



STUDY TO ASSESS KNOWLEDGE REGARDING OSTEOPOROSIS RISK FACTORS AND ITS PREVENTION AMONG WOMEN IN SELECTED URBAN AREA OF JABALPUR CITY

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KEYWORDS :

BACKGROUND OF THE STUDY

Anthropologists have studied skeletal remains that showed loss of bone density and associated structural changes that were linked to a chronic malnutrition in the agricultural area in which these individuals lived. "It follows that the skeletal deformation may be attributed to their heavy labor in agriculture as well as to their chronic malnutrition", causing the Osteoporosis seen when radiographs of the remains were made.

Osteoporosis means "porous bones", from Greek: οστών/*ostoun* meaning "bone" and πόρος/*poros* meaning "pore".

It is estimated that 200 million people have Osteoporosis. Osteoporosis becomes more common with age. About 15% of White people in their 50s and 70% of those over 80 are affected. It is more common in women than men. In the developed world, depending on the method of diagnosis, 2% to 8% of males and 9% to 38% of females are affected. Rates of disease in the developing world are unclear.

There are 8.9 million fractures worldwide per year due to Osteoporosis. Globally, 1 in 3 women and 1 in 5 men over the age of 50 will have an osteoporotic fracture. Data from the United States shows a decrease in Osteoporosis within the general population and in white women, from 18% in 1994 to 10% in 2006. White and Asian people are at greater risk. People of African descent are at a decreased risk of fractures due to Osteoporosis, although they have the highest risk of death following an osteoporotic fracture. It has been shown that latitude affects risk of osteoporotic fracture. Areas of higher latitude such as Northern Europe receive less Vitamin D through sunlight compared to regions closer to the equator, and consequently have higher fracture rates in comparison to lower latitudes. For example, Swedish men and women have a 13.% and 28.5% risk of hip fracture by age 50, respectively, whereas this risk is only 1.9% and 2.4% in Chinese men and women. Diet may also be a factor that is responsible for this difference, as vitamin D, calcium, magnesium, and folate are all linked to bone mineral density.

NEED OF STUDY

According to the National bone disease institute (NBDI) there were more than 194,000, new cases of BD in the United States in 2009 more 40,000 people died of the disease. Osteoporosis may be due to lower than normal peak bone mass and greater than normal bone loss. Bone loss increases after menopause due to lower levels of estrogen. Osteoporosis may also occur due to a number of diseases or treatments including alcoholism, anorexia, hyperthyroidism, surgical removal of the ovaries, and kidney disease. Certain medications increase the rate of bone loss including some antiseizure medications, chemotherapy, proton pump inhibitors, selective serotonin reuptake inhibitors and steroids. Not enough exercise and smoking are also risk factors. Osteoporosis is a disease where decreased bone strength increases the risk of a broken bone. It is the most common reason for a broken bone among the elderly. Bones that commonly break include the back bones, the bones of the forearm, and the hip. Until a broken bone occurs there are typically no symptoms. Bones may weaken to such a degree that a break may occur with minor stress or spontaneously. Chronic pain and a decreased ability to carry out normal activities may occur following a broken bone.

Osteoporosis becomes more common with age. About 15% of white people in their 50s and 70% of those over 80 are affected. It is more common in women than men. In the developed world, depending on the method of diagnosis, 2% to 8% of males and 9% to 38% of females are affected. Rates of disease in the developing world are unclear. About 22 million women and 5.5 million men in the European Union had Osteoporosis in 2010. In the United States in 2010 about eight million women and one to two million men had Osteoporosis. White and Asian people are at greater risk. The word Osteoporosis is from the Greek terms for "porous bones".

Osteoporosis is defined as a bone density of 2.5 standard deviations below that of a young adult. This is typically measured by dual-energy X-ray absorptiometry at the hip

- Identity women facing Osteoporosis.
- Increase knowledge about Osteoporosis.
- Provide information about services that need to be developed to better meet the need of women diagnosed with Osteoporosis in the urban area of Jabalpur .

With the help of this study we will assess the knowledge of Osteoporosis disease in the female. By the help of this study we are giving information and education of Osteoporosis about causes, clinical features examination diagnosis treatment and prevention, & we can improve their knowledge by this study.

STATEMENT-

"Study to assess knowledge regarding osteoporosis risk factors and its prevention among women in selected urban area of Jabalpur City"

OBJECTIVES

The objectives of this study are to...

1. Assess the knowledge of women regarding Osteoporosis risk factor and prevention in selected urban area of Jabalpur city.
2. Associate the knowledge scores of Osteoporosis women with selected demographic variable.
3. Assess the risk factor of Osteoporosis women in selected urban area of Jabalpur city.

