

# Gynecological morbidity and co-morbidity in postmenopausal women: A descriptive study

Dr. Kavita Tanwar<sup>1§</sup>, Dr. Deepali Jain<sup>2</sup>, Dr. Meenakshi Samariya<sup>3</sup>,  
Dr. Narendra Mahawar<sup>4</sup>, Dr. Ajay Sharma<sup>5</sup>

<sup>1</sup>Junior Resident, Department of Obstetrics and Gynaecology, JLN medical college Ajmer

<sup>2</sup>Senior Professor and Unit Head, Department of Obstetrics and Gynaecology, JLN medical college Ajmer

<sup>3,4,5</sup>Assistant Professor Department of Obstetrics and Gynaecology, JLN medical college Ajmer

<sup>§</sup>Corresponding author

**Abstract**—Menopause is very crucial phase of woman's life. There are many health problems that are associated with postmenopausal phase. So this present study was conducted on 215 postmenopausal women with the aim to find out gynecological problems associated with postmenopausal period. This study observed that 70.5% women experienced hot flushes and sweating, 65.5% had insomnia, 37.6% complained of headache. Decreased libido was observed in 80.9% women and 54.4% reported dyspareunia. 78.1% women complained of backache. Joint pain was complained by 52.5% of women. 32% women noted weight loss and 26.5% women complained of weight gain after menopause. Among gynecological problems Genital Prolapse was most common morbidity found in 45.1% of cases followed by Cancer cervix in 12.5%, Fibroid uterus in 9.3%, Senile vaginitis in 5.6%, Ovarian neoplasm in 4.1%, Cancer endometrium 1%, Pyometra in 0.9%, Carcinoma vagina 0.4% and Carcinoma vulva in 0.4% of menopausal women. Genital prolapse was found with PMB in 9.2% cases and with PMB & Vaginal discharge in 10.3% of cases.

**Keywords:** Postmenopausal Phase, Gynecological Problems.

## I. INTRODUCTION

Menopause is defined as a permanent cessation of menstruation resulting from the loss of ovarian follicular activity at the end of reproductive life. Natural menopause is recognized to have occurred after 12 consecutive months of amenorrhea for which there is no other obvious pathological or physiological cause.<sup>1</sup>

World health Organization report on menopause<sup>1</sup> defines postmenopause as dating from the final menstrual period, regardless of whether the menopause was spontaneous or induced, although it cannot be determined until after a period of 12 months of amenorrhea has been observed.

Menopause is very crucial phase of woman's life, this fact has been ignored or hidden for a long time but it is now clearly established that this is a difficult time of life due to frequency of physical and psychological disorders which are associated in about 80% of menopausal women.<sup>2</sup>

There are various changes in hormones<sup>3,4,5,6</sup> during this period which may result in many changes in health of a women, which leads to changes in various parts of reproductive system like ovary, fallopian

tube, uterus, cervix, vagina & vulva.<sup>7-14</sup> Changes in these parts of reproductive system results into various gynecological problems.<sup>15-17</sup>

So this present study was conducted at a tertiary level hospital with the aim to study various gynecological problems in postmenopausal women.

## II. METHODOLOGY

This descriptive study was carried out in the department of Gynecology and Obstetrics at Rajkiya Mahila Chikitsalaya, JLN Medical College, Ajmer and associated hospitals, during November 2015 to October 2016.

Study was conducted on 215 women attending at gynecology department of Mahila Chikitsalaya with postmenopausal problems. Participants were women with established spontaneous menopause i.e. spontaneous cessation of menstruation for more than one year. Women who had got hysterectomy and or bilateral oophorectomy, radiation, or ablation of ovaries done were excluded from the study.

Each of eligible participants were interrogated about detailed history of bio-socio-demographic information. They were also asked about menstrual history as age of menarche and age at menopause. Past and significant family history was also noted.

These eligible participant were asked about complains like vasomotor symptoms, sweating, hot flushes, and palpitation, psychological problems like insomnia, depression, irritability, and headache, sexual dysfunction like decreased libido, frequency of coitus and dyspareunia, complaints like joint pain, backache, and weight change, gynecological problems such as genital prolapse and associated urinary and defecatory problems, postmenopausal bleeding, vaginal discharge and itching of vulva and pain abdomen etc.

