

A SURVEY OF KNOWLEDGE AND PERCEPTIONS OF MENOPAUSE AMONG YOUNG TO MIDDLE-AGED WOMEN IN FEDERAL TERRITORY, KUALA LUMPUR, MALAYSIA

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ABSTRACT: Prevalence and signs and symptoms of menopause have been extensively studied among Malaysian women but no one had investigated the level of knowledge and perception of menopause. This study aimed to examine the knowledge and perception of menopause among young to middle aged women (15 to 49 years old). A cross-sectional survey using 20-items questionnaire was conducted in three randomly chosen districts in Federal Territory, Kuala Lumpur. Women in this survey were aware of the meaning of the term menopause and its symptoms. However, the majority lacked comprehensive understanding about the health risks associated with menopause. Commonly cited sources of knowledge were magazines and family members. Lack of official sources for accurate information on menopause was reported. Communication with health care personnel regarding menopause was uncommon. An exploration into respondents' perceptions on menopause revealed that the majority displayed positive thinking towards menopause. Young respondents seemed to have better perception regarding menopause compared to middle aged women. Although the women had good knowledge about menopause, they expressed feelings of sadness and nervousness upon the approach of their own menopause. Our data provides insight on the knowledge and perception of menopause that will guide future public health initiatives for premenopausal women in order for them to cope better when approaching this stage of life cycle. (*JUMMEC 2007; 10(2):22-30*)

KEYWORDS: Premenopausal women, knowledge, perception, menopause, urban

Introduction

The exact age of menopause varies from population to population. In Malaysia, the average age of menopause among Malaysian women has been determined to be 50.7 years (1). The average life span of Malaysian women has been reported to have increased from 71.6 years in 1980 to 76.3 years in year 2006 (2). This implies that a significant proportion of Malaysian women live one third of their lives after menopause. Therefore, these women spend a great proportion of their lives in menopause, experiencing acute menopausal symptoms and associated adverse health as well as psychological effects.

Menopause can have a significant effect on a women's quality of life. Their health needs change significantly and it is important that women become aware of the new health risks they face and that there are options for preventing those risks. Studies revealed that women may avoid and reduce many adverse emotional and

psychological symptoms of menopause by educating themselves about menopause to better equip themselves when approaching this stage of life cycle (3,4). Knowing more about menopause might empower women to cope better with menopausal changes (5,6). It has been suggested that lack of knowledge regarding menopause makes women more frightened when it is time to deal with menopause and this has negative effects on their emotional state (7). Changing women's perceptions on menopause by increasing their knowledge on menopause may cause less emotional disturbance (8).

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Study also revealed that stigma about menopause begins early in life, partly due to little accurate information or education about this life phase among young women, unless an open and proactive view is stressed by society or families (9). Also, culture and societal influence were discovered to play a role in determining how individuals think about menopause (10). Until quite recently, it was not the norm for a Malaysian woman to seek advice regarding symptoms during her transition into menopause. Sweating, aches and pains, insomnia were said to be part of growing old and are accepted by many Malaysian women (11).

Several local studies regarding menopause have put much emphasis and weight on the findings of prevalence, physiology, menopausal symptoms, and hormone replacement therapy (HRT) (12, 13). Little has been said and viewed on the knowledge and perception of Malaysian women on menopause and no studies have been conducted to address this issue among the premenopausal Malaysians. Therefore, this study aimed to investigate the young adults and middle-aged Malaysian women regarding their level of knowledge and perception of menopause.

Methods

A cross-sectional interview survey was conducted in the Federal Territory, Kuala Lumpur. The target population was young to middle-aged adult women, aged 15 to 49 years old. Based on the Population and Housing Census of Malaysia 2000 (14), total female population in Federal Territory, Kuala Lumpur was approximately 400,000. The calculated sample size was 385 based on margin error of 5% and 95% confidence intervals.

Two stage sampling methods were implemented. Random procedures by drawing lots were used to select three districts in Federal Territory and the selected districts were Ampang, Setapak and Petaling. In each district, total sample to be collected was calculated based on a proportional sampling of the total female population in the respective district. One town was selected at random by drawing lots in each of the districts. Subsequently, the households were selected from randomly selected list of addresses by random sampling scheme. Only one eligible member was randomly selected in each household. Where the respondents were not at home or not in a position to respond (e.g., due to busy work schedule or refused to be interviewed), the researcher would move on to the next household in the list of the selected addresses.

