A Compartive Study on Depression among Married and Unmarried after Menopause

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Abstract:- Menopause is a normal physiological change in women's life. During menopause various hormonal changes occur in women that brings about drastic alterations in psychological status of the individual typically causing mood swings, depression and anxiety. This study primarily focuses on comparing depression level between married and unmarried females after menopause. A group of two categories a married and an unmarried after menopause, between the age group of 55 to 65 were selected for this study. Each group consisted of 25 subjects with a total of 50 subjects. The depression level was assessed using Goldberg's depression scale and the data were statistically analysed using SPSS (version 20.0). The results showed that majority of unmarried (48%) had moderate to severe depression but in case of married group, majority (64%) had no depression. The differences in the result were found to be statistically significant with p value <0.05. On comparison it is evident that unmarried females suffered more levels of depression than married females.

Keywords:- Menopause, Married, Unmarried, Depression.

I. INTRODUCTION

According to the world health organization (WHO), natural menopause as the "permanent cessation of menstruation resulting from the loss of ovarian follicular activity". When comparing the depression rates among males and females, females have a high chance to suffer from depression than males. Menopause is prompted by a decline in estrogen and progesterone production, and rising follicle-stimulating hormone (FSH) and luteinizing hormone (LH) levels. Among south Indian women population, the average age of menopause is 48.7 years. When women reach the menopause phase, hormonal shifts occur which make the individual face various physical, psychological and sexual symptoms. Features of menopause are: irregular or absent menstrual periods, hot flashes, night sweats, palpitations, decreased vaginal lubrication and thinned vaginal mucosa (resulting in dyspareunia), behavioural and other neuro psychophysiological problems like mood swings, insomnia, anxiety, and depression, forgetfulness and impaired concentration ability, urinary incontinence, loss of libido; other symptoms like paraesthesia, nervousness, melancholia. vertigo, weakness, arthralgia/myalgia, headache, and formication. The menopausal transition is a period of heightened hormonal variability and is associated with a greater risk of osteoporosis, greater sexual dysfunction, depressive symptoms, and substantial psychosocial impairment ^[1]. Estrogen decrease is the leading cause of functional and structural brain damage across and after menopause ^[2]. Evidence indicates that hormones produced by the ovary, control various nonreproductive functions of CNS. Early effective symptoms, such as depression and anxiety, are due to the impact on the limbic system of the estrogenic fluctuations, leading to a decrease of neurotransmitters such as females who enter menopausal transition at an early ages are at higher risk of developing depression. Serotonin, dopamine, and endorphins, as well as environmental factors, across the menopause^[3]. Recent studies demonstrate a relationship between the perimenopausal reduction of sexual hormones and increased chances of mood disorders even in women who never experienced it before. Many studies are conducted on the topic of depression in females during the menopausal transition^[4].

II. SIGNIFICANCE OF STUDY

India's public health care system typically concentrates on women of child bearing age who received little attention when they moved out of this bracket. Not much effort has been made to study the needs of women in late reproductive age or have moved in to the postmenopausal stage although there has been growing attention on aging which mainly focus on women aged 60 and above. The latest health policy opted by India also do not give any importance on the issues of aged women especially during their menopausal period. Therefore any attempt to study the issues of menopause assumes significance in the current Indian context^[5].

III. MATERIALS AND METHODS

A total of 50 postmenopausal subjects were selected for this study. Out of these 25 subjects were married and 25 were unmarried. All the subjects had attained menopause and is between the age group of 55 to 65 years. All the subjects were randomly selected from the outpatient department of little flower hospital and research center Angamaly. The subjects were selected according to inclusion and exclusion criteria and grouped according to the marital status to married group and unmarried group. All subjects included in this study were free from any daily medications, hormonal therapy, and psychiatric or gynecological problems, etc.

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The main objective of this study was to scrutinize and compare the level of depression among married and unmarried women during the postmenopausal period. For attaining this objective depression-related data collected from both groups using Goldberg's depression scale, a standardized tool to self-score the depression level. A total of six-month duration is taken to attain the goals of this study. The ethical approval of this study was got from the ethical committee of little flower institute of medical science research (LIMSAR). The permission for data collection from the OP department was taken from the OPD in charge and consent for data collection is also taken from each patient

> Assessment of depression level

This is a scale consist of 18 items. The subject will self-score this test with instructions at the bottom of the screening questions. There will be 6 choices for each question, that is choice (to a great extent) score 5, choice (a lot) score 4, choice (quite a lot) score 3, choice (Partly) score2, choice (only slightly) score 1 and choice (not at all) score 0. Based on the total score of the individual item the level of depression is classified into 5 groups. That is total score 0-9 no depression, 10-21 possible symptoms that may be due to depression or other medical issues, 22-35 mild to moderate depression, 36-53 moderate to severe depression, 54 and up severely depressed. If the subject's total score is over 21, the client should refer to health experts for further examination and necessary treatment ^[6].

