KNOWLEDGE, ATTITUDE AND PERCEPTION ABOUT MENOPAUSE AMONG WOMEN IN MAKIUNGU VILLAGE, SINGIDA RURAL, TANZANIA

By

Rosemary Damiano Mrina (MD)

A Dissertation Submitted in Partial Fulfilment of the Requirements for the Degree of Master of Medicine (Obstetrics and Gynaecology) of the Muhimbili University of Health and Allied Sciences.

Muhimbili University of Health and Allied Sciences
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CERTIFICATION

The undersigned certify that he has read and hereby recommends for acceptance by the Muhimbili University College of Health and Allied Sciences a dissertation entitled ***"Knowledge, Attitude and Perception about menopause among women living in Makiungu Village, Singida Rural, Tanzania"*** in partial fulfillment of the requirements for the degree of Master of Medicine in Obstetrics and Gynaecology of the Muhimbili University of Health and Allied sciences.

Ngwalle 26/11/09

Supervisor ..... Date

Dr Edward Ngwalle,

DECLARATION

I declare that, this is my own work, and it has not been submitted for a degree in any other University.

.....

Rosemary Damiano Mrina

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DEDICATION

To my mother Francisca Jerome Maselle

ABSTRACT

Background: Menopause is a physiological event occurring with ovarian failure and marks the end of a woman's reproductive life. The average age at menopause is about 50 years. Symptoms associated with menopause include irregular menstruation, dry skin, hot flushes and vaginal dryness. Some women experience few whereas numerous emotional and physical symptoms plague others. Often menopause is symptomatic for women. Perception, attitudes and knowledge regarding menopause and its transitional period, the climacteric, may differ from one female population to another. These differences have been related to female age, parity and hormonal status as well as to social, economical, cultural, educational and geographical factors.

Objectives: The main objective was to investigate knowledge, attitude and perception on menopause and menopausal symptoms among women in Makiungu Village, Singida Rural District

Material and methods: House to house visits were done after systematic random sampling done using the list of house holds from the village office list of households. Women aged 45-55 years were recruited in the study. Questionnaire was administered to all the study subjects assessing knowledge, Attitude and perception towards menopause.

Results: A total of 150 women were included in the study, 72% were postmenopausal and 28% were premenopausal. Mean age was 50.1 and SD 3.8. Parity was 7.13 and SD 3.2. 88% of the study populations were peasants. Of the participants 44.7% had no formal education and the mean age at menopause was 47.8 and SD 2.8.

The majority of women (79%) were of the option that seeking medical attention at the time of menopause was not important. Most common sources of information and knowledge on menopause were friends (47%) and relatives (29%). Fifty eight percent (58%) did not think that menopause is coupled with unbearable symptoms. Fifty percent (50%) of post menopausal women did not know at what age women reach menopause. Very few of them knew at least 3 postmenopausal symptoms. The most prevalent symptoms were hot flushes (56.7%), palpitation (40%) and vaginal dryness (36%)

however majority of the consultation to the physicians were because of hot flushes (24%) and palpitations (18%). Having secondary education or above was associated with poor information about menopause (60%) than no formal education (90%) and primary education (90%) p value is 0.015 each.

Conclusion:

Despite the fact that women perceived menopause as a positive event, their related knowledge was low.

There is a great diversity in symptom frequencies across countries, and the association of symptoms with menopausal status in Singida rural is weak.

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1.0 INTRODUCTION

The term Menopause is derived from the Greek; *men* (Month) and *pauo* (to stop) and is applied to mean permanent cessation of menstruation. This is because of depletion of ovarian follicular activity. Menopause is a physiological event occurring with ovarian failure and marks the end of a woman's reproductive life. The average age at menopause is about 50 years [1].

Menopause is also an important psychological event signaling the end of reproductive life and of youth. It is associated with fear of loss of feminity and of advancing age. Some believe that women can avoid many adverse symptoms by educating themselves and their families about menopause and approaching the stage as a life cycle change rather than an end of youth and attractiveness[1, 2]

The etiology of menopause is primarily due to exhaustion of the stock of oocytes or primordial follicles in the ovary, with a consequent fall in estrogen and progesterone secretion. Symptoms associated with menopause include secession of menstruation, dry skin, hot flushes and vaginal dryness and thinning of head and pubic hair, hair growth on face, headaches, loss of bone density, stiff joints, memory loss, mood swings, depression, irritability, insomnia, and decreased libido[3, 4]

Psychological distress is associated with irregular menses in women of middle age. With age symptoms vary widely among women. Some women experience few whereas numerous emotional and physical symptoms plague others. Due to this variability of changes, women need positive education and support during this time of life. Symptom frequency is also modulated by socio-economic factors[5, 6]

Management of intolerable menopausal symptoms is achieved through Hormonal Replacement Therapy (HRT). Some studies recommend the use of supplements and activities described as Complimentary and Alternative Medicine (CAM). The World Health Organization (WHO) has defined complimentary alternative medicine as a diverse group of medications, therapies, techniques and exercises that incorporate a range of

approaches and philosophies. In addition, the WHO recognizes CAM as a multi-treatment approach that aims at preventing illness and maintaining wellbeing rather than curing a condition[7].

