

Age at Natural Menopause and Socio-demographic Factors among Women 45-64 Years in Tirana, Albania

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Abstract: *The objective of this study is to determine age at menopause in women and study overall socio-demographic factors. This is a cross-sectional study of 1040 women of age 45-64 years old in Tirana, Albania. Mean age at menopause resulted 47, 74± 3.82 years. There was found a significant relationship between age at menopause and marital status, also age at menopause vs. residence. As a country in transition, Albania will have a growing aged population, so there will more post-menopausal women in need to be informed and treated efficiently, taking into consideration influence of socio-demographic factors.*

Keywords: menopause, age, socio-demographic factors, influence, relationship

1. Introduction

The menopause, from Greek word 'MENOS' (month) and 'PAUSE' (cessation), is defined as the last menstrual period, diagnosed after at least one year of amenorrhea.[2] The age at the last menstrual period holds inherent clinical and public health interest since it may be a marker of maturing and wellbeing.[3] In different populations, age at menopause may differ slightly and various factors can contribute to an early or later initiation, including genetic factors, environmental exposures, health-related and socio-demographic factors.[8]

The statistics show that in the developing world the population aged 60 or over is expected to rise from 8 per cent in 2005 to close to 20 per cent by 2050.[1] These data suggest that there will be more post-menopausal women in the future and knowing that in Albania there is an increase in the longevity of women, we need to have more data. To our knowledge, there are no studies dedicated to age at menopause and influencing factors and the data in general are scarce. We need to know how our socio-demographic patterns affect pre-menopause and post-menopause women, in order to inform and implement programs that can fit our background.[9] In this cross-sectional study, we have examined age at menopause and other socio-demographic factors associated with menopause.

2. Literature Survey

In literature, age at menopause has been studied all around the world. There are some studies to suggest that through the span of of the twentieth century there have been modest increments in average age at menopause.[5, 6] Instead, one international study of 18, 997 women from 11 countries found the median age at natural menopause to be 50 years (range, 49–52 years), [8] where African, Hispanic, Chinese and Thai have an earlier age at menopause instead Japanese and Malaysian have a range similar to European women.[9] Some work relates an early age at menopause with poor early growth, poor socioeconomic conditions and parental divorce.[5] Additionally, studies have found that women

living in urban areas have a later natural menopause, compared to those living in rural areas.[3] Likewise an earlier age at menopause is associated with a lower social class[3, 4], nulliparity or having fewer children[7], less education[8], current smoking propensities and not being married[8]. Although, the most consistent finding has been that menopause occurs 1-2 years earlier for smokers than non-smokers.[8, 10-11]

Age at normal menopause has additionally been identified with all-cause mortality. A population-based study has shown that women who had menopause before age 40 had a 50 percent higher mortality rate than those who experienced menopause at age 50 or later.[8] Age-adjusted mortality for cause-specific mortality is reduced with each increasing year of menopause, especially for ischemic heart disease mortality.[12, 13] However, late menopause increases the risk of death from breast cancer.[14, 15]

3. Methods

This is a population based cross-sectional study on 1040 women aged 45-64 years old in Tirana, the capital of Albania which has a total population of 87106 women. 2/3 of them live in urban areas instead 1/3 on the rural areas, corresponding with the proportions in our sample. The timeframe of the study was from March 2016 to November 2016. Participation rate was 89, 4% (In the beginning we had calculated 1350 participants and only 1207 accepted to respond). Although, only 1040 were on menopause, so the data is based in this number of women. The inclusion criteria consist in: a) age; b) residence; c) being in menopause d) sex.

The data was collected using a 13 section, self-administered questionnaire with sections listed as follows: socio-demographic data, health-related questions, information on BMI index, medical history, gynecological history, obstretical history, sexual history, actual treatment, family history, lifestyle, mental health, menopause symptoms, and the last section on attitudes towards menopause and Hormone Replacement Therapy.

Volume 6 Issue 6, June 2017

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Analysis was performed using SPSS software v.21. There were recorded socio-demographic factors like current age, age at menopause, marital status, educational level, employment and ethnicity. Data are presented as percentages, means accompanied with standard deviation.

4. Results / Discussion

More than half of women were between ages 51-60 years old. The mean age at menopause was 47, 74 ± 3.82 years. Out of total, 65, 2% were living in the city and 34, 8% in rural areas around Tirana. About 95% of women were Albanian; instead the remaining part had a different ethnicity. When talking about religion, 836(80.3%) were Muslims and 204(19.7%) were Christian. Regarding the level of education, 23.4% of women have completed from 0-8 years of education, 44.3% from 9 to 12 years and 32.3% more than 13 years of education. The vast majority of women were either unemployed (488) or employed (439) with only 113(10.8%) being retired. Out of total, 83% were married.

