



## An Overview of Menopausal Symptoms in A District Hospital of Nepal

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### ABSTRACT

**Introduction:** Menopause is a universal reproductive phenomenon which confirms the end of fertility of the women. The objectives of this study were to establish the age of natural menopause and to identify the prevalence of menopausal symptoms among the rural women attending district hospital of Nepal.

**Methods:** This present study is a hospital based, observational cross-sectional study conducted in Outpatient department of Lamjung District Hospital, Lamjung, Nepal. The study was carried out from January 2014 till June 2014. Fifty four menopausal women were included in the study. A structured questionnaire was used and the data were analyzed using statistical package for social sciences.

**Results:** There were 54 participants with menopausal symptoms included in the study. Age ranged from 45 to 60 years with mean 51.2 years. Approximately seventy percentages of women were in age group of above 50 years. About two-third of participants had menarche in at 11 to 13 years of age and 32 (59.5%) of females were married before 15 years of age. In the study total 22 different health problems were reported by menopausal women. The most common symptoms were backache, fatigue/tiredness, numbness and tingling of the extremities, mental exhaustion, depressive mood, bladder problems and sexual symptoms.

**Conclusions:** The study suggests that rural middle-age and elderly women suffer from variety of health problems related to natural menopause. The health care workers should adopt a holistic approach towards management to improve the quality of life.

**Keywords:** age; menopausal symptoms; women; district hospital.

### INTRODUCTION

Menopause derived from Greek words meno (month) and pausis (pause) meaning the cessation of monthly period cycles. World Health Organization (WHO) defines menopause as the permanent cessation of menstruation resulting the loss of follicular activity of the ovaries. It is a stage when the menstrual cycle stops for longer than 12 months and there is a drop in the levels of estrogen and progesterone, two important hormone in the female

bodies.<sup>1</sup>

Menopause is colloquially known as “the change of life” because it signifies the end of reproductive

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fertility. This event is a completely natural, normal biological phenomenon. It is significant component of the reproductive cycle and is accompanied by profound hormonal changes.<sup>2</sup> The menopausal women experiences a complex interaction of socio-cultural, psychological and environmental factors as well as biological changes relating strictly to altered ovarian function. The various published studies shows considerable variation regarding age of onset of natural menopause and physical/somatic, psychological and genitourinary symptoms presented by postmenopausal women.<sup>3-5</sup>

The reproductive life in female can be divided into three major phases- menarche, childbirth and menopause. Out of these three phases, menarche and child birth are the most studied in medical literatures as compared to menopause.<sup>6</sup> Thus the present study was designed with the aim to study the age of onset natural menopause and prevalence of menopausal related symptoms among women attending rural district hospital as studies on issues relating to menopause, especially among rural women are limited in Nepal.

## METHODS

The present study is an observational, cross sectional study done at outpatient department of Lamjung District Hospital, Besishahar, Lamjung. The duration of study was from January 2014 till June 2014. The study was approved by Internal Management Committee of Lamjung District Hospital.

We interviewed middle aged and elderly women visiting district hospital with generalized vague physical symptoms and reported to have experienced menopause were included in the study. The menopause is defined as having their last menstrual period for more than one year ago. We excluded patient with co-morbidities conditions, undergone hysterectomy and presenting with acute illness. A structured questionnaire survey was done on the participants after taking informed consent. The data were collected, tabulated and analyzed using the statistical package for social sciences (SPSS), version 14.0 software.

## RESULTS

A total of 54 menopausal women were enrolled in the study. The socio-demographic features of the Lamjung district in relation to female population showed increased number of females compared to male population in the district and female literacy rate showed 63.3% (Table 1). The demographic characteristics of participants

showed age varied from 45 years to 60 years and the mean age of menopause was 51.2 years. The study showed majority of women 38 (70.4%) belonged to age group 50 and above year's category. The highest numbers of women were from the local indigenous population of Gurung and Magar community. The study showed 34 (62.9%) of women had active life style with only 24 (44.5%) were literate (Table 2).

The menstrual and reproductive history showed 42 (77.7%) of women had menarche in between 11-13 years and 32 (59.5%) of females were married before 15 years of age. Numbers of children were majority 30 (55.5%) in category of 3-5 children. Total 32 (59.5%) of female in the study were living sexually active life (Table 3).

**Table 1. Sociodemographic Feature of Lamjung District.<sup>7</sup>**

Total Population	1,67, 724
Numbers of Females Population	91,811
Literacy Rate	63.3%
Female	
Male	80.7%
Average size of each family	4
Main occupation of the village	Agriculture

**Table 2. Sociodemographic Features.**

Characteristic	n (%)
Age in years	
45-50	16 (29.6%)
51-55	24 (44.4%)
56-60	14 (26.0%)
Ethnic Group	
Brahmin	7 (12.9%)
Chettri	6 (11.3%)
Gurung & Magar	22 (40.5%)
Newar	7 (12.9%)
Dalit	12 (22.4%)
Marital Status	
Married	50 (92.6%)
Divorced	2 (3.7%)
Widow	2 (3.7%)
Educational Status	
Literate	24 (44.5%)
Illiterate	30 (55.5%)
Life style	
Active	34 (62.9%)
Sedentary	20 (37.1%)