More often than not menopause is symptomatic. Some women prefer dietary modifications, herbs and vitamins to treat menopausal symptoms. Many view the symptoms of menopause as "normal" and "something all women go through." They believe that the symptoms would pass without treatment and are not unduly perturbed by menopausal discomforts.

Perceptions, attitudes and knowledge regarding menopause and its transitional period, the climacteric, may differ from one female population to another. These differences have been related to female age, parity and hormonal status as well as to social, economic, cultural, educational and geographical factors. Moreover, the changing evidence and recommendations for hormone replacement therapy (HRT) have also impacted on women's attitude towards menopause and the use of HRT[8]

1.1 LITERATURE REVIEW

A review of the literature between 1993 -2004 was conducted to identify studies providing information on menopause knowledge and attitudes. Of the studies identified, (90%) focused on the general experience of "Black" women and/or "Afro-American" women[9]

Several studies showed numerous factors determined a woman's perceptions and beliefs about menopause including menopausal status, social background, education, occupation, physical or emotional health. General symptoms were also shown that they could influence the perception on menopause. Cultural influences are thought to affect the menopausal transition experience but little cross-cultural data exists[10].

A study done in Taiwan on attitude towards menopause revealed that, women held more positive attitudes toward menopause when compared to previous studies. Postmenopausal women in this cross sectional study tended to have a more positive attitude toward

menopause. Also the prevalence of vasomotor symptoms among the community women in Taiwan was low compared with that in western studies. Vasomotor symptoms were hot flushes, palpitations, dizziness and sweating[10].

Yet limited cross-cultural research on menopause suggests that attitudes and incidences of symptoms vary considerably depending on environment, health status and cultural paradigms around women's health[11-13].

In a study done in Sri Lanka overall knowledge on menopause among the elderly women seemed to be poor. Most women were aware that menopause has adverse effects on their health status, even though their knowledge on specific areas (example effects on bones) were inadequate. Some women even believed that changes due to menopause would anyway occur with aging and they were not concerned about minimizing effects of menopause[14].

In a cross -sectional observation study done in Fiji Islands, to compare three different ethnic groups few differences in the attitudes, knowledge, belief or practices related to menopause was observed. No significant differences between ethnic groups were noted, for example, in their attitudes towards menopause except for part-European women not considering the onset of menopause as the start of 'old age' this was despite differences in the general cultural beliefs[15].

In contrast a study done among Caucasian women had Preliminary findings suggesting that attitudes toward menopause different between ethnic groups. This supports the conclusion from investigators that results from one population of women cannot be assumed to apply in all populations[16]

Earlier reports have indicated that well-educated women hold more positive attitude regardless of their culture, whether Eastern or Western. However, in one study, educated women expressed more remorse about menopause. Knowing more about menopause might empower women to better cope with menopausal changes. On the other hand,

educated women had more opportunity to hear the stereotypes of menopause, which may have contributed to an inconsistent correlation between education and menopause[17]

In a study done on perceptions of women towards menopause in Egypt, they perceived menopause as a normal event in their lives that does not necessitate medical consultation; and that was a personal issue that should not be discussed with others. In contrast, a study in Mauritius in 2001 revealed that one fourth of the participants said that they had not heard of the term menopause, and the majority believed in herbal remedies to treat menopausal symptoms[18]

In a study done in Nigeria, majority of women had negative perception towards menopause and only few had positive perception, as the perception among women differs although menopause is the universal experience, meaning that all women undergo menopause however the perception differs[6]

Across the Asian continent, studies on perception towards menopause found that, the majority women in Asia embrace the menopause with stoic and tranquil acceptance, treating it as another milestone in the progression of life. Indeed, the term used in Chinese is simply "a change in life phase." Hence, most Asian women look upon the problems that accompany the onset of menopause as an inevitable part of ageing to be embraced, rather than struggled against as is the case in Western countries [19]. The studies also found that Chinese, Malay, and Indian women residing in Singapore generally viewed the menopause positively and there was a significant correlation between education and belief. Women of higher educational levels were more willing to accept that there may be medical conditions associated with the menopause that require medical attention.

Conversely, women of lower educational levels were more inclined to believe that menopause is a completely natural event for which it would be pointless to seek any medical attention.

