



E-ISSN: 2278-4136  
P-ISSN: 2349-8234  
JPP 2018; 7(1): 1118-1119  
Received: 25-11-2017  
Accepted: 27-12-2017

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## Prevalence of cardiovascular risk factors among middle adulthood urban women of eastern part of Uttar Pradesh

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### Abstract

The risk of chronic diseases like diabetes mellitus, hypertension along with stress is increasing day by day globally which together invite the fatal risk of cardiovascular diseases. Female hormone estrogen along with other factors like exercise, balanced diet with low consumption of sweets and salt plays a very crucial role in improving the quality and quantity of life of middle age women. As the age increases the risk of various chronic diseases like hypertension, diabetes mellitus along with stress increases which causes morbidity and mortality in women. If women are not educated or timely awarded about the impact of these chronic risk factors they finally become the main cause of cardiovascular diseases among them. Women have lower risk of chronic diseases in comparison to men but as they cross the forty five years of their age the risk is similar to men among them.

**Keywords:** Chronic diseases, estrogen, middle age women, morbidity, mortality

### Introduction

Menopause is an important phase in every woman's life. Its occurrence among women may be natural or surgical but it is such type of fact which can neither be avoided nor changed. Every middle aged woman has to experience this phenomenon in their lives after their age of forty or forty five years. They spend a significant part of their lives in menopausal state. The overall health and well-being of middle-aged women has become a major public health concern around the world. Such women face various physical and psychological changes in their bodies as their age increases. After the age of 45 years the secretion of the two female hormones estrogen and progesterone become cease out. These two hormones provide protection to middle aged women in various ways like by reducing the oxidation of LDL-cholesterol, maintaining endothelium function, normal activation of sympathetic nervous system, regulating the function of insulin and thus maintaining the glucose homeostasis and helps in preventing lipid accumulation, inflammation and risk of diabetes mellitus in the body. Among chronic diseases hypertension and diabetes mellitus are more crucial along with stress in other various segments of the population of developed and developing countries as their burden are increasing globally day by day. After menopause middle aged women are highly susceptible to the risk of these chronic diseases. In the beginning the negligence of the symptoms of these chronic diseases can become fatal for their lives if they are avoided for a longer period by increasing the risk of cardiovascular diseases. Such risk factors cause morbidity and mortality among post menopausal women of various socio economic groups of developed and developing countries and affect the quality and quantity of life. Before the age of 45 years the prevalence of hypertension, diabetes mellitus, stress etc. tend to be lower in women in comparison to men. But as they cross the 45 years of their age, they are the main victim for hypertension, diabetes and stress which together cause the risk of CVDs like atherosclerosis, chronic heart disease, ischemic heart disease, stroke etc. Hypertension, a global health problem and menopause a universal phenomenon when both linked together become a major risk factor along with obesity, diabetes mellitus, for CVDs like complications. After menopause the distribution of fat changes among middle aged women and when it joins with other risk factors like stress and diabetes mellitus, chances of mortality increases among post menopausal women. On one hand the reason behind these diseases is cessation of estrogen and on another hand the reason behind these chronic diseases are unawareness about dietary consumption pattern like excess intake of table salt, simple sugars, low consumption of fibre, sedentary life style and lack of physical activity like exercise etc. Along with the physical changes that occur after menopause, women may need to improve their health care routines.

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In comparison to reproductive age group no intention is giving to the post menopausal women whereas they are more susceptible to the risk of non communicable diseases. The postmenopausal women are at higher risk of cardiovascular problems in India as well as globally, and this risk increases with age. An association of hypertension with the menopause and related risk factors need to be given due attention to avoid increased burden of hypertension and related CVDs among women. Information about high blood pressure and its determinants is becoming increasingly important for improving existing health services. There is a need of large efforts like by educating them, by creating awareness regarding health and nutrition etc. on large scale to overcome the risk of such chronic diseases among middle age women.

### Materials and Methods

For the present study one hundred middle aged women were selected randomly from the urban area of Varanasi of Uttar Pradesh. The respondents were between the age group of 50-60 years, who were menopausal women, mostly home makers and were living sedentary life style. For collecting information regarding prevalence of stress and chronic diseases like diabetes mellitus and hypertension, questionnaire cum interview method technique was used during survey. In the study it was found that majority of the respondents were not suffering from stress, diabetes mellitus and hypertension. During study it was advised to the respondents to take low amount of salt and simple sugars and high amount of dietary fibre in their diet daily for inhibiting the risk of various non communicable and some deficiency diseases like osteoporosis.

### Results and discussion

Information regarding prevalence of stress among respondents was presented in Table 1. During the study it was found that majority of the respondents were not suffering from stress (48%), thirty nine percent respondents were suffering from stress whereas thirteen percent respondents were suffering from stress occasionally. Information regarding prevalence of diabetes mellitus among respondents was presented in Table 2. During the study it was found that only six percent respondents were suffering from diabetes mellitus whereas majority of the respondents (94%) were not suffering from diabetes mellitus. Information regarding prevalence of hypertension among respondents was presented in Table 3. During the study it was found that only seventeen percent respondents were suffering from hypertension, two percent were suffering occasionally whereas majority of the respondents (81%) were not suffering from hypertension.

**Table 1:** Prevalence of stress in respondents

Responses	Frequency	Percentage
Yes	39	39
No	48	48
Occasionally	13	13
Total	100	100

**Table 2:** Prevalence of diabetes mellitus in respondents

Responses	Frequency	Percentage
Yes	6	6
No	94	94
Total	100	100

**Table 3:** Prevalence of hypertension in respondents

Responses	Frequency	Percentage
Yes	17	17
No	81	81
Occasionally	2	2
Total	100	100

### Conclusion

The conclusion of the study is that the prevalence of chronic diseases among middle aged women is not only affected by the cessation of female hormone estrogen but dietary factor along with stress also plays a very important.

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