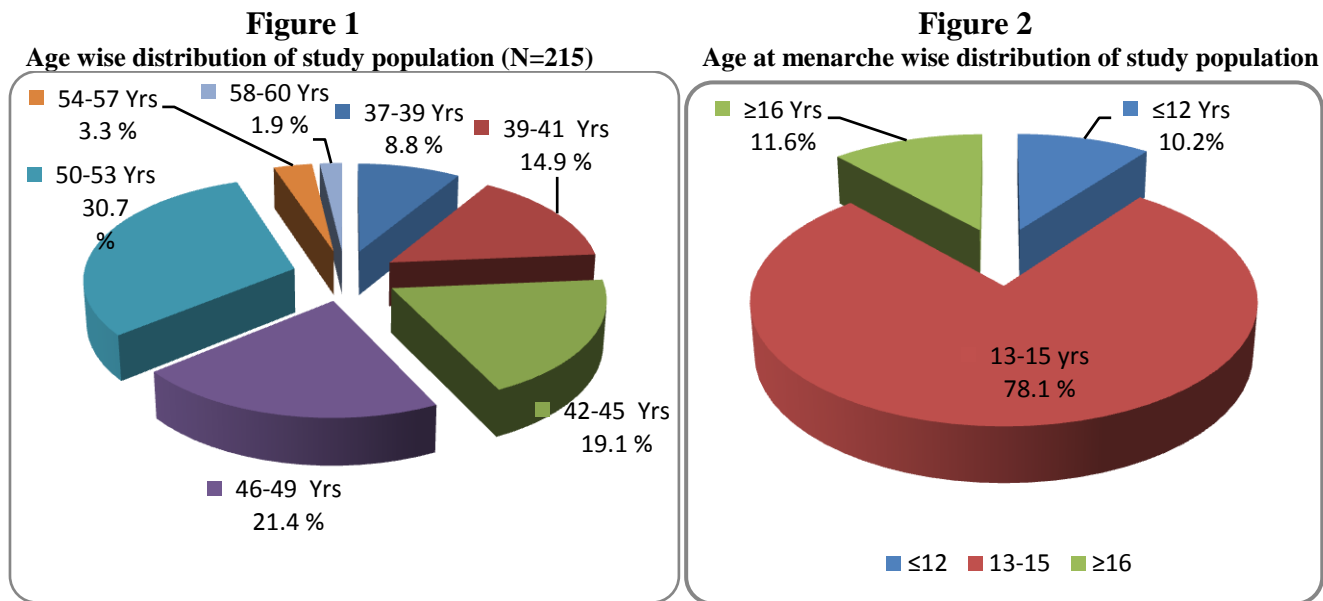
Detailed clinical examination was done by expert from gynecology department for making sure of diagnosis of problem if any. Supportive investigations were also done to support the diagnosis.

Data thus collected were compiled in Microsoft MS Excel 2007 worksheet. These data were analysed and inferred with the help of MS Excel 2007.

## III. RESULT

Present study included 215 symptomatic postmenopausal women with established menopause who had attended at Mahila Chikitsalaya, JLN Medical College Ajmer. All the patients were examined and investigated thoroughly and managed according to their clinical diagnosis.

Age ranged in this series was from 40-85 years. Most of the women were between 46-50 years (29.7%). Age of menarche was 13-15 years in 78.1% of women. Mean age at menopause was  $46.8 \pm 4.2$  years. (Figure 1 & 2)



Out of these 215 postmenopausal women, 70.5% women suffered from hot flushes and sweating and out of them 42.7% complained of hot flushes and sweating, 16.7% only hot flushes and 11.1% complained only of sweating and 1.8% women developed angina. (Table 1)

In present series 65.5% women suffered from insomnia, 37.6% complained of headache and 18.6% had depression. In this study group 71.6% women experienced decreased libido and 54.4% of women experienced dyspareunia. Backache was reported by 78.1% patients in this series and in 44% it was associated with genital prolapse. Joint pain was observed in 69.7% of the cases but none has history of fracture and all showed normal S. Calcium, S. Phosphorous, S. Alkalinephosphatase and urine calcium levels. (Table 1)

In present study group 32.0% women noted loss of weight, 26.5% noted weight gain, while 35.8% observed no significant change in body weight following menopause. (Table 1)