A Bangkok study [20] on knowledge about menopause concluded that the majority of women showed correct overall knowledge about menopause. However, less than half thought that menopause was a pathologic event that needed treatment

Another study conducted in an African community in Durban, South Africa, showed that, most women knew of menopause. Half had obtained their information from family or friends and the rest from their general practitioner, hospital or local clinic. This shows the importance of the community in spreading health-related information. There was no difference in attitude toward menopause between the low- and higher-income groups. Attitude was positive in that the women who were aware of the existence of menopause said it was culturally and socially acceptable. Another aspect probably influencing the women's positive attitude toward menopause is their lack of knowledge of menopausal symptoms, only 19% of them thought that 'hot flushes' were related to menopause. Women can only know them if they are given appropriate health information[21].

A Kenyan study showed that Perceptions of menopause in Africa vary by culture and the woman's reproductive history. For women with multiple births, menopause is likely to be welcomed as an end to childbearing under conditions of limited fertility control technology. In some cultures, for childless women, menopause often marks the onset of a period of emotional depression. Since menstrual flow is commonly viewed as a cleansing process that keeps a woman healthy, the cessation of menses may be associated with ill health. In some cultures, postmenopausal vaginal bleeding is viewed as a sign of witchcraft, leading many women who in fact have ovarian, cervical, or endometrial cancers to delay seeking medical care[22].

Despite studies in different countries and settings, so far we don't have limited studies done in Tanzania rural setting on menopause awareness.

2.0 PROBLEM STATEMENT AND RATIONALE

2.1 PROBLEM STATEMENT

While menopause has been extensively investigated elsewhere, menopause studies are very limited in African settings. Most of these studies are clinical, and they focus on menopausal symptoms. There is a Perception that women's attitude and knowledge regarding menopause may differ from one society to another. These differences have been related to female age, parity and hormonal status as well as to social, economic, cultural, educational and geographical factors. The studies that have been conducted among western societies were mostly on white women[23].

A Massachusetts women's health study of women between 45 and 55, proved that a negative attitude and perception towards the menopause could lead to less favorable mode of climacteric[24].

In Africa, including Tanzania, most women reach the age of 45-55. They may be at the climacteric phase or menopause experiencing different postmenopausal symptoms. We don't know what are their knowledge, attitude and perception towards menopause since there are no studies done in Tanzanian society. With my 2 years working in Makiungu Hospital, many women were coming to hospital with complaints which were menopause related and hence the choice of subject and place to see what they already know and what they might need to know.

2.2 RATIONALE OF THE STUDY

This study will provide information on knowledge, attitude and perception towards menopause in women living in Makiungu Village.

Results from this study will be applied in the area and other communities to provide baseline information these women will need to know regarding menopause. This study will also provide information on how the community understands menopause and the results will be used to intervene in providing the information regarding menopause.

It is assumed that this measure will improve the knowledge, attitude and various perceptions towards menopause in the locality. This will help to know if there is need to

address the need for interventions like mass education and use of Hormonal Replacement Therapy (HRT) in our communities

3.0 RESEARCH QUESTION AND OBJECTIVES

3.1 RESEARCH QUESTIONS

1. How much knowledge do women living in Singida Rural District, Makiungu Village have on menopause?
2. What is their attitude and perception towards menopause?

3.2 RESEARCH OBJECTIVES

3.2.1 Main objective

To investigate knowledge, attitude and perception on menopause and menopausal symptoms among women in Makiungu Village, Singida Rural District

3.2.2 Specific objective

1. To determine the mean age at menopause
2. To assess knowledge on menopause
3. To assess the attitude towards menopause
4. To determine sources of information regarding menopause
5. To determine the proportion of women who experience the different symptoms of menopause
6. To determine the proportion of women that express different perceptions towards menopause
7. To determine association between socio-demographic characteristics and knowledge, attitude and perception towards menopause

4.0 METHODOLOGY

4.1 STUDY DESIGN: Cross sectional Descriptive study

4.2 STUDY AREA:

Makiungu Village,located is 31 km Southeast of Singida Town on the high central plateau of Tanzania. It is in Singida rural District which is a semi-desert area. The main tribe is Nyaturu, with few Nyiramba, and others.They are agro-pastoralists growing several types of millet, maize, sweet potatoes and groundnuts. They keep animals like cattle, goats and sheep. Donkeys are kept for transportation purposes. Within the Village there is also a hospital, a Designated District Hospital for Singida Rural being run by the Medical Missionaries of Mary. There is also a primary school and a secondary school. The total population is 4800 (from the Local Village census 2007). The place is a typical rural village which has never been involved in any community research.

4.3 STUDY POPULATION:

Women aged 45-55 years old who are residents of Makiungu Village. This included the premenopausal and the postmenopausal women.

4.4 STUDY SAMPLE AND SAMPLING PROCEDURE:

The study participants were selected from the village list of houses obtained from the village office. Every second house was chosen from that list and the chosen houses were visited where as any woman who was at the age of 45-55 in that house was recruited. (Systematic random sampling). If there were more than one woman in the same house with appropriate criteria they were all enrolled. Houses with women no appropriate women were also counted.

