

ASSESSMENT OF HEALTH RELATED PROBLEMS IN POST MENOPAUSAL WOMEN: ROLE OF CLINICAL PHARMACIST

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ABSTRACT

Introduction: Menopause is universal reproductive phenomenon. Inclusion of clinical pharmacist in the healthcare team plays a pivotal role in health related problems and educational interventions to postmenopausal women, thereby decreasing the disease progression and improving patient outcome. **Materials and Methods:** A prospective, observational study was conducted for a period of 6 months from January to June 2016 in a tertiary care hospital. Data was collected from post menopausal women at age of 45 to 60 years using menopausal health questionnaire and menopausal rating scale (MRS). **Results:** A total of 104 women were enrolled for the study. The mean age was found to be 54.4 years. The mean age at menopause was 46.2

years. Among the study population post-menopausal related symptoms reported were hair loss 57 (55%), anemia 56(54%), back pain 53(51%), blood pressure 43(41%), etc. According to menopause rating scale most reported symptoms were joint and muscular discomfort 89(86%), sleep problems 68(65%) followed by hot flashes and sweating 57 (55%) and other problems. **Conclusion:** Patients were suffering from one or more number of menopausal symptoms which was misinterpreted as aging syndrome, so most of the symptoms were left unnoticed due to patient's negligence.

KEYWORDS: Menopause, Clinical Pharmacist, Symptoms, Aging syndrome.

INTRODUCTION

Menopause is universal reproductive phenomenon. All the women who live beyond the age of 45-50 years, experience a period of transition from reproductive to the non reproductive stage of life. Natural menopause is recognized after 12 consecutive months of amenorrhea for which there is no obvious pathological or physiological cause.^[1] Women spend a significant

part of their lives in post menopausal state. In 1990, around 467 million women aged 50 years and are expected to increase to 1200 million by the year of 2030.^[2] Women attain menopause through varied reasons like natural decline of reproductive hormones, hysterectomy, due to primary ovarian insufficiency and chemotherapy or radiation therapy.^[3]

The period from the initiation of irregular menstrual cycle to the complete cessation of cycle is divided into 3 phases, namely: Pre- Menopause (time from end of last menstrual period), Peri-Menopause (Time between the changes of normal ovulation to amenorrhea) and Post Menopause (12 consecutive months of amenorrhea).^[4]

In the period heading towards menopause, generally women may experience the symptoms related to vascular instability, uro-genital atrophy, bone and muscular problems, psychological damage and sexual stagnation.^[5] These symptoms on prolonged duration can lead to complications like cardiovascular disease, osteoporosis, abnormal vaginal bleeding and metabolic syndrome.^[6]

The main problem in treating post menopausal symptoms is that, there is no proper diagnostic tool available to detect problems before hand. The normal lab like complete blood count, scans, breast or pelvic examinations will be initiated only after the reporting of problems.^[7] After that only pharmacological treatment for that specific condition will be done. This insists the need for the early detection and assessment of health related problems in post menopausal women to preserve the quality to life.^[8]

So this study aims to assess the health related problems in post menopausal women with the objectives to define the symptoms related to the post menopausal health and to identify the socio-demographic factors associated with post menopause.

MATERIALS AND METHODS

A prospective, observational study was conducted for a period of six months from January to June 2016 in a tertiary care hospital, Chennai, India after obtaining Institutional ethical clearance (ECR/102/Inst/TN/2013). A total of 104 post menopausal women, who gave written consent to participate in the study, were enrolled from department of Obstetrics and Gynaecology. Menopausal rating scale (MRS) was administered to assess the health related symptoms which contains 11 item questionnaires. It contains three independent dimensions: Psychological, somatic, and urogenital subscale. Each of the 11 symptoms in MRS contained

in the scale can get 0 (no complaints) or up to 4 scoring points (sever symptoms) depending on the severity of the complaints perceived by the women completing the scale. The composite scores for each of the dimensions (subscales) are based on adding up the scores of each item of the respective dimensions. The total score is the sum of the dimension scores, and is proportional to their severity of subjectively perceived symptoms.^[9] Their demographic details, socio-economic status, educational status, past medical and medication history, current medication therapy, lab investigations and menopausal symptoms will be recorded.