IV. STATISTICAL ANALYSIS

The data obtained were analyzed using the Statistical Package for Social Sciences (20.0). Descriptive statistics of the data are presented as frequencies, percentages, and mean \pm SD. A comparison of means between the married group and unmarried group were done using the Mann Whitney U test.

V. RESULTS

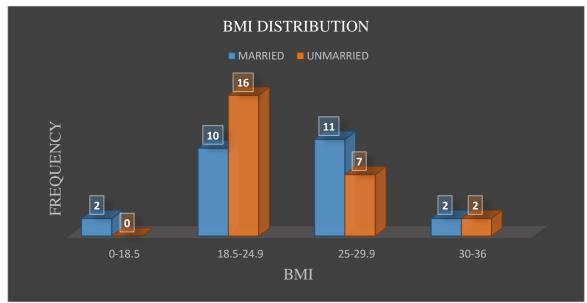
➢ Baseline Characters

AGE GROUPS (In years)	MARRIED GROUP		UNMARRIED GROUP		
MEAN±SD	62.84±5.68		60.44±6.21		
	Frequency	Percentage	Frequency	Percentage	
51-60	10	40%	16	64%	
61-70	13	52%	7	28%	
71-80	2	8%	2	8%	
TOTAL	25	100%	25	100%	

Age distribution of the study population

Table 1:- Age distribution of study population

Table 1 shows the age distribution of married and unmarried subjects in the study population. The mean age of the married group was distributed as 62.84 ± 5.68 and that of the unmarried group was distributed as 60.44 ± 6.21 . The majority of unmarried subjects (64%) included in 51-60 class intervals but in case of married subjects' majority (52%) are included in the 61-70 class interval. An equal number of (8%) of subjects both married and unmarried were included in the age group of 71-80 class intervals.



Graph 1:- BMI distribution of study population

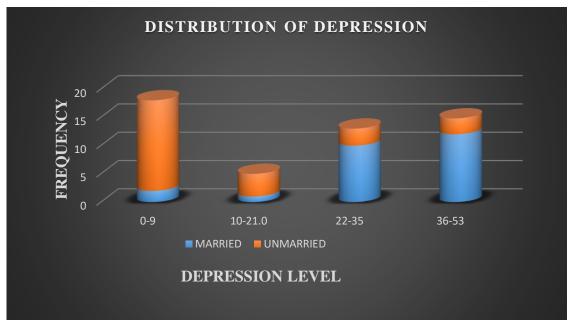
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Graph 1 shows the body mass index of the study population. The mean value of BMI distribution for married subjects is 24.12 ± 4.49 and unmarried subjects are 25.03 ± 3.35 . The mean value of BMI distribution is high for unmarried when compared with married subjects. In married subjects, higher numbers (44%) are included in the class interval of 25-29.9 which indicate the subjects are in pre-obese state and 8% included in the class interval of 0-18.5, the subjects who are included in this interval are

underweight and 40% subjects are included in the class interval of 18.5-24.9 are normal weight and 8% are included in the class interval of 30-36, the subjects are in class I obesity. In unmarried subjects the majority (64%) included in the class interval of 18.5-24.9, they are in normal weight. 28% of unmarried subjects are in the class interval of 25-29.9, they are in the pre-obese state. And 8% are included in class I obesity. No one from unmarried subjects is included in the underweight state.

