A STUDY TO ASSESS THE BIOPSYCHOSOCIAL PROBLEMS AND THE FRACTURE RISK AMONG THE MENOPAUSAL WOMEN AT SELECTED COMMUNITY SETTING, TAKIYA SASARAM

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Abstract: INTRODUCTION: Women are said to be the principle and more vulnerable group to the primary osteoporosis subcategory of Involutional Osteoporosis Type I, which occurs postmenopausal, as an outcome of low estrogen that adversely affects the trabecular bone. Reduced estrogen in the menopause causes a detrimental effect on the bonebuilding cells, which impacts the natural procedure of the bone breakdown and repair. It is indicated that age, nutrition, education level, physical movement, and weight as most common risk factors for osteoporosis. Since change in the genetic factor is impossible to yield, the presence of adjustable factor is required for sustaining bone strength and bone density that assists in mitigating the osteoporosis and fracture risk. Osteoporosis is a serious health issue among them, with more than 1.5 million women suffering from fractures as a result of the disease each year, with 44.8 percent of them suffering from hip fractures. Menopausal women are stressed by these musculoskeletal issues. The quality of a woman's life can be significantly impacted by menopause. Their health requirements vary dramatically, and it is critical for women to be aware of the increased health dangers.

METHODOLOGY: The research approach was quantitative and research design was Descriptive Survey design. The setting was a village named Takiya, Sasaram, Rohtas. There was 60 post- menopausal women were chosen as sample for study. The assessment was done on a semi structured tool with three different sections.

RESULTS AND DISCUSSION: The findings obtained from the study were in two parts according to analysis of bio psychosocial tool scores. 38.3% of sample are at moderate risk and 61.7% of sample are at high risk and according to analysis of fracture risk assessment tool scores. 33.3% of sample are in mild risk, 35% of sample are in moderate risk, 31.7% of sample are in severe risk.*.*

Index Terms - **Biopsychosocial Problems, Fracture, Menopausal Women, Community Setiing.**

I. INTRODUCTION

I.   When the body moves from the reproductive stage into the nonproductive stage, menstruation ceases to occur. The hormonal changes during menopause can cause a number of physical, psychological, and social problems. Feeling less confident because of their infertility and decreased reproductive capabilities desirable in societies. Daily life is affected more negatively by psychological symptoms and is also neglected more often. During this transition, stress is caused by adjusting to a changing self, adapting to hormonal shifts that alter sexuality. Nurses can help identify people with these problems and assist them in returning to a normal life.. Human being goes through various stages of life. Each stage of life is influenced by specific aspect as infancy, childhood, adolescent, adult, middle age, old age. Women of postmenopausal period is very important since it influences psychological, social, and emotional aspects due to physiological changes. Psychological problems affects your physical well-being, resulting in chronic fatigue, sleep problems, and changes in appetite. It affects your mood, with feelings of sadness, emptiness, hopelessness and dysphoria. It affects the way you think, interfering with concentration and decision making. And, it affects your behavior, with increased irritability and loss of temper, social withdrawal, and a reduction in your desire to engage in pleasurable activities. Postmenopausal woman is mainly affected by the hormonal factors.

II. OBJECTIVE OF THE STUDY

• To assess the Biopsychosocial problems and the fracture risk among the menopausal women.
• To compare the association between the biopsychosocial problems and the fracture risk test scores with socio demographic variables.

III. CONCEPTUAL FRAMEWORK

This research study is based on IPO model, the IPO model represents a system in three stages: input, process and output. Inputs are modeled as consumables and efforts that are introduced to a system at the beginning stage of the lifecycle. Outputs are modeled as the result produced by the system. Process is modeled as the conversion of the inputs to the outputs.

•   INPUT- Sociodemographic factor, Biopsychosocial factors, Biological factors
•   PROCESS – Assessment of the Menopausal Women with FRAX
Tool, Biopsychosocial Tool.
•   OUTPUT- Risk of the fracture in menopausal women

II.   RESEARCH METHODOLOGY

RESEARCH APPROACH:
A quantitative research approach was used for this study.