Inclusion Criteria: Women aged between 45 to 60 years, women who attained menopause above one year and patients visiting or admitted either as inpatient or outpatient.^[10]

Exclusion Criteria: Women less than 45 years, women who have undergone hysterectomy and women on hormone replacement therapy.

Clinical pharmacist intervention laid importance on (1) symptoms related to post menopause, (2) socio-demographic factors associated with post menopause, (3) knowledge regarding the menopausal stage, (4) pharmacist education about post menopause. All the assessments were entered in MS Excel and analyzed by using Statistical Package for the Social Sciences (SPSS) version 22.0 with percentage calculations.

RESULTS

Out of 104 post menopausal women were enrolled in the study, out of whom 18(17%) were in the age group of 45-49, 32(1%) were in the age group of 50-54 years, 30(28%) were in the age group of 55-59 years and 24(23%) were at the age group of 60 years. On assessing the marital status, 76 (73%) was presently lead a married life, 21 (20%) was widowed, 4(4%) was found to be divorced and 3 (3%) was never married.

In study population, 38 (37%) were in intermediate level of education, 28 (27%) were degree holders, 17 (16%) was found to be completed higher secondary, 10 (10%) had primary level of education and 11 (11%) was found to be illiterate.

Out of 104 post menopausal women participated in the study 45(43%) were upper middle class, 52(50%) were in lower middle class and 7(7%) were in lower class. The participants reported their age in menarche as 9(9%) at <12 years, 46(44%) at 12-14 years and 49(47%) at >14 years. Participants parity was reported as 9 (9%) had no children, 26 (25%) had one

child, 40(38%) have 2 children 17(16%) have 3 children and 12(12%) have more than 4 children. Distribution of age at first pregnancy was 13(14%) at age of 15-19 years, 67(72%) at their age at 20-24, 15(16%) at 25-29 years, their last pregnancy in 15-19 years 1(1%), 20-24 years 17(18%), 20-29 years 60 (65%), and 35-39 years 17(18%) and 86 (91%) had normal delivery and 19(20%) undergone cesarean were shown in **Table 1**.

Table 1: Distribution of Women According to Socio-Demographic Factors.

Variable	Number	Percentage (%)
Age (years) (n= 104)		
45-49	18	17
50-54	32	31
55-59	30	29
60	24	23
Educational status (n=104)		
Illiterate	11	11
Primary	10	10
Intermediate	38	37
Higher secondary	17	16
Degree	28	27
Marital status (n=104)		
Single	3	3
Married	76	73
Divorced	4	4
Widowed	21	20
Socio-Economic status (n=104)		
Upper middle	45	43
Lower middle	52	50
Upper lower	7	7
Employment status (n=104)		
Employed	24	23
Unemployed	64	62
Retired	16	15
Age at menarche (n=104)		
>12 years	9	9
12-14 years	46	44
<14 years	49	47
Parity (n=95)		
0	9	9
1	26	25
2	40	38
3	17	16
<4	12	12
Age at first pregnancy (n=95)		
15-19	1	1
20-24	17	18
25-29	60	63

35-39	17	18
Mode of delivery (n=95)		
Normal	86	91
Cesarean	19	20
Age at menopause		
40-44	30	29
45-49	64	62
<50	10	10

Among the study population post-menopausal related symptoms reported were hair loss 57 (55%), anemia 56(54%), back pain 53(51%), blood pressure 43(41%), dyslipidemia 28 (27%), sleep disorders 24 (23%), diabetes mellitus 23(22%), thyroid 8 (8%) was shown in **Table 2.**

Table. 2: Descriptive Analysis Post-Menopausal Symptoms.