DEPRESSION LEVEL	UNMARRIED DROUP 32.72±12		MARRIED GROUP 9.76±10.68	
MEAN±SD				
	Frequency	Percentage	Frequency	Percentage
0-9	2	8%	16	64%
10-21	1	4%	4	16%
22-35	10	40%	3	12%
36-53	12	48%	2	8%
TOTAL	25	100%	25	100%

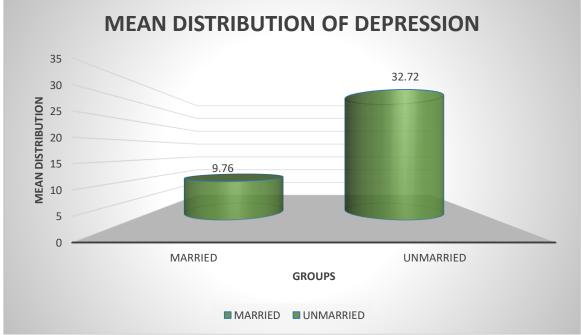
Table 2:- Distribution of Depression among the Study Groups



Graph 2:- Distribution of Depression among the Study Groups

Table 2 shows the distribution of depression rates among unmarried and married subjects. The mean value of depression of the married group is 9.76 ± 10.68 , and for the unmarried group is 32.72 ± 12 . In the married group majority (64%) have no depression. But 16% of subjects scored in between the 10-21, indicate that these people are suffering from possible symptoms that may be due to depression or other medical issues. In this married group 12% of subjects' experiences mild to moderate level of depression and very fewer people (8%) have moderate to severe level of depression. In the case of unmarried subjects, the majority (48%) of unmarried subjects suffered by moderate to severe depression. 8% of the study subjects are free from depression. Very less amount of people (4%) suffered the possible symptoms may be due to depression or other medical illnesses. And about 40% of subjects experience mild to moderate levels of depression.

GROUP	Ν	MEAN±SD	Z VALUE	P VALUE
MARRIED	25	9.76±10.68	-4.955	0.000
UNMARRIED	25	32.72±12		



Graph 3:- Comparison of Depression Level between the Study Subjects

Table 3 compares the depression level of the two study groups. The mean score of married subjects is 9.76 ± 10.68 and for unmarried subjects is 32.72 ± 12 . From these values it is clearly evident that the depression level is very high for unmarried subjects when compared with married subjects. The difference in the depression level experienced by the married and unmarried subjects is found to be statistically highly significant as the p-value is 0.000. In the Mann Whitney U test, P <0.05 is considered to be statistically significant.

VI. DISCUSSION

In the present world, depression is one of the leading cause of disease-related disability among women. Ahmed et.al in their study says that depression is very common among females than males, with risk ratios roughly 2:1. This high range of depression in females may be due to common major life changes, like giving birth, menopause, retirement, midlife crisis, etc. If these changes perceived as positive, they may still lead to depression. This study shows that major life transitions can cause depression if they are sudden, major, and lead to a loss (or change) of life roles ^[7]. The current study shows that the participants experienced depression after menopause only, because they have no prior incidence of depression or history for treatment for any mood disorders.

Ruiyi's study reveals that the prevalence of symptoms of depression rose from 14.5% during pre-menopause, to 18.2% during the menopausal transition, and 19.6% in the postmenopausal period. Compared with women in the premenopausal stage, perimenopausal and postmenopausal women were more likely to have symptoms of depression. They conclude that the symptoms of depression are more in post-menopause than pre-menopause ^[8]. The current study

also proves the same thing that is a depression in postmenopausal women is very high.

The current study was also help to assess the differences in depression experienced by the married and unmarried population. It reveals that the unmarried population experience more depression than married. The difference in the depression level experienced by the married and unmarried subjects is found to be statistically highly significant as the p-value is 0.000. In the Mann Whitney U test, P <0.05 is considered to be statistically significant. The unmarried population experiences more depression because of many reasons may be due to lack of social support, loss of role function, retirement, menopausal hormonal changes, feeling of loneliness, lack of selfesteem, feeling of loss of physical strength, feeling of burden to the society, feeling of loss of self-identity as a women, etc. but in married population, their family is a great support for them than unmarried. The married subjects are staying with their family so they can escape from the feeling of loneliness and they are busy with their day to day life. But in the case of unmarried, they get more free time, this made them think more and more and it will put them in to the feeling of depression.

VII. CONCLUSION

As per the findings obtained by the study, it is statistically significant that rate of depression is high in unmarried women during postmenopausal period than married women.

RECOMMENDATION

Present study puts forth for several investigations like quantitative analysis of the hormonal changes after menopause and its significance in depression, qualitative analysis on feelings regarding menopause and its chances to lead mood disorders, qualitative analysis on family and society support to escape from the depression, hormonal modifications or therapy to depressive post-menopausal subjects to treat depression, therapeutic milieu therapy for depressive clients to escape from mood disorders, effects of both hormonal and therapeutic milieu therapy in depressive postmenopausal women.

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