RESERACH DESIGN :
Descriptive survey design (Basic pre-test only design)

STUDY SETTING:
The settings in the current selected village of Sasaram, Bihar,
India

POPULATION OF THE STUDY
The population comprises of all Women Menopausal women and residents of selected Takiya village of Sasaram, Bihar, India

TARGET POPULATION
All the women of the age 45 to 75 year old has selected.

SAMPLE
Selected post Menopausal Women above the age 45years and residents of selected Takiya village of Sasaram, Bihar, India

SIZE OF THE SAMPLE
Sample size is approximately 60

CRITERIA FOR SAMPLE SELECTION
We include all women who are menopausal women, who are residents of Takiya village of Sasaram ,women who can communicate, women willing to participate in the study and Women who are available at the time of data collection

3.4.1 Descriptive Statistics
Our tool contains two tool as it include socio-demographic variable which contain 11 questions and tool-2 includes

SECTION A- Analysis of demographic variables
SECTION B – Analysis of Biopsychosocial data
SECTION C- Analysis of Fracture risk Assessment data
SECTION D- Chi square analysis among Menopausal women

S.NO.	VARIABLES	FREQUENCY	PERCENTAGE %
1.	Age of women		
	45-55Yr.	22	36.7 %
	56-65Yr.	11	18.3 %
	66-75Yr.	10	16.7 %
	Above 75Yr.	17	28.3 %
2.	Religion of the women		
	Hindu	30	61.7 %
	Muslim	30	38.3 %
	Sikh	0	0.0 %

	Christian	0	0.0 %
3.	Educational status		
	No formal education	37	61.7 %
	Primary education	23	38.3 %
	Secondary and Higher education	0	0 %

	Diploma and Degree holder and above	0	0 %
4.	**Types of residence**		
	Rural	8	13.3 %
	Urban	19	31.7 %
	Semi Urban	33	55.0 %
5.	**Monthly income of family**		
	<5000	0	0 %
	5001-10000	5	8.3 %
	10001-150000	18	30.0 %
	>15000	37	61.7 %
6.	**Occupational status of women**		
	Home maker	5	8.3 %
	Job (Private/Govt.)	3	5.0 %
	Business	35	58.3 %
	Farmer	17	28.3 %
7.	**Total no. Of children of women**		
	One	39	65.0 %
	Two	10	16.7 %
	Three	11	18.3 %
	Above four	0	0 %
8.	**Family type of women**		
	Nuclear	49	81.7 %

	Single parents family	0	0 %
	Extended family	8	13.3 %
	Childless family	3	5.0 %
9	**Dietary pattern of women**		
	Vegetarian	2	3.3 %
	Non vegetarian	3	5.0 %
	Mixed	6	10.0 %
	Wagan	49	81.7 %
10	**Marital status**		
	Married	55	91.7 %
	Unmarried	5	8.3 %
	Divorced	0	0 %
	Widowed	0	0 %
11	**Age of Menarche women**		
	Early adolescence- occur between the age of 10 and 13 yr.	11	18.3 %
	Middle adolescence – occurs between the age of 14 to 17yr.	44	73.3 %

Late adolescence-occurs between age of 18 to 19 yr.	5	8.3 %

SECTION B
Analysis of Biopsychosocial data

Fig 12: Result of Biopsychosocial Data of post menopausal women.