Data collection was conducted by face-to-face interviews using structured questionnaires as the interview guide. Interviews were carried out by one

interviewer throughout the entire survey. The interviewer was trained to address the questions identically so that the questions have same meaning to all respondents. A questionnaire or interview guide consisting of twelve pages (averaging 15 minutes to complete) was developed for the use in this study. Health professionals were invited to examine and to validate the questionnaire, and after their approval, it was pilot tested. The questionnaire was pre-tested on a volunteer sample of twenty subjects before it was administered to the study participants. Complete questionnaire data were analysed for its reliability. Demographic questionnaire included questions on age, race, religion, highest educational level, occupation, marital status and menstrual status. The knowledge section assessed the respondents' understanding on the definition of menopause, signs and symptoms, associated health risks, treatment, source of information about menopause. Respondents were asked on perception of menopause in general and also how they perceive the approach of their own menopause.

The study was conducted after approval had been obtained from the Medical Ethics Committee, University of Malaya Medical Centre, Kuala Lumpur. All participants were informed of the objective of the study and written consents for interview were received from the respondents.

Data Analysis

Data entry and analysis was performed in SPSS version 13.0 (SPSS Inc, Chicago, Ill, USA). Missing data were corrected and data were presented as mean \pm SD for continuous variables with normal distribution, median for continuous variables without normal distribution and proportions for categorical variables. The analysis was considered to be statistically significant at $p < 0.05$.

Results

Particulars of Respondents

A test of internal consistency conducted with the overall study sample, achieved a Cronbach alpha coefficient of 0.77, represent an acceptable level of internal consistency. The total respondents interviewed in this study were 399. The response rate was 84.7%. Premenopausal (n=3) and postmenopausal (n=1) women were excluded from the analysis.

Table 1 shows the socio demographic profile of the respondents. The mean age of the respondents was 28.7 years (SD=9.7); 190 (38%) of whom were young adults (15-24 years old) and 245 (62%) respondents were middle-aged women (25-49 years). From the total 395 subjects, 45.6 % were Malays, 31.9% Chinese and 21.7% Indians. Majority of the respondents have at least

Table 1. Socio demographic profile of women who participated in the study (n=395)

Sociodemographic	n	%
Ethnicity		
Malay	180	45.6
Chinese	126	31.9
Indians	86	21.7
Others	3	0.75
Age (years)		
Young Adults 15-24	150	38.0
Middle-aged		
25-34	135	34.2
35-44	81	20.5
45 and above	29	7.3
Level of Education		
Secondary School	195	49.4
Diploma	72	18.2
Tertiary	128	32.4
Marital Status		
Single	169	42.8
Married	225	57.0
Widowed	1	0.3
Occupational group		
Professional	77	19.5
Clerical Staff	80	20.3
Technician & Semi Professional	90	22.8
Staff of Retail & Sales Outlets	6	1.5
Handicraft & Sales of Products	1	0.3
Support staff	5	1.3
Student	111	28.1
Housewife	14	3.5
Jobless	11	2.8

some secondary education (49.4%), none of the respondents were illiterate and 32.4% were university graduates.

Knowledge of Menopause

Respondents had good knowledge of the definition of menopause, and definitions given varied widely. The study showed that 89.0% (95% CI, 85.8 to 92.0%) agreed that menopause refers to permanent cessation of menstruation, 72.2% (95% CI, 67.7 to 76.6%) noted menopause happens when ovaries stop estrogen production, and 62.8% (95% CI, 58.1 to 67.6%) believed menopause begins after age 50 years. A total of 216 respondents (54.6%; 95% CI, 49.8 to 59.6%) associated hot flushes as the physiological manifestations of menopause and 228 respondents (57.9%; 95% CI, 52.9 to 62.6%) defined menopause as a condition in which the ovaries stop functioning. Only ninety-nine respondents (24.8%; 95% CI, 20.8 to 29.3%) described menopause as any women above 35 years without having any menstrual period for one year. On the average, middle-aged women were more knowledgeable on the definition of menopause compared to young adults although the difference was not significant.

Majority of the respondents ($n=160$, 40.5%; 95% CI, 35.7 to 45.4%) noted menopause happens at the age of 51 to 55 years old. A total of one hundred and three (26.1%; 95% CI, 21.8 to 30.4%) accurately determined the onset of menopause generally occurs at age 46 to 50 years old. A total of twenty-four respondents (6.0%; 95% CI, 3.7 to 8.4%) noted that menopause happens at age 66-70 years old. Knowledge on age of menopause was generally better among middle-aged respondents compared to young adult respondents even though the difference was not significant.