Training of Research assistants

Four research assistants, nurses, were recruited and trained for one day on the ethical issue concerning the study on the correct conduct of human subject in research. They were also trained on the study procedures namely identification of the study participant, application of the inclusion and exclusion criteria, administration of the consent forms.

The task of the research assistants was to assist the principal investigator in the study. They were responsible in recruiting participants, administering consent form and questionnaire.

Recruitment procedure

Study participants were recruited from their homes and for those who were not at home were followed at their working places being it at school or to the hospital. The house holds were selected from the list of houses obtained from the village office and every second house was selected from the list. Those who were not found at home were followed at their places of work. Those who did not know their age were asked at what age they were when the important events happened and hence their age extrapolated from there. The event included, the coming of Pallotine Fathers, Golden Jubilee of the Roman Catholic Church, coming of Medical Missionaries of Mary who built the hospital.

An informed consent was obtained from the participants and after accepting to join; every participant signed an informed consent form before being enrolled into the study. All eligible women were enrolled.

Women with >12 months amenorrhea were defined as postmenopausal otherwise they were considered not menopausal.

4.5 DATA COLLECTION:

Participants were seen at their homes and their working places. For those who were not able to communicate because of language barrier a translator facilitated. Most of participants were found in their home during the morning hours as it was not the farming season of the year however in the afternoon most of them went to local pubs for local brew and some chatting with other village members and friends.

The interviewer administered the questionnaire for those who could read and write and for those who couldn't they were asked questions as per questionnaire and questionnaire filled by the interviewer. The questionnaire contained participant's socio-demographic characteristics, knowledge on menopause, attitude and perception and menopausal symptoms. The questionnaire was translated into Kiswahili the language easily understood by the local population. The participants were interviewed separately to ensure confidentiality.

Objective 5 was answered by those who were menopausal as it was assessing the menopause symptoms.

Variables for the socio-demographic characteristics were age, parity, level of education, tribe, and marital status.

For those who could read and write, they were asked to mark if they agreed or not with each statement on the questionnaire, and those who couldn't the interviewer was marking according to their responses. Additionally, women were asked about their source of information regarding menopause.

Perception and attitude were tested using statements/myths about menopause obtained from the literature[8, 25, 26]. For those who could not read they were interviewed by reading a statement to them followed by and asking if they agreed or not. The questions asked were about menopause and the woman answered using a 4-Likert scale whereby she stated if she strongly agreed, agreed, disagreed or strongly disagreed .Likert scale is a psychometric scale commonly used in questionnaires. When responding to a Likert questionnaire item, respondents specify their level of agreement to a statement. The scale is named after Rensin Likert. Reliability and Validity of the scale were assessed before the beginning of the study and necessary adjustments were done.

Knowledge was assessed through open-ended questions. Participants were categorized according to their response as whether Yes, No or don't know. Five questions were included and a score of 1 was regarded as a correct response, while 0 if the participant didn't know the answer. This method of knowledge assessment was described by Kaliyaperumal[27]

The symptoms like Depression, Anxiety, Insomnia were assessed using the criteria for their diagnosis from Diagnostic and Statistical manual of Mental Disorder, DSM-IV-TR (*Appendix III*)

4.6 DATA ANALYSIS:

Data was entered in Epi info 6 and then transferred to SPSS. Analysis was performed with the use of the SPSS statistical program Version 13.0.

X^2-*test* was used to compare categorical data. A p value of <0.05 was considered as statistically significant

4.7 ETHICAL ISSUES

The study ethical consideration covered:

Assurance to the participants that their decision to join the study was voluntary and there was no risk associated with this study.

Thorough explanation to the participants concerning the conduct of the study was done.

Proper administering and signing of the informed consent was done by the study participant before their enrollment.

The study participant's personal information was kept confidential and was treated with utmost respect. Participants were explained about their right to withdraw at any stage of the interview.

Those who were found to have inadequate knowledge were educated on the subject and encouraged to spread correct information regarding menopause at the end of the interview.

No costs were incurred by the participants in the study. The participants who were found in need of any information concerning menopause were educated upon the subject and those who were found to have problem needing medical attention were referred to the hospital for medical care.

Ethical clearance was sought from the Muhimbili University of Health and Allied Sciences, Research and Publication Committee. The study began when permission to conduct the study was granted from the Makiungu Village leaders.

5.0 RESULTS

In the present study 150 women fulfilling inclusion criteria were identified. They consented and participated in providing the information required in the survey. Of these 108 were menopausal and 42 were premenopausal. . The total of 136 houses was visited and only 2 houses had no appropriate women. The mean age of the study participants was 50.1 (SD 3.8). The mean parity was 7.13 (SD 3.2).The mean age at menopause for these women was 47.8 (SD 2.8) years.