**Table 1**  
**Type of symptoms wise distribution of study population (N=215)**

Type of Symptoms	Number	Percentage	
<b>General Menopausal symptoms</b>	<b>Hot flushes + Sweating</b>	92	42.7
	<b>Hot flushes</b>	36	16.7
	<b>Sweating</b>	24	11.1
	<b>Angina</b>	4	1.8
<b>Psychological</b>	<b>Insomnia</b>	141	65.5
	<b>Headache</b>	81	37.6
	<b>Depression</b>	40	18.6
<b>Sexual</b>	<b>Decreased Libido</b>	154	80.9
	<b>Dyspareunia</b>	117	54.4
<b>Skeletal</b>	<b>Backache</b>	168	78.1
	<b>Joint Pain</b>	150	52.5
<b>Weight Changes</b>	<b>Same</b>	77	35.8
	<b>Loss</b>	69	32.0
	<b>Gain</b>	57	26.5

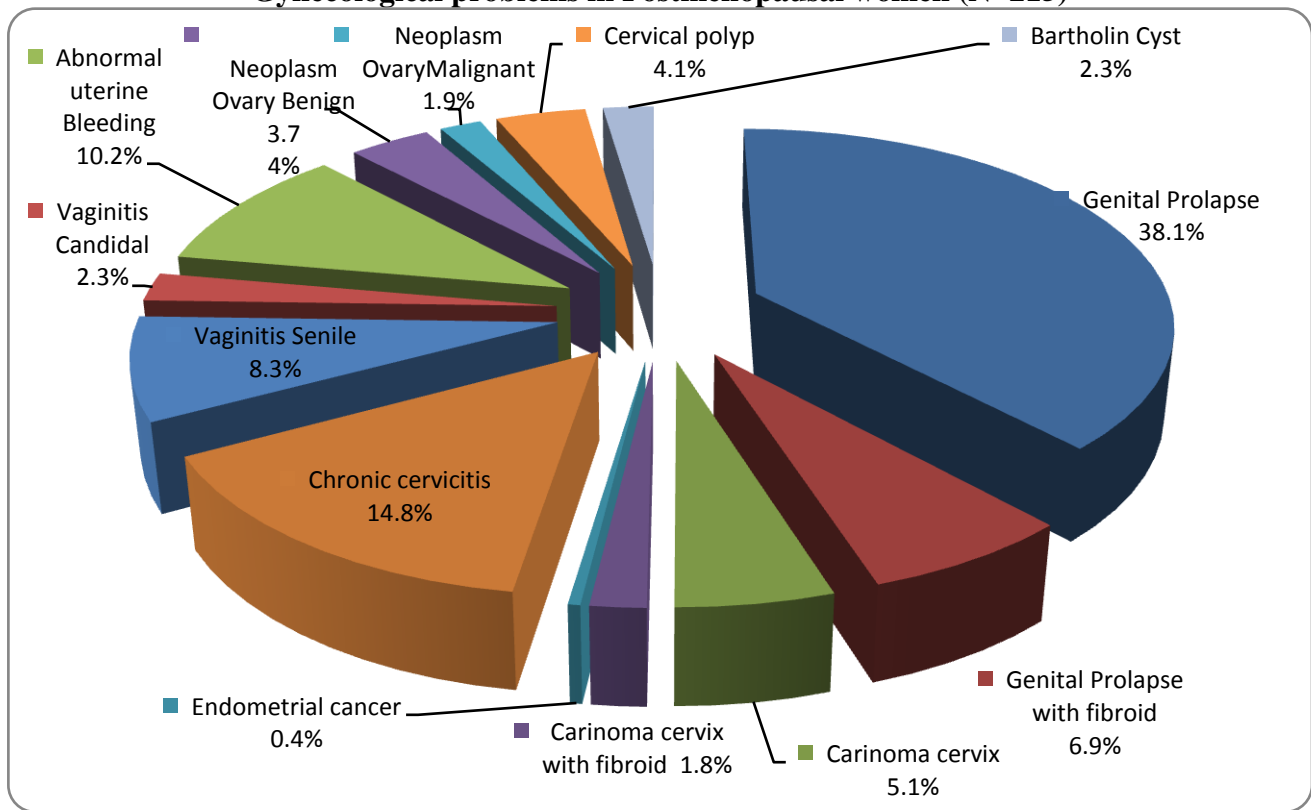
In present study it was also found that out of 215 postmenopausal women who were admitted with specific gynecological complaints, 45% showed genital prolapse of varying degree, in 4.6% it was associated with both postmenopausal bleeding and white discharge per vaginum, while 4.1% cases were associated with postmenopausal bleeding and 4.1% were associated with white discharge. 40% of women presented with postmenopausal bleeding. Only postmenopausal bleeding was major presenting symptoms in 18% of cases and postmenopausal bleeding was associated with white discharge in 9.7% cases. White discharge was the only complain in 12.09% women and in 6% women white discharge was accompanied with vulvo vaginal itching. Itching vulva with postmenopausal bleeding was reported in 3.2% of women. Three cases reported with swelling in vulvar region and 4.1% presented with complain of lump abdomen. Here genital prolapse was main complain in 45% women followed by postmenopausal bleeding in 40% women. (Table 2)