**Table 3. Menstrual and Reproductive characteristics.**

Characteristics	n (%)
Age of Menarche(years)	
11- 13	42 (77.7%)
14- 15	10 (18.6%)
Above 15	2 (3.7%)
Age of Marriage (years)	
Less than 15	32 (59.5%)
15- 20	21 (38.8%)
More than 20	1 (1.9%)
Numbers of Children	
1-2	6 (11.1%)
3-5	30 (55.5%)
More than 5	18 (33.4%)
Sexual activity	
Active	32 (59.5%)
Inactive	22 (40.5%)

**Table 4. Menopausal symptoms of participants.**

Symptoms*	45-50 years (n = 16)	51-55 years (n = 24)	56-60 years (n = 14)
Hot flushes	8	12	6
Night sweats	10	15	9
Dizziness	9	11	7
Heart symptoms	6	12	8
Numbness/ tingling of extremities	10	21	9
Fatigue & Tiredness	12	22	10
Headache	11	14	9
Sleep disturbance	12	17	11
Back ache	14	24	12
Joint pain	12	16	11
Alter skin sensation	2	3	1
Dryness of Mouth	3	4	2
Anxious	7	22	11
Depressive mood	9	22	7
Mental exhaustion	12	24	11
Lack of concentration Pressure and	11	10	10
Tightness	3	6	2
Irritability	9	12	8
Weight gain	4	6	2
Urinary problem	12	22	12
Vaginal dryness/ itching	6	18	7
Decrease Libido	12	14	5

\*Multiple responses of the symptoms by participants

The prevalence of menopausal symptoms among the study participants varied among each age group. The study showed that women experienced total of 22 different types of menopausal health problems. Among the most common symptoms were: Backache, Fatigue/ Tiredness, Numbness and tingling of the extremities followed by Joint pain, Mental exhaustion, Depressive mood, Anxiety followed by Lack of concentration. Symptoms related to genitourinary diseases were Bladder problems, sexual symptoms followed by vaginal dryness (Table 4).

## DISCUSSION

The menopause is defined as the final menstrual period that a women experiences. It is a single event retrospectively diagnosed after a year with no menstrual periods. Natural menopause (as opposed to surgical menopause, which results from removal of ovaries) is generally believed to be related to exhaustion of the remaining ovarian follicles, the multi-cellular structures that contain the germ cells or egg and that produce the steroid hormones-estrogens and progesterone.<sup>7</sup> The socio-demographic features of Lamjung District represent similar features with remaining district within western development region.<sup>8</sup>

The age of onset of the menopause varies greatly among women all over the world. The mean age of menopause in our study was 51.2 years. It was slightly late compared to other studies done in Nepal. The mean age of menopause in the study done by Chuni et al,<sup>9</sup> Marahatta et al<sup>10</sup> and Ghimire et al<sup>11</sup> ranged from 47 to 49.9 years. In India the mean age of menopause has been reported to ranged from 40.32 to 48.84 years as shown in different studies.<sup>4,12-17</sup> Majority of women were married (92.6%) and belonged to indigenous community in the ethnic category of Gurung and Magar (40.5%). Study showed literate participants to be 44.5% and almost 63% of women were living active life style. As youth migration in the country has lead to people in villages to carry out daily house hold activities by themselves.

Majority of participants in our study had menarche between 11-13 years of age and got married below 15 years of age which was similar with the study of Ray et al<sup>6</sup> and Kriplani et al<sup>12</sup> done in India. In South Asian continent females often have trend to get married at early age. The present study revealed almost 60% of women were sexually active. These finding were similar with the studies done in different parts of India too.<sup>3,14,16</sup>

In present study we enquired about the different health problems experienced by the menopausal

women. It was interesting to know than menopausal women had variable nature of symptoms. A total of 22 different types of symptoms were recorded from out participants. The most common symptoms were as follows- back ache, fatigue/tiredness, numbness and tingling of extremities, mental exhaustion, depressive mood, bladder problem and sexual symptoms. The findings were quite similar with some studies done in Nepal and India, Madhukumar et al,<sup>3</sup> Srivastava et al,<sup>4</sup> Marahatta et al,<sup>10</sup> Christian et.al<sup>13</sup> and Sharma et al.<sup>16</sup>

The study shows that women in rural community suffer from multiple symptoms related to physiological hormonal changes associated with menopause and women attribute it to be symptoms of aging.

Our study had some limitations like limited numbers of participations, information lacking on nutritional status, perception of menopause, hormonal level estimation. Hence further studies in different part on Nepal with large study group to explore further understanding of menopause in our community are recommended.

## CONCLUSIONS

The study suggests that rural middle-age and elderly women suffer from variety of health problems related to natural menopause. The health care workers should adopt a holistic approach towards management of health problems to improve the quality of life. Hence health care providers should carry out regular screening of the menopausal symptoms for early detection and appropriated management of middle-age and elderly women presenting at the health facilities.

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**Conflict of Interest: None.**

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