subjects at all age groups in their sample reported "very much" decrease in their sexual desire (66.7%) and 56.7% men reported their sexuality being affected by their deteriorating health (19).

Although having the desire for sexual activity, older persons may not be able to express it properly which may be related to the taboos and stigma, that leads to the dissatisfaction. Hence, community awareness on this issue is important to obviate the stigma related to sex in later life.

Although this study reported higher proportion of women experiencing sexual problems, the gender difference was small. Previous study (20) found that the difference in overall rates between men and women is mainly explained by the relative shortage of man which is in turn due to disparity in ages between partners with women having higher life expectancy and less likely to have sexual partner of comparable age in later life. Men not only tend to be older than their spouses but the higher longevity among women also results in a shortage of men in the later life period (3). Apart from the unavailability of partner and the deteriorating health status which is commonly associated with co-morbidity as a result of longevity, physical and social environment, education, previous negative experiences, cultural background and relationship with partner are also reported to influence women's sexual desire and interest (21). The health status of the spouse or partner is also an important factor towards disparity in sexual desire and satisfying sexual life. The less likelihood of remarry among women after the death of their husband or partner compared to men may also contributed towards low sexual drive and desire among older women. The effects of the ageing process on sexuality and sexual function also depends upon the mental and physical health status of an individual (8, 22). Presence of illness and deteriorating health have been reported as the major reason for reduced sexual desires and activity in men , while women reported loss of partner as the major factor (22, 23).

The findings from this study also revealed smoking status marginally significant factors towards sexual satisfaction. Surprisingly, those who was currently smoking showed to have better sexual satisfaction compared to those never smoked. This is rather shocked findings as previous studies have reported that smoking increases sexual dissatisfaction (24, 25). One plausible explanation for this contradict findings is that the respondent's responses in this study might be influenced by bias. Due to the issue being too sensitive, respondent might opt not to report their sexual problem especially dissatisfaction.

Same as any other study, this study present with few limitations. First, the study design used (cross-sectional) which raise issue for causal relationship. Study design such as cohort study is recommended for future research. Secondly, due some issue being too sensitive, response might be affected by respondent's bias. Future research that can minimize this issue is highly recommended.

CONCLUSION

The findings of this study reflect the existence of sexual desire and dissatisfaction among the elderly, with sexual problems being dominated among elderly women. Gender, marital status, perceived health status and present of arthritis are among associated factors for sexual desire while marital status, perceived health status and sexual problem are among associated factors for sexual satisfaction. This study findings highlighted the modifiable associated factors of decreased sexual desire and satisfaction among elderly that can be intervened in order to improve elderly sexual life.

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