There were no significant differences among respondents from all ethnic groups in the knowledge of the definition of menopause. The results also did not indicate that tertiary educated respondents were more knowledgeable than secondary school educated women.

Knowledge on Signs and Symptoms

Generally, all respondents have reasonably good knowledge on signs and symptoms attributed to menopause. Majority (86.5%; 95% CI, 83.2 to 89.9%) identified depression as a sign and symptom of menopause. Approximately 85.6% (95% CI, 82.1 to 89.0%) reported irritability as sign and symptom of menopause, whereas 80.5% (95% CI, 76.6 to 84.4%) noted vaginal dryness, 77.5% (95% CI, 73.4 to 81.6%) forgetfulness, 74.9% (95% CI, 70.7 to 79.2%) lethargy,

67.6% (95% CI, 63.0 to 72.2%) hot flushes, 67.1% (95% CI, 62.5 to 71.7%) skin dryness, 63.5% (95% CI, 58.8 to 68.3%) no sexual desire and 60.0% (95% CI, 55.2 to 64.8%) excessive sweating. Other signs and symptoms identified were weight gain 50.9% (95% CI, 46.0 to 55.8%), urine leakage 53.4% (95% CI, 48.5 to 58.3%), hair loss 49.1% (95% CI, 44.2 to 54.0%) and painful intercourse 48.9% (95% CI, 43.9 to 53.8%). There were significant difference between the young adults and middle-aged respondents for signs and symptoms of forgetfulness, vaginal dryness and no sexual desire. Significantly more middle-aged respondents noted vaginal dryness ($p<0.05$) and no sexual desire ($p<0.001$) compared to young adult respondents (Table 2). No differences were noted among ethnic groups for any of these signs and symptoms of menopause.

Majority (84.3%; 95% CI, 80.7 to 87.9%) cited signs and symptoms of menopause should be treated while 15.7% (95% CI, 12.1 to 19.3%) viewed them as a natural part of a woman's life and thus did not necessarily require treatment. For knowledge about ways to overcome signs and symptoms of menopause, most respondents quoted exercise (82.3%; 95% CI, 78.5 to 86.1%), vitamin and food supplement intake (76.5%; 95% CI, 72.3 to 80.6%) and stop smoking (for those who smoke) (66.8%; 95% CI, 62.2 to 71.5%). More than half (54.4%; 95% CI, 49.5 to 59.3%) did not agree that hormone replacement therapy can effectively control symptoms of menopause.

Findings also revealed that most respondents suggested no definitive treatment for menopause. Only 45.6% (95% CI, 40.7 to 50.5%) of the respondents agreed on hormone replacement therapy as a treatment option. Nearly half (45.8%; 95% CI, 40.9 to 50.7%) believed in traditional remedies for treatment of menopause.

Knowledge on associated health risks of menopause, respondents were much more likely (76.2%; 95% CI, 72.0 to 80.4%) to know that osteoporosis risk increased with menopause than to know that heart disease risk increased (36.5%; 95% CI, 31.7 to 41.2%) despite the much higher prevalence and severity of heart disease as a health problem of menopausal women. Findings also indicated that not many respondents associated breast cancer (32.2%; 95% CI, 27.5 to 36.8%), diabetes (37.0%; 95% CI, 32.2 to 41.7%), colon cancer (28.6%; 95% CI, 24.2 to 33.0%), stroke (40.0%; 95% CI, 35.2 to 44.8%), elevated blood pressure (43.8%; 95% CI, 38.9 to 48.7%) and cervical cancer (48.4%; 95% CI, 43.4 to 53.3%) as health risks associated to menopause (Table 3). Young adult respondents were more knowledgeable than middle-aged respondents on health risks associated to menopause. Young adults were significantly more aware that heart disease, diabetes, colon cancer, high

Table 2. Knowledge of young adult and middle-aged women on signs and symptoms of menopause (n=395).