**Table 2**  
**Distribution of cases according to specific gynecological complaints.**

S. No.	Complaints	Number	Percentage
1	Genital Prolapse only	69	32
2	Genital Prolapse with White discharge + postmenopausal bleeding (PMB)	10	4.6
3	Genital Prolapse with (PMB)	9	4.1
4	Genital Prolapse with White discharge	9	4.1
5	Postmenopausal bleeding(PMB)	39	18
6	PMB with White discharge	21	9.7
7	White discharge	26	12.09
8	Itching vulva with White discharge	13	6.04
9	Itching vulva with PMB	7	3.2
10	Growth Vulva	3	1.3
11	Lump Abdomen	9	4.1

Out of these 215 postmenopausal women, 38.1% cases had genital prolapse, 6.9% cases had genital prolapse with fibroid uterus. Carcinoma cervix was diagnosed in 5.1% cases and in 1.8% cases carcinoma cervix with fibroid was seen. Endometrial cancer (Adenocarcinoma stage IIb) was diagnosed in 1 case (0.4%). 14.8% cases were diagnosed with chronic cervicitis. Senile and candidal vaginitis was reported in 8.3% and 2.3% cases respectively. Abnormal uterine bleeding reported in 10.2% of cases. Benign neoplasm of ovary was reported in 3.7% cases and 1.9% cases reported with malignant ovarian neoplasm. 4.1% cases reported to have cervical polyp. Bartholin cyst was reported in 2.3% of cases. (Figure 3)

**Figure 3**  
**Gynecological problems in Postmenopausal women (N=215)**



Out of 45% women with genital prolapse, all of the women presented with the complain of backache. 61.8% women complained of urinary problems such as frequency of micturition (32.9%), on and off retention of urine (8.2%), dysuria (12.3%), urge incontinence(4.1%) and stress incontinence (4.1%). Problems related to defecation was noted in 52% of patients out of which 41.2% presented with constipation while 12.3% complained of incomplete evacuation creating problem to the patient. Genital prolapse in 9.2% cases was associated with postmenopausal bleeding and in 9.2% with white discharge. In 10.3% cases genital prolapse was associated with both postmenopausal bleeding and white discharge. (Table 3)

**Table no. 3**  
**Genital porlapse associated complaints (N=97)**

Complaints associated with genital prolapse	Number	Percentage
<b>Backache</b>	97	100
<b>Urinary</b>	60	61.8
Frequency	32	32.9
Retention	8	8.2
Dysuria	12	12.3
Urge Incontinence	4	4.1
Stress incontinence	4	4.1
<b>Defecation Related</b>	52	53.6
Constipation	40	41.2
Incomplete evacuation	12	12.3
<b>Postmenopausal bleeding</b>	9	9.2
<b>White discharge</b>	9	9.2
<b>Genital prolapse with white discharge and PMB</b>	10	10.3

Out of 86 women who presented with postmenopausal bleeding per vaginum, 24.4% of cases presented with irregular heavy bleeding, 34.8% had intermittent spotting and 36% were reported with intermittent bleeding with white discharge per vaginum. In 4.6% of cases postmenopausal bleeding was associated with vulvo-vaginal itching that was later diagnosed as carcinoma vagina in 1.8%. 8.9% women had associated genital prolapse with the postmenopausal bleeding. These patients were common for the group of genital prolapse and with group presented with postmenopausal bleeding. (Table 4)