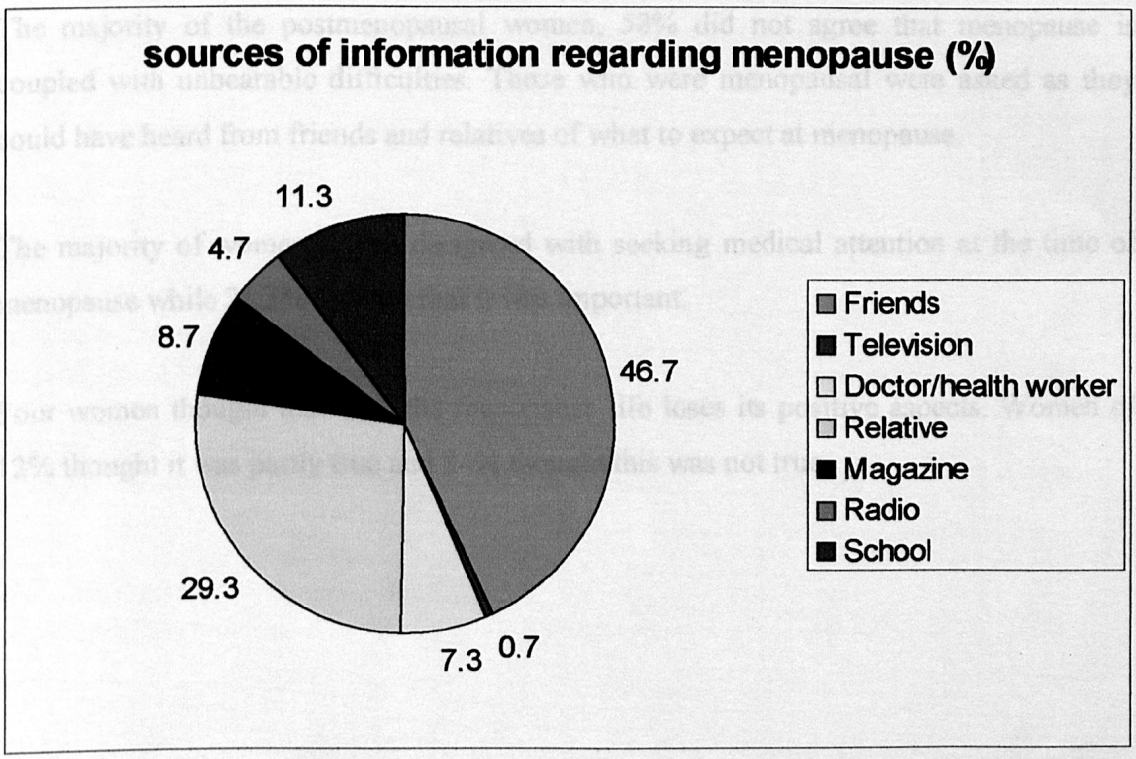
Table 1: Socio-demographic characteristics of the study population:

Characteristics	Total population N=150, N (%)	Premenopausal N=42, N (%)	Postmenopausal N=108, N (%)
Parity:			
0	0	0	0
1-4	29 (19)	14 (33)	26 (24)
5-9	80 (53)	23 (55)	46 (43)
10^{+}	41 (27)	5 (12)	36 (33
Educational level:			
No formal Eductn	67 (45)	9 (21)	58 (54)
Primary	68 (45)	29 (69)	39 (36)
Secondary and college	15 (10)	4 (10)	11 (10)
Marital status:			
Never married	5 (3)	1 (2)	4 (4)
Married	104 (69)	35 (84)	69 (64)
Divorced/widowed	41 (27)	6 (14)	35 (32)
Occupation:			
Peasant	132 (88)	39 (93)	93 (86)
Employed	18 (12)	3 (7)	15 (14)

According to the socio-demographic characteristics of the study participants, majority of them had either no formal education (45%) or primary education (45%). Also most of them were those married were peasants. All women interviewed had children.

Respondents were asked to indicate their source of information regarding menopause. Figure 1 presents the proportions of their responses.

Figure 1: Sources of information/knowledge regarding menopause



The most common sources of information and knowledge on menopause were friends (47%) and the lowest was from television (0.7%).

Table 2: Attitude towards menopause:

	Menopause is coupled with unbearable difficulties, N (%)		
	Agree	Disagree	Total
Menopausal	21 (14)	87 (58)	108
Premenopausal	7 (4.7)	35 (23.3)	42
Total	28	122	150

The majority of the postmenopausal women, 58% did not agree that menopause is coupled with unbearable difficulties. Those who were menopausal were asked as they could have heard from friends and relatives of what to expect at menopause.

The majority of women (79%) disagreed with seeking medical attention at the time of menopause while 21.3% thought that it was important.

Four women thought that with the menopause life loses its positive aspects. Women of 12% thought it was partly true and 84% thought this was not true.