Symptoms	Number	Percentage (%)
Blood pressure	43	41
Hair loss	57	55
Cholesterol	28	27
Anemia	56	54
Diabetes	23	22
Thyroid	8	8
Back pain	53	51
Seizures	3	3
Sleeping disorder	24	23
Migraines	16	15

According to MRS, most reported symptoms were joint and muscular discomfort 89(86%), sleep problems 68(65%), hot flashes and sweating 57 (55%), heart discomfort 54(52%), physical and mental exhaustion 55(53%), followed by dryness of vagina 51(49%), irritability 47 (45%), depressive mood 45(43%) and the least reported symptoms were anxiety 40(38%) and sexual problems 21(20%).

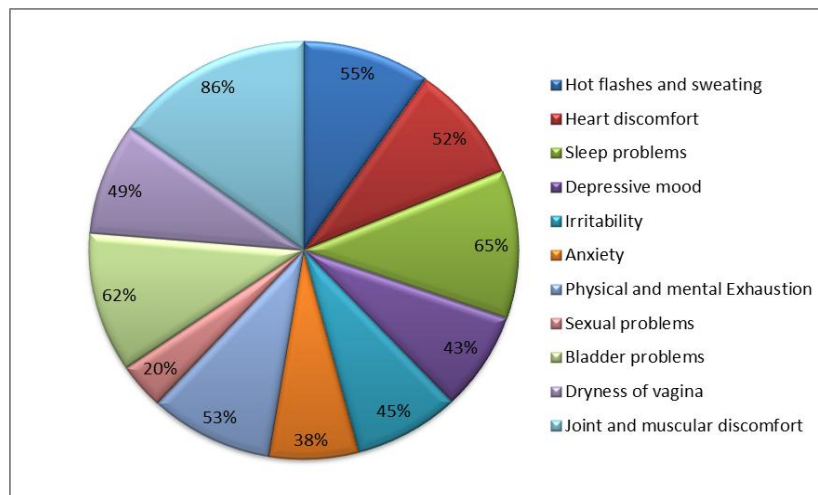
Figure. 1: Menopausal Rating Scale.

Figure. 1: illustrates that, prevalence of joint and muscular discomfort was high 89 (86%), sleeping problems 68 (65%), and hot flashes and sweating 57 (55%) followed by other symptoms.

DISCUSSION

The major patient population was in the age group of 50-54 years 30 (29%). It show highest incidence of post menopausal symptoms occurred among 50-54 which is similar to the study conducted by Mohammed F *et al.*^[11] Among 104 post-menopausal women 76(73%) lead a married life which was similar to the study conducted by Sarkar A *et al.*^[12] Among post menopausal women majority of women 38(37%) were intermediate in education and this was supported by Manjusha K *et al.*

Majority of the study population were in lower middle class 50 (50%) which was supported by study conducted by Manjusha K *et al.* The mean of menarche in the present study was 13.2 years (SD \pm 1.19) in the study conducted by Sakar A *et al.*, the mean age of menarche was 14.73(SD \pm 1.3). In our study population, maximum patients had 2 children 40 (38%) and followed by 3 children 26 (25%).

Out of 101 study population on assessing the symptoms our study reported that occurrence of hair loss 57(55%), anemia 56(54%), back pain 53(51%) were the most reported symptoms, one which was similar to the study conducted by Mital J.^[13] On assessing the overall rating in MRS, in our study population we found out that joint and muscular discomfort 89 (56%), sleep problems 68 (65%), bladder problems 64 (62%) were the most commonly reported menopausal symptoms which was similar to study conducted by Sudha S *et al.*^[14]

CONCLUSION

Our study demonstrates the role of clinical pharmacist intervention in assessing the health related problems in post menopausal women by patient education. Patients were suffering from one or more number of menopausal symptoms which was misinterpreted as aging syndrome, so most of the symptoms were left unnoticed due to patient's negligence. Most of the patients were able to afford for the post menopausal symptoms management, but left untreated due to carelessness. Active participation by a clinical pharmacist is effective in improving patient's knowledge towards the identification and management of menopausal symptoms and there is a necessity for a multidisciplinary approach in spreading awareness and education regarding menopause.

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CONFLICT OF INTEREST: None.

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