Table 1: Sociodemographic characteristics

Variables	Categories	N(%)
Residence	Urban	679 (65.2)
	Rural	361 (34.8)
Ethnicity	Albanian	983 (94.5)
	Other	57 (5.5)
Religion	Muslim	836 (80.3)
	Christian	204 (19.7)
Education	0-8 years	244 (23.4)
	9-12 years	461 (44.3)
	13+ years	335 (32.3)
Employment	Employed	439 (42.2)
	Non employed	488 (47)
	Retired	113 (10.8)
Marital status	Married	864 (83)
	Non married	176 (17)

There was found a statistically significant relationship between marital status and early menopause ($x=6.48$, $p=0.011$) (Table 3). Also, there was a significant relationship between cohorts of birth and the start of menopause ($x=22.18$, $p=0.000$) (Table 4), the same with residence and the start of menopause ($x=4.414$, $p=0.035$) (Table 2). There was not proven a statistically significant relationship between ethnicity, faith, education, employment and the start of menopause.

Table 2: Relationship between residence and age at menopause

Residence	Age at menopause	
	Normal	Early
Urban	567	112
	83.5%	16.5%
Rural	319	154
	88.4%	14.8%

$X= 4.414$, $p= 0.035$

Table 3: Association between marital status and age at menopause

Marital status	Age at menopause	
	Normal	Early
Married	747	117
	86.7%	13.5%
Non married	139	37
	79.0%	21.0%

$X= 6.481$, $p= 0.011$

Table 4: Association between birth cohorts and age at menopause

Age group	Age at menopause	
	Normal	Early
<=50	155	66
	70.1%	29.9%
51-60	618	66
	90.4%	9.6%
61+	113	22
	83.7%	16.3%

$X= 22.189$, $p= 0.000$

There is variability in age at menopause for women all around the world. In USA, age at menopause has been reported 51.4.[8] This is comparable to other countries, like Zwitzerland[16], Czechoslovakia[17] and Italy[19], where age at menopause is 50, 51.21, 50.9 years respectively. Instead, a study in Latin America has reported a age at menopause in Colombia of 53 years and in the villages of Paraguay a very early initiation of menopause in 43.8 years old.[18] Age at menopause in Albania is near to age at menopause in Turkish women living in rural areas[20], 47.74 and 47 respectively. Maybe, this can be related to some socio-demographic factors that could be somehow equally influencing women.

In some studies it has been reported that in rural areas, women experience menopause earlier than those living in urban areas.[8, 20-21] On the contrary, our results suggested that women living in the city had an earlier menopause than those living in rural areas. This could be due to the increment of sedentarity, levels of smoking and other lifestyle factors, that can be more prevalent in developed regions.

Different studies conducted on menopausal transition have concluded that married women have a later menopause than those who aren't married.[23-24] This is consistent with our finding, too. For this matter, nulliparity associated with early menopause could be a contributor in this case.

In the present study, women born in years 1967-1972 (category <=50) reported an earlier menopause than those of previous birth cohorts. So, younger generation of women report early menopause more frequently than those of more than 51 years of age. This could suggest a different socio-economic environment each generation has lived. Could it be a result of modern life consequences or early menarche in the latest years, it still will require further study.

Unlike our study, in literature, age at menopause has been related to employment, ethnicity and education. Several studies have concluded that low socio-economic status- not being employed and having no education can lead to an early

menopause in women.[4, 25] Also, as we described before, age at menopause is different in women worldwide, as part of different ethnicities. Asian has an earlier menopause than white women. For example, in a study in South Korea age at menopause was 46.9[13], whilst in Italy is around 50 years of age. We could not find any significant associations for these variables.

5. Conclusion

Some socio-demographic factors seem to influence age at menopause and are by this matter important. The fact of being married suggests a later arrival of the non-reproductive period, by leaving so much space for research in the future for the reasons behind it.

6. Future Scope

We should take into account some limitations of the study. First of all, by being a cross-sectional study, it cannot be verified the causality of the associations. Secondly, we could not collect data to understand specifically how marital status could affect age at menopause, like for example if their husbands were employed or not. Also, we didn't have the possibility to select a multiethnic sample, so we could find differences in age at menopause in each category. The study was based only in the district of Tirana and it will be important in the future to include other cities in this kind of research.

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