Table 3: Knowledge on menopause

Question(correct response)	Postmenopausal N=108 (%)	Premenopausal N=42(%)	P value
Consider having information About menopause? (yes)	15 (13.9)	5 (11.9)	
At what age do women undergo Menopause?			
Don't know	54 (50)	13 (30.9)	
40-45	20 (18.5)	9 (21.4)	0.161
46-50	11 (10.2)	5 (11.9)	
>50	23 (21.3)	15 (35.7)	
Is menopause associated with any Physiological body changes? (yes)	30 (27.8)	9 (21.4)	0.961
Do you think menopause is associated With any health problem? (yes)	25 (23.1)	9 (21.4)	0.718
Are there symptoms associated With menopause? (yes) those mentioned Total of 15 symptoms.	24 (22.2)	7 (16.7)	0.831

Of the women who were included in the study, 50% of the post menopausal women admitted that they did not know at what age women undergo menopause. The total scores for all knowledge questions was 19 and scores from clients responses ranged from 0 – 19 with a mean score of 3.96. There was no difference in knowledge score among the two groups postmenopausal and the pre menopausal group.

Participating women were asked if they had ever experienced symptoms of menopause, consulted a physician and if they were aware that their complaints were menopause related.

Table 4: Proportion of women who experienced the different symptoms of menopause (N=108)

Symptoms	Presence %	Consulted physician %	Awareness that symptom and menopause are related %
Headache	8.7	6.7	0.7
Anxiety	6	0	0.7
Muscle pain	34.7	10.7	0.6
Palpitation	40	18	3.3
Depression	12	0	0
Irritability	18	0	0
Hot flashes	56.7	24	4.7
Insomnia	14.7	0	0
Memory problems	3.3	0	0
Night sweats	20.7	6	2
Sexual problems	6	0	0.7
Urinary problems	8	7.3	0
Vaginal dryness	36	0.7	4
Dizziness	24	14	1.3

The most prevalent symptoms were hot flushes (56.7%), palpitation (40%) and vaginal dryness (36%). Majority of the consultation to the physicians were because of hot flushes (24%) and palpitations (18%)

Women's perception toward the menopause is depicted in **table 5**, sorted as positive and negative ones.

Table 5: Proportion of women that express positive and negative perception towards menopause (n=150)

	Percentage
Positive perception	
It is a normal event and not a problem	88.7
There is more confidence and maturity	92.6
One may fully enjoy sexual relations	56
It is an important event	90
It is a relief as there is no more pregnancy risk	86.6
Life is easier and calmer	86
Negative perception	
One becomes grumpier and irritable	34.6
If menses returns one would feel younger	4.7
Well being is affected	18.7
Is a problem or burden	16
An offensive term to women	19.3
Working capacity is altered	58.7
It increases familial problems	16
Physical attractiveness is lost	57.3
Femaleness is lost	58.7
It is considered as a disease	24

Respondents more frequently perceived the menopause as a positive event rather than a negative one.

Table 6: Association of level of Education with information that defines menopause correctly

	Having information that correctly defines menopause N (%)		
Education level	Yes	No	Total
No formal education	7 (10)	60 (90)	67
Primary	7 (10)	61 (90)	68
Secondary or above	6 (40)	9 (60)	15
Total	20	130	150

40% of women with secondary education or more gave information which defined menopause correctly compared to 10% of the women who had no education or had primary education. Only 13.3% had information that defines menopause.

Table 7: postmenopausal women's parity in relation to loss of femininity and experience of postmenopausal symptoms

	Parity 1-4 N=26 (%)	Parity 5-9 N=46 (%)	Parity 10^{+} N=36 (%)	P value
Femininity is lost				
Agree	10(38.5)	24 (52.1)	24 (66.7)	0.051
Disagree	14 (53.8)	21 (45.6)	8 (22.2)	
Don't know	2 (7.6)	1 (2.1)	4 (11.1)	
Experienced postmenopausal Symptoms				
Yes	23 (88.5)	42 (91.3)	20 (55.6)	0.0001
No	3 (11.5)	4 (8.6)	16 (44.4)	

Women of lower parity had mostly agreed that femininity is lost with menopause compared with those who had higher parity (P=0.051). Women of higher parity experienced less postmenopausal symptoms compared to those of low parity (P=0.0001).

Table 8: marital status in relation to the desire for sexual intercourse postmenopausal

Marital status	No need for sexual Intercourse N=120 (%) Agree	No need for sexual Intercourse N=30 (%) Disagree	P value
Not married	4 (2.7)	1 (0.7)	
Married	85 (57)	19 (13)	0.708
Divorced/Widowed	31 (31)	10 (7)	

Women who were widowed /divorced or single had nearly same perception like those who were married and living with their husband that there was no need for sexual intercourse after menopause, the difference observed was not statistically significant (P=0.708).