This figure represents that 38.3% of sample are at Moderate risk and 61.7% of sample are at high risk .
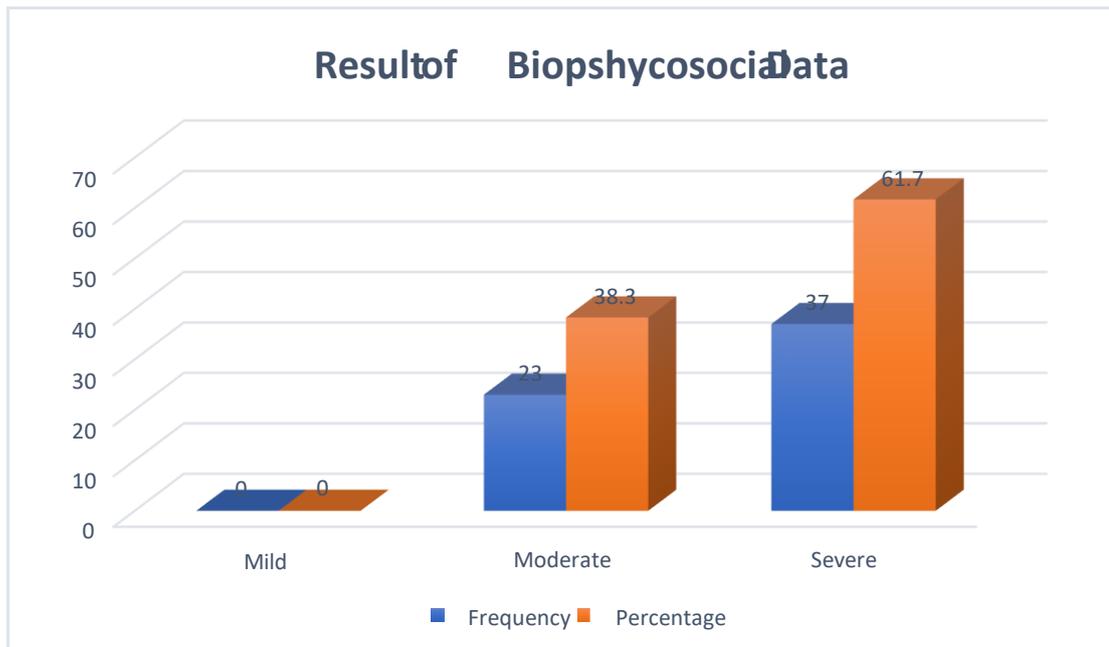
Variables	Frequency	Percentage
Mild	**20**	**33.3%**
Moderate	**21**	**35.0%**
Severe	**19**	**31.7%**
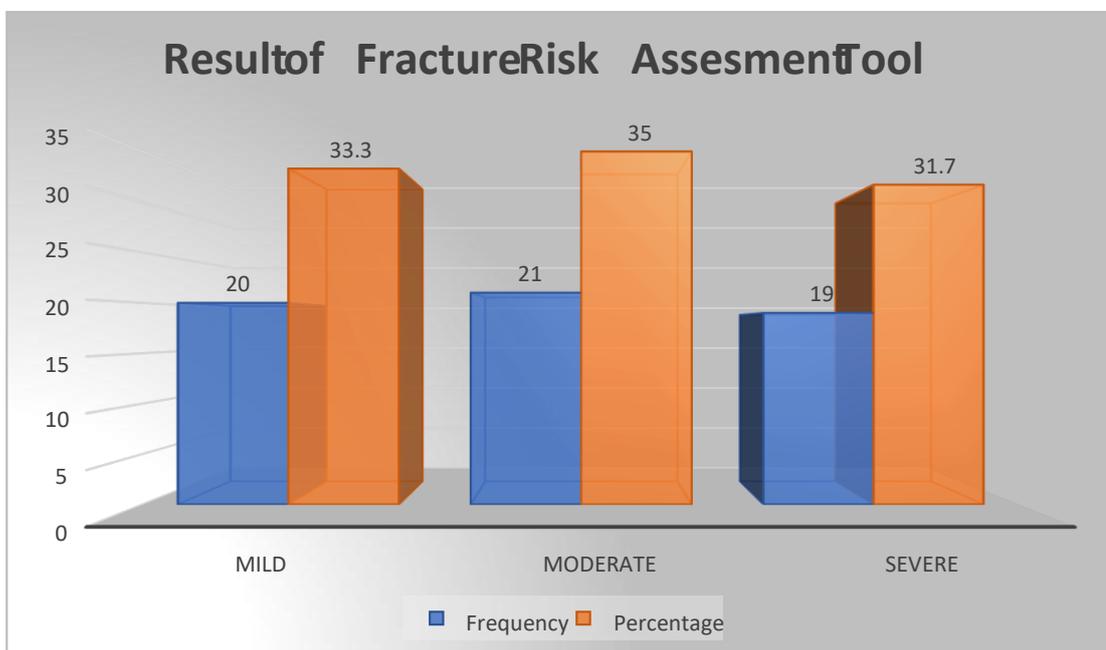
Fig-13: Result Of Fracture Risk Assessment Tool