Signs and symptoms	Total n=395 n (%)	Young adult n=150 n (%)	Middle-aged n=245 n (%)	p value
Irritability	338 (85.6)	126 (84.6)	216 (86.7)	0.448
Depression	342 (86.5)	122 (81.3)	221 (88.8)	0.061
Forgetfulness**	306 (77.5)	131 (87.3)	179 (68.3)	0.001
Vaginal Dryness*	318 (80.5)	109 (72.7)	210 (84.3)	0.050
No Sexual Desire**	251 (63.5)	77 (51.3)	175 (70.3)	0.001
Lethargy	296 (74.9)	98 (65.3)	199 (79.9)	0.060
Hot Flushes	267 (67.6)	100 (66.7)	171 (68.7)	0.677
Hair Loss	194 (49.1)	68 (45.3)	127 (51.0)	0.272
Short-sighted	138 (34.9)	53 (35.3)	85 (34.1)	0.808
Weight Gain	201 (50.9)	72 (48.0)	129 (51.8)	0.461
Excessive Sweating	237 (60.0)	86 (57.3)	155 (62.2)	0.331
Skin Dryness	265 (67.1)	102 (68.0)	167 (67.1)	0.847
Urine Leakage	211 (53.4)	89 (59.35)	126 (50.6)	0.090
Painful Intercourse	193 (48.9)	76 (50.7)	117 (47.0)	0.476

Table 3. Proportion who know the health risks of menopause

Health risks	Total n=395 n (%)	Young adult n=150 n (%)	Middle-aged n=245 (n) %	p value
Osteoporosis**	301 (76.2)	97 (67.4)	204 (82.3)	0.001
Cervical Cancer	191 (48.4)	39 (26.0)	88 (35.9)	0.052
High Blood Pressure**	173 (43.8)	77 (51.3)	67 (27.3)	0.001
Stroke	158 (40.0)	67 (44.7)	79 (32.2)	0.059
Diabetes**	147 (36.6)	64 (42.7)	49 (20.0)	0.001
Heart Disease**	144 (36.5)	91 (60.7)	86 (35.1)	0.001
Breast Cancer**	127 (32.2)	95 (63.3)	63 (25.7)	0.001
Colon Cancer	113 (28.6)	81 (54.0)	110 (44.9)	0.057

**Refers to significant *p*-value.

Table 4. Perception on menopause by young adult and middle-aged respondents.

Statement	Total n=395 n (%)	Young adults n=150 n (%)	Middle-aged n=245 n (%)	p value
Menopause is a sign of ageing	303 (76.7)	120 (80.0)	183 (74.7)	0.194
Loss of fertility	273 (69.1)	115 (76.7)	158 (64.5)	0.012
Menopause is a normal transition in ageing process	309 (78.2)	119 (79.3)	190 (77.6)	0.604
Freedom from menstrual, pregnancy and childbirth	237 (60.0)	99 (66.0)	138 (56.3)	0.064
Loss of youth	207 (52.4)	104 (69.3)	103 (42.0)	0.000
Not a real woman	93 (23.5)	48 (32.0)	45 (18.4)	0.001
Partial death	90 (22.8)	27 (18.0)	63 (25.7)	0.076
Not wanted anymore	92 (23.3)	47 (31.3)	45 (18.4)	0.001
Menopause is a disease	94 (23.8)	69 (46.0)	25 (10.2)	0.001
Old and useless	113 (28.6)	56 (37.3)	57 (23.3)	0.003
Regret when menses ceases	168 (42.5)	87 (58.0)	81 (33.1)	0.001
Loss of drive to perform daily routine	89 (22.5)	68 (45.3)	21 (8.6)	0.001
Menopause do not change women	162 (41.0)	57 (38.0)	105 (42.9)	0.291

blood pressure, stroke, and cervical cancer are health risks associated with menopause than middle-aged respondents. For osteoporosis and breast cancer, more middle-aged respondents cited them as risks associated with menopause compared to young adult respondents. There were no ethnic differences for knowledge on health risks of menopause.

Sources of Information

The main sources of information about menopause in descending order were magazines (85.3%; 95% CI, 81.8 to 88.8%), families (77.2%; 95% CI, 73.1% to 81.4%), books (58.7%; 95% CI, 53.9 to 63.6%), newspapers (58.0%; 95% CI, 53.1 to 62.8%), radio and television (56.2%; 95% CI, 51.3 to 61.1%), and friends (53.4%; 95% CI, 48.5 to 58.3%). Less than half of the respondents (40.8%; 95% CI, 35.9 to 45.6%) identified medical and health personnel as a source of information. Only 36.5% (95% CI, 31.7 to 41.2%) received information from the Internet and 36.2% from pamphlet. Three main sources of menopause information for young adult respondents were families (76.7%; 95% CI, 69.9 to 83.4%), magazines (76.0%; 95% CI, 69.2 to 82.8%) and books (54.0%; 95% CI, 46.0 to 62.0%). In contrast, for middle-aged

respondents, their three main sources of information were magazines (91.0%; 95% CI, 87.4 to 94.6%), families (77.6%; 95% CI, 72.3 to 82.8%) and newspapers (67.8%; 95% CI, 61.9 to 73.6%). Significantly more ($p < 0.01$) middle-aged respondents (25 years old and above) acquired menopause information from magazines, newspapers and pamphlets than young adults respondents (15 to 24 years old).