Table 9: Occupation and perception towards menopause

	Peasants N=132 (%)	Employed N=18 (%)	P value
Working capacity is reduced			
Agreed	77 (58.3)	11 (61.1)	0.975
Disagreed	55 (41.6)	7 (38.9)	
Is considered as a disease			
Agreed	32 (24.2)	4 (22.2)	0.915
Disagreed	100 (75.8)	14 (77.8)	
Menopause is coupled with Unbearable difficulties			
Agreed	22 (16.7)	6 (33.3)	0.088
Disagreed	110 (83.3)	12 (66.7)	

Occupational differences, being a peasant or employed, did not seem to interfere with the post menopausal perceptions that working capacity is reduced (P= 0.975), and with unbearable difficulties there was no difference between the peasants and those employed (P=0.088)

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6.0 DISCUSSION:

This study included 150 women aged 45-55 years living in Makiungu village Singida rural, 108 were already postmenopausal and 42 had not yet reached menopause.

The mean age at menopause

The mean age at menopause in this study was 47.8. This was noticeably higher than the study done in Turkey [28]. Studies done in Malaysia[29], South Africa [21] and in Nigeria [6], the mean age at menopause was much higher compared to the one found in this study. The number of ovarian follicles is the determining factor of woman's age at menopause when the primordial ovarian follicles have fallen below a critical number but also other factors such as cultural, environmental and socioeconomic and race could account for the differences seen in different studies.

Level of education was observed to be generally low in the study group. Lack of education could be a contributing factor on poor knowledge on menopause, in other studies where the knowledge was high the levels of education of the study groups was also high as it was seen in the studies in urban SA and Bangkok [20, 21].

Parity was observed to be high in this study; the woman found to have higher parity had 17 children. In the study done in Nigeria high parity was observed among postmenopausal women, however in other studies the parities were much lower and only one woman was reported to have 5 children which was the highest [6, 21, 24, 28, 30].

When parity was compared with perception it was observed that those with high parity (>5) who were the majority had more of positive perception towards menopause than those of lower parity (P=0.0001). In this study it has been observed that, the higher the parity the less severe were the postmenopausal symptoms as the studied population was of high parity. There were no literatures found to compare this association.

This could justify the statement above that those women who had higher parity in the study had experienced fewer, less severe or even unnoticed postmenopausal symptoms.

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Attitude towards menopause

Most women disagreed that menopause was coupled with unbearable difficulties. This could be because of the less severe postmenopausal symptoms experienced. In a study done in Austria more than half of the study group did not agree with this statement[24], the difference observed between these two studies is small.

Life after menopause did not seem to lose its esteem as seen in this study. Majority of participants (84%) viewed life to be normal which means that there were no major changes seen in life between the premenopausal and the postmenopausal state. These results concur with those found in a similar study done in Austria[24]

In this study 79% of the participants thought that seeking medical attention in these menopausal symptoms was not important. This was in contrast to the findings in a study in Ecuador where 79.4% thought it was important [8]. This can be explained by the high parity in Africa with association of reduced postmenopausal symptoms severity which will require seeking medical attention. The study in Ecuador was done in a community of nurses who were of low parity also considered to have more knowledge on menopause showed that they are likely to seek medical attention during menopause for possible screening of diseases conditions.

Attitude towards menopause was assessed and the attitude difference in this study were not significant (P=0.27) between those who were already menopausal and those who were premenopausal. Many postmenopausal women disagreed with the statement that women became depressed or irritable during menopause. This is different from the findings of a study in Taiwan where the same effect was assessed and the difference was significant as fewer postmenopausal women agreed (P=<0.01)[10].

This study found that clients had more of a positive attitude towards menopause and it is inconsistent with the study done across Ethnic/Racial groups which found that attitudes toward menopause and aging differed across ethnic groups, with African American

women being the most positive and the less acculturated Chinese American and Japanese American women the least positive[23]

Sources of information and knowledge about menopause

Information about menopause was obtained mostly from friends and relatives. Schools contributed for only 11.3%. In our communities most of times the first source information is obtained from relatives. In this study the main source of information was from friends. This could be because of uneasy to talk matters related to reproduction in the family. In other studies the main sources of information about menopause were from friends, Television and Health care providers. Magazines/newspaper, and radio constituted over 40% as a source of information in a study done among the teachers. This was high as they can all read and write therefore it was easy for them to read the newspapers/magazines and also access for the magazines and news paper [8, 21, 31, 32]. Radio, magazine and television in this study as sources of information were less than 10%.

This study was done in a rural area where access to radio and television was hampered by availability of electricity. Though the place has electricity, few people could afford to have it in their homes. Of the study clients 45.3% had at least attended primary school they could read and write. However the news papers or even magazine don't reach there. This is the chief contributing factor for the low sources of information.

In this study the total score on knowledge was low and the mean score was less than half of the total score. This implies that the overall knowledge on menopause was poor. A large number of women did not know at what age women attain menopause. This could be because of their low knowledge on this subject. Only 23% did know that menopause is associated with health problem. In another study though women had poor knowledge on the subject but they were aware that menopause had adverse effects on their health status[14].