**Table no. 4**  
**Postmenopausal bleeding (PMB) associated complaints (N=86)**

Complaints associated with PMB	Number	Percentage
Irregular heavy Bleeding	21	24.4
Intermittent Spotting	30	34.8
Intermittent bleeding with White Discharge	31	36.0
Vulvo vaginal Itching	4	4.6

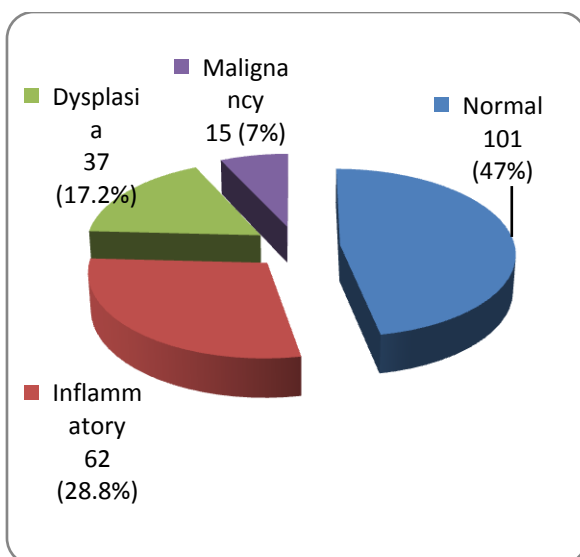
On investigations in women complaining of backache and joint pain S. Calcium, S.Phosphorous and S. Alkaline phosphatase was found normal. In 88 hypertensive women lipid profile was done, which was found normal in 22.7%, high LDL and high cholesterol was found in 22.7% and 31.81% of cases respectively.

Papanicolaou smear was taken in all the cases which was found to be normal or inflammatory smear in 47% and 28.8% of women, dysplasia and malignancy was found in 17.2% and 6.9% of women. (Figure 4)

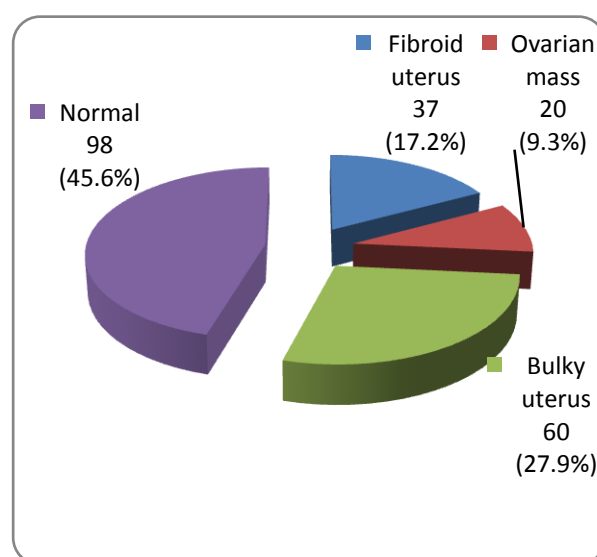
Ultrasonographic findings were normal study and bulky uterus in 45.5% and 27.9% of women, ovarian mass and fibroid uterus was found in 9.3% and 17.2% of cases. (Figure 5)

In present study Genital Prolapse was most common morbidity found in 97 (45.1%) of cases followed by Cancer cervix in 27 (12.5%), Fibroid uterus in 20 (9.3%), Senile vaginitis in 5.6%, Ovarian neoplasm in 9 (4.1%), Cancer endometrium 3 (1%), Pyometra in 2 (0.9%), Carcinoma vagina 1(0.4%) and Carcinoma vulva in 1(0.4%) of menopausal women.

**Figure 4**  
**PAP Smear of Postmenopausal Women**



**Figure 5**  
**USG Smear of Postmenopausal Women (N=215)**



#### IV. DISCUSSION

This present study included 215 symptomatic postmenopausal women with established menopause and who were admitted at state Zanana hospital, JLN Medical College Ajmer.

In present study Genital Prolapse was found in 45.1%, Senile vaginitis in 5.6%, Ovarian neoplasm in 4.1%, Cancer cervix in 12.5%, Cancer endometrium 1%, Carcinoma vagina in 0.4%, Carcinoma vulva in 0.4%, Pyometra in 0.9% and Fibroid uterus in 9.3% of menopausal women. These observations of present study were compared with findings of previous studies in table 5. It was observed that in all the studies (except in Debnath and Gita, 1994), genital prolapse was the main problem suffered by the patient, followed by cancer cervix and others. In Debnath and Gita (1994), cancer predominated with 42% of cases; this may be due to the fact that this study was conducted at JIPMER hospital, which is a referral centre for cancer cervix.