On further questioning types of additional information needed about menopause, the respondents expressed overwhelming positive response. Three most required additional information were menopause treatment (96.5%; 95% CI, 94.6 to 98.3%), treatment of signs and symptoms of menopause (94.2%; 95% CI, 91.9 to 96.5%), and health risks associated with menopause (88.7%; 95% CI, 85.7 to 92.0%). The respondents' good knowledge on signs and symptoms of menopause may be the reason that the least required additional source of information was information on signs and symptoms of menopause (77.5%).

Sources of Support and Help

Family members were identified by the highest percentage of respondents (79.5%; 95% CI, 75.5 to

83.5%) the main source of support and help on problems related to menopause, followed by medical health personnel (68.1%; 95% CI, 63.5 to 48.272.7%) and friend or colleagues (59.7%; 95% CI, 54.9 to 64.6%). Only 43.5% (95% CI, 38.7 to 48.4%) would turn to a counselor for support and help. Young adults respondents were more likely than the middle-aged to seek support and help from family members ($p < 0.01$). For the remaining sources of support, the middle-aged respondents outnumber the young adults ($p < 0.01$).

Perception on Menopause

A majority of the respondents disagreed that menopause means no longer being 'real' women (76.5%; 95% CI, 72.3 to 80.6%), feeling not wanted by others (76.7%; 95% CI, 72.5 to 80.9%), feeling old and useless (71.4%; 95% CI, 66.9 to 75.9%) and it's a sign of partial death (77.2%; 95% CI, 73.1 to 81.4%). Most of them also disagreed that menopause is a disease (76.2%; 95% CI, 72.0 to 80.4%). Many held a positive attitude towards menopause and regarded menopause as a normal transition in the ageing process (78.2%; 95% CI, 74.2 to 82.3%) and it is just a sign of ageing (76.7%; 95% CI, 72.5 to 80.9%). Majority (77.5%; 73.4 to 81.6%) also do not feel menopause would result in loss of drive to perform their daily chores. Relatively low percentages of respondents (42.5%; 95% CI, 37.6 to 47.4%) express regrets if their menstrual period ceases approaching menopause. Although more than half of the respondents (59.0%; 95% CI, 54.1 to 63.8%) believed that menopause would not change women in any important way, the majority agreed that menopause means a loss of their youth (52.4%; 95% CI, 47.5 to 57.3%) and fertility (69.1%; 95% CI, 64.6 to 73.7%).

Table 4 shows that on the whole, middle-aged respondents have better perception on the approaching of their menopause compared to young adult respondents. Significantly more young adults compared to middle aged respondents ($p < 0.01$) agreed with the statement that menopause means loss of youth, not being wanted anymore, menopause is a disease, feeling old and useless, regrets when menses ceases and loss of drive to perform daily routine. The statement, "menopause indicates partial death", was the only response whereby middle age respondents outnumber young adult respondents. Nevertheless, the difference was not statistically significant ($p = 0.07$).

Responses to questions about the respondents' feelings towards the approach of their own menopause revealed that most of the respondents feel nervous (66.6%; 95% CI, 61.9 to 71.2%) and fear (63.8%; 95% CI, 59.1 to 68.5%) about their oncoming menopause. Other responses were feeling of sadness (46.3%; 95% CI, 41.4 to 51.3), disgust (34.9%; 95% CI, 30.2 to 39.6%), relief (29.6%; 95%

CI, 25.1 to 34.1%), joy (18.2%; 95% CI, 14.4 to 22.0%). One hundred and forty eight (37.5%; 95% CI, 32.7 to 42.2%) respondents stated as do not care.