Postmenopausal symptoms

The main post menopausal symptoms experienced by the women who were already menopausal were hot flushes, palpitation, vaginal dryness and muscle pains. In other studies the predominant postmenopausal symptoms were similar [6, 21, 31, 32].

Ismael's study (2001) showed that more than half of the women aged 40–60 years had hot flushes and in study in Malaysia it has been estimated that almost 75% of menopausal women will experience hot flushes [21, 32]. With all these together it is true that hot flushes are the most prevalent postmenopausal symptom. Insomnia was not very much reported. Women involved in this study live in hot environment, work hard in the sun. When they get back home from the farms, they are likely to be tired and sleep; this could have an effect on adaptation. This could mask the insomnia symptom in these women. In other studies there were high prevalence of Insomnia compared to this study, as the study in South Africa, Malaysia and in Taiwan had reported [21, 31, 32]

Although women commonly experienced actual postmenopausal symptoms, they had poor understanding of them. Only 4.7% of them thought that 'hot flushes' were menopause related, consultation to physicians on hot flushes were 24%, palpitation 18% dizziness 14% and muscle pain 10.7%. This is low compared to the other study where 19% thought 'hot flushes' were menopause related, 19% consulted physician for hot flushes, and was high for muscle pains where 35% consulted physicians for this [21, 32]. 36% had vaginal dryness and only 0.7% consulted physician for this, the prevalence was high however because of not being open in talking about the sex issues in the community that they are being kept as secret this could be a cause of not seeking medical attention. Those who had sexual problems did not go to seek any medical attention mainly because they do not want to or it's not culturally acceptable to talk about sex. This could also contribute to inability of talking matters related to sex that they should be kept as secret.

Women who had hot flushes and visited physicians; thought that they had malaria and most of them tested several times for malaria. Only 5% knew that the symptom was menopause related. This reflects the poor understanding of the symptoms; this includes women who visited the doctor for palpitation. Palpitation could also be caused by other

medical problems and hence being a confounding factor as a postmenopausal symptom alone. Malaria and Tuberculosis is endemic in our communities. Women who went to hospital for headache, muscle pains, night sweats and hot flushes were likely to be investigated several times for Malaria and Tuberculosis. This makes difficult to rely on these symptoms as purely menopause related.

Perception towards menopause

The aim of this study was to determine the perception towards menopause as given in other studies [7, 8, 17]. Responses to questions regarding perception were similar to those on other studies, women perceived menopause positively (over 80%) as a sign of maturity, as a normal event, life becomes calmer and no risk of pregnancy. Perception was more of positive (over 60%) in the study in Ecuador done among the Nurses of middle age.

This study was done in the rural area where the level of education was low compared to the study in Ecuador among the Nurses[8]. Women in both studies showed positive perception towards menopause regardless of their level of education.

In the Egyptian study [18] likewise, many women perceived menopause as a normal event. In a Nigerian study[6] majority of women had more of Negative perception towards menopause. This could be because the women who were included in the Nigerian study were seen in the hospital and they were not well, most likely to have negative perception.

Although menopause is the universal experience women perceive it differently because of the different degrees of the postmenopausal symptoms experienced. It has been observed in this study that most of the women had perceived menopause as a positive step in life. This could be because of the less severe post menopausal symptoms that most of them could carry on the daily living activities.

In the study there was one woman (0.92%) who had postmenopausal bleeding for 5 months during the study period. She thought menses had recurred however it was abnormal with some watery discharge. She thought of witchcraft and went to elective

doctor; this was the perception of postmenopausal bleeding same as one of the perceptions found in the study in Kenya. In Nigeria postmenopausal bleeding was observed to be high this could be because the study was done in the hospital where these women came to seek medical attention and one of the complaints was bleeding per vagina. [6, 22]

CONCLUSION:

1. Despite the fact that women perceived menopause as a positive event, their related knowledge was low.
2. Menopause is an important event in women. There was no cultural preparation apart from information from friends and relatives.
3. There is a great diversity in symptom frequencies, and the association of symptoms with menopausal status is weak.
4. Women of higher parity had less severe on unnoticed menopausal symptoms.
5. Menopause symptoms did not seem to affect the daily living activities.

RECOMMENDATIONS:

1. Women should be given health Education on menopause. This will help them to better cope with the postmenopausal symptoms and also increase the level of knowledge on menopause. Information can be given by Health care providers.

2. Ministry of Health and Social Welfare should incorporate menopause in the programmers of disease prevention. Knowing menopause will enable women to look for medical attention when they see conditions like postmenopausal vaginal bleeding and discharges.

3. Further researches on menopause are needed. This study was done in a rural area. Study in an urban setting in Tanzania and also studies in other regions and districts are needed. Exploration of menopausal symptoms with parity need to be studied.

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