**Table no. 5**  
**Comparison of present study with other studies regarding gynecological problems.**

S.No.	Gynecological problems	Banerjee and Halder(1976) <sup>18</sup>	Bhargava and Pant(1982) <sup>19</sup>	Debnath and Gita(1994) <sup>20</sup>	Present study(2017)
1	Genital prolapse	34	45	21	45.1
2	Senile vaginitis	7	25	11	5.6
3	Ovarian neoplasm	0.4		3	4.1
4	Cancer cervix	10		42	12.5
5	Cancer endometrium	3.2		1	1
6	Carcinoma vagina	0.4	0.2	0.4	0.4
7	Carcinoma vulva	0.4		0.8	0.4
8	Pyometra	4	0.2	0.2	0.9
9	Fibroid uterus	0.8		2.8	9.3

These changes in ovary, uterus, vagina, vulva e.t.c. may be due to changes in hormones<sup>3,4,5,6</sup> after menopause. Estrogen<sup>3</sup>& Progesterone<sup>4</sup> start decreasing after menopause and Testosterone<sup>5</sup> start increasing after menopause which may be responsible for these changes.

#### V. CONCLUSION

This present study concludes that major complain was decreased libido, backache, dyspareunia, hot flushes & sweating. Other complains were joint pain, insomnia, headache and depression. Most common gynecological problem found was Genital Prolapse followed by Cancer cervix, Fibroid uterus, vaginitis, Ovarian neoplasm, Cancer endometrium, Pyometra, Carcinoma vagina and Carcinoma vulva of menopausal women. Genital prolapse was found with PMB in 9.2% cases and with PMB & Vaginal discharge in 10.3% of cases.

#### CONFLICT OF INTEREST

None declared till now.

#### REFERENCES

- [1]. International menopaual society, WHO definitions of menopause,2015
- [2]. Devi PK: menopause and its problems post graduate's obstet&gyane, 4,421-429, 1993
- [3]. Marc A.Fritz, Leon Speroff, Female life expectancy, menopause and the perimenopausal women, Clinical gynecologic, endocrinologic and infertility, 8<sup>th</sup> edition, 2015

- [4]. Vermeulen A: *J. clinendometab* 42,247,1976
- [5]. Sternberg WH: *Am. J. path* 25. 493, 1949
- [6]. Reyes FI: *Am J obst&gynae*: 129, 577, 1977
- [7]. Tervilla L: *Ann Chirgynae* 471, 232, 1958
- [8]. Ferenczy A: SEM of human fallopian tube: *Science* 175, 783, 1972
- [9]. Cutler WB: Philadelphia JB, Lippincott Co. 1984.
- [10]. Notelovitz M: *Geriatrics*: 33, 24, 1978, 33, 51, 1978.
- [11]. Krouse TB: New York masson publishing USA, 1980.
- [12]. Easley EB: *Clinobstgynae*:21, 269, 1978.
- [13]. Semmens JP: Estrogen deprivation and vaginal function in postmenopausal women *JAMA*. 245-445, 1982
- [14]. Milligan D. *Br. Med J.* 494, 1975
- [15]. Dennerstein L, Randolph J, Taffe J, Dudley E, et al. Hormones, mood, sexuality, and the menopausal transition. *FertilSteril* 2002; 77(suppl):S42-8
- [16]. Graziottin A, Leiblum SR. biological and psychosocial pathophysiology of female sexual dysfunction during the menopausal transition. *J Sex Med* 2005;2(suppl 3):133-45.
- [17]. Hayes R, Dennerstein L. The impact of aging on sexual function and sexual dysfunction in women: a review of population-based studies. *J Sex Med* 2005;2:317-30
- [18]. Banerjee MS, Halder B. Geriatric problems in Gynaecology. In *Journal of Obstetrics and Gynaecology of India* 1976;26:262-267
- [19]. Bhargava H, Pant N. *Journal of Obstetrics and Gynaecology of India* 1992;32:436.
- [20]. Debnath S, Geeta R, et al. Study of gynaecological problems in postmenopausal women. *Journal of Obstetrics and Gynaecology of India* 1994 April;44(2):286-289