This figure represents that 33.3% of sample are in Mild Risk,
35% of Sample are in Moderate risk, 31.7% of Sample are in Severe Risk.
Section D
Chi square analysis among Menopausal women With Selected demographic variables.

S.NO.	VARIABLES	FREQUENCY	Chi square test
1.	Age of women		
	45-55Yr.	22	0.209
	56-65Yr.	11	
	66-75Yr.	10	
	Above 75Yr.	17	
2.	Religion of the women		
	Hindu	30	0.055
	Muslim	30	
	Sikh	0	
	Christian	0	
3.	Educational status		
	No formal education	37	0.433
	Primary education	23	

	Secondary and Higher education	0	
	Diploma and Degree holder and above	0	
4.	**Types of residence**		
	Rural	8	0.057
	Urban	19	
	Semi Urban	33	
5.	**Monthly income of family**		
	<5000	0	0.571
	5001-10000	5	
	10001-150000	18	
	>15000	37	
6.	**Occupational status of women**		
	Home maker	5	0.268
	Job (Private/Govt.)	3	
	Business	35s	
	Farmer	17	
7.	**Total no. Of children of women**		
	One	39	
	Two	10	
	Three	11	
	Above four	0	

8.	Family type of women		
	Nuclear	49	0.981
	Single parents family	0	
	Extended family	8	

	Childless family	3	
9	Dietary pattern of women		
	Vegetarian	2	.152
	Non vegetarian	3	
	Mixed	6	
	Wagan	49	
10	Marital status		
	Unmarried	55	.642
	Married	5	
	Divorced	0	
	Widowed	0	
11	Age of Menarche women		
	Early adolescence- occur between the age of 10 and 13 yr.	11	0.466
	Middle adolescence – occurs between the age of 14 to 17yr.	44	

	Late adolescence- occurs between age of 18 to 19 yr.	5	

Results And Discussion

The findings obtained from the study were in two parts according to analysis of bio psychosocial tool scores. 38.3% of sample are at moderate risk and 61.7% of sample are at high risk and according to analysis of fracture risk assessment tool scores. 33.3% of sample are in mild risk, 35% of sample are in moderate risk, 31.7% of sample are in severe risk.

Hypothesis: There was significant association between the demographic variables and biopsychosocial problems and the fracture risk test scores.

This depicts that all variables have p score are greater than 0.05, so H1 hypothesis is rejected.

The first objective of the study : To assess the Biopsychosocial problems and the fracture risk among the menopausal women.

Analysis of bio psychosocial tool scores shows that 38.3% of sample are at Moderate risk and 61.7% of sample are at high risk.

Analysis of Fracture Risk Assessment Tool scores that 33.3% of sample are in Mild Risk, 35% of Sample are in Moderate risk, 31.7% of Sample are in Severe Risk.

The second objective of the study : To compare the association between the biopsychosocial problems and the fracture risk test scores with socio demographic variables

After chi square test, the data shows that none of the variable shows that none of the above demographic variable shows significant relationship with the bio psychosocial scores including Age of women, Religion of the women, educational status, Types of residence, Monthly income of family, Occupational status of women, Total no. Of children of women, Family type of women, Dietary pattern of women, Marital status, Age of Menarche women.

II. ACKNOWLEDGMENT

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