On the whole, tertiary-educated respondents were more positive regarding the approaching of their own menopause than secondary educated respondents. Significant differences ($p < 0.01$) were observed between the two groups in statements where menopause denotes loss of youth, not a real women anymore, not wanted anymore, menopause is a disease, feeling old and useless, regret when menses ceases, and loss of drive to perform daily routine.

Discussion

Respondents held accurate ideas of the time of life when menopause occurs. Most respondents defined menopause as menstrual period termination. Though many identified the general definition of menopause accurately, some lacked comprehensive understanding of the meaning of the term menopause such as menopause being defined as, "without having any period for a year after age 35."

Respondent were more aware of physical signs and symptoms of menopause such as depression, irritability, vaginal dryness and lethargy and least likely to know the physiological symptoms such as hot flushes, excessive sweating and urine leakage. Respondents' foremost knowledge on ways to overcome signs and symptoms, rather surprisingly, was not hormone replacement therapy. In their opinion, exercise and vitamins supplements may overcome signs and symptoms of menopause. Surprisingly, nearly half of the respondents believed in traditional remedies rather than in HRT, or they were unaware of HRT.

The most striking finding from the present study was the clear underestimation of menopause related risk factors such as cardiovascular diseases and cancer. Respondents' knowledge on health risks associated to menopause in this survey were similar to the other study (15). They were much more likely to identify osteoporosis rather than hypertension and heart diseases despite the fact that the risk of developing cardiovascular diseases is higher than osteoporosis (15). Middle-aged adult respondents appeared to be less knowledgeable on health risk associated to menopause. This raises concern because many in this group are now entering menopause and a lot more will reach menopause over the next decade.

According to our results, the most commonly cited as sources of information about menopause were reading

materials (magazines, books) and families. Little information was obtained from medical sources. This may denote lack of communication between healthcare personnel and women regarding menopause. Physicians may not be likely to discuss about menopause with women who have not reached menopause or vice versa. Apparently many respondents tend to learn about menopause from the media and were not well informed via specific education on menopause. Young adult respondents, on the other hand, particularly tend to look to family members for menopause related information. Similar to the study by Pan, *et al.* (16), Taiwanese women reported family members specify women from their own generation (mother or sisters) as most frequently chosen source of menopause-related information. This indicates the need for menopause related education programs targeted at young adults in school. Thus, it is important to encourage medical care providers, schools and other educational institutions to increase their efforts to educate women about menopause.

With regard to source of information needed by respondents, it appeared that the least additional information needed was information on signs and symptoms of menopause. The most required information was treatment of menopause. We can estimate that the respondents in this survey have adequate knowledge on signs and symptoms and least knowledge on the aspect of treatment.

Respondents in this study also held positive perception toward menopause. Although many agreed that menopause indicate loss of youth and fertility, and a sign indicates aging, generally responses relating positive reactions included believe that menopause is part of getting old and freedom from menstruation, pregnancy and childbirth. Negative perception of menopause such as menopause is a disease, feeling no longer like a 'real' women, feeling old and useless and loss of drive to perform daily chores, were generally not accepted as true by many respondents. Rather surprisingly, despite positive attitude towards menopause, most respondents expressed nervousness, fear and sadness about the approach of their own menopause. In general, middle-aged respondents possessed better perception on menopause compared to young respondents. Therefore, this finding suggests that education on menopause should put more emphasis on young women.

This study is not without its limitation. The present study surveyed women in the urban setting as a preliminary study in investigating the knowledge and perception of menopause among Malaysian women. As expected urban participants are generally more

educated. All the participants in this study had at least secondary school education and none had only primary education. Therefore, the result of this survey may be biased towards higher knowledge responses about menopause.

Conclusions

In conclusion, data from this study provides preliminary data regarding the level of knowledge and perception of menopause among women in three districts of the Federal Territory Kuala Lumpur. Young women in this country should be educated to remove stigmas about menopause from the school level. For the older group, it is important to emphasise on educating them about health risk and that adopting healthy lifestyle behaviour now can influence their risk for developing diseases associated to menopause in the near future.

The results of this study provides enormous guidance for future education on behavioural changes and exercise in improving women's views of this transition in their lives, and ultimately enable women to face this phase of life in a more positive approach. This study identifies the need for further research to examine the views and also to explore urban and rural differences in the aspect of knowledge as well as perception and attitude of women regarding menopause.

Acknowledgement

The study was not funded in whole nor in part by any research grant or funding body. It was conducted as a partial requirement for an undergraduate Degree course in Biomedical Science Program, Department of Molecular Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia.

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