ASSUMPTION-

- v It is assumed that women in the urban of Jabalpur city having some knowledge about Osteoporosis.

DELIMITATION-

The study is limited to women's-

1. In selected urban area of Jabalpur city.
2. Who are willing to participate in study.
3. Size of sample is 100.
4. Knowledge of women's assessed by the structured multiple choice questionnaires.
5. Age group women's more than 20 years.

RESEARCH DESIGN:-

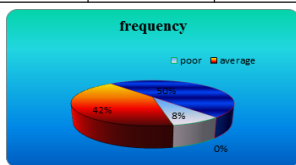
Research design is the overall plan for collecting and analyzing data including specification for enhancing the internal and external validity of the study.

It help in the selected of subject, independent variables and information to be obtained. The present study is viewed to identify the

knowledge & practice regarding Osteoporosis prevention and risk assessment of women in a selected area of Jabalpur

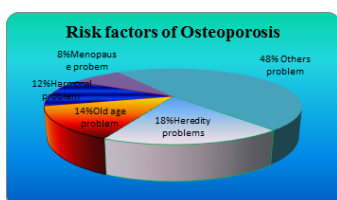
Population	Sample & sampling technique	Variables	Tools & techniques	Plan for analysis
women's age more than 20 years.	Sample 100 woman's from selected urban area of Jabalpur Sampling technique- convenient sampling	Dependent variable :- Osteoporosis Independent variable :- Socio demographic variable Age, Education, Occupation, Family income, Type of family, No. of children, Previous knowledge, Tele media	Tool -1 structured interview schedule Part 1 – Demographic data Part 2 – structured interview schedule knowledge of women's regarding Osteoporosis. Part 3- Check list for risk factors of Osteoporosis.	Demographic data for women's would be analyzed by using frequency & percentage. Level of knowledge of women's, according to the score which are classified as good , average or poor. Association between knowledge of women's and selected demographic variables. Assess the risk factor of Osteoporosis by checklist.

	Variables	Frequency	Level of knowledge			Mean	χ^2	DF	“p” value	Inference
			Poor	Average	Good					
1	Age									
	21-30 year	30	0	10	20	14.7				
	31-40 year	46	0	16	30	15.59				
	41-50 year	20	0	6	14	21.1				
	Above 51	4	0	0	4	23	2.6	3	>0.05	NS
2	Education									
	Illiterate	6	0	4	2	20				
	Primary edu.	14	0	6	8	20.35				
	Secondary edu.	30	0	12	18	19.2				
	Graduate	50	0	22	28	19.8	0.035	3	>0.05	NS
3	Occupation									
	Job workers	18	0	6	12	21.4				
	House wife	82	0	22	60	20.71	0.013	1	>0.05	NS
4	Socio-e status									
	Low	72	0	20	52	21.78				
	High	28	0	10	18	20	0.076	1	>0.05	NS
5	Family type									
	Nuclear	64	0	24	40	20.57				
	Joint	36	0	16	20	18.94	0.066	1	>0.05	NS
6	No. of children									
	One child	4	0	4	0	16.5				
	Two child	62	16	20	26	18.27				
	Three child	18	8	10	0	11.54			>0.05	NS
	More than 3	16	4	6	6	16.25	1.588	3		
7	Previous knwge									
	Yes	80	16	40	24	16.4				
	No	20	4	16	0	11.9	0.716	1	>0.05	NS
8	Telemedia									
	Mass media	78	6	40	12	15.08				
	Magazine	6	4	10	2	14.12				
	News paper	10	4	12	4	14.9				
	Literature/friend	6	2	4	0	11.67	0.586	3	>0.05	NS



Graph no. Pie diagram showing distribution of the poor, average, good knowledge in Osteoporosis

Assess the risk factor of Osteoporosis in women in selected urban area of Jabalpur city.



Graph no. Pie diagram showing distribution of the risk factors of Osteoporosis.

SUMMARY:-

This chapter deals with analysis and interpretation of the data collected on 100 women's of selected urban area of Damohnaka, Jabalpur using interview schedule, the purpose of analysis is to summarize and infer the findings. The information collected was translated into interpretable, purposive and descriptive term and inferme down from them using statistical method.

MAJOR FINDING OF THE STUDY:-

The following are the major finding of the study-
It deals with the analysis of the demographic data of the sample, frequency and percentage distribution of sample characteristics: Description of total knowledge score of women's regarding Osteoporosis: Finding of section I indicate that the majority of women's were having (50%) good knowledge, (42%) were having average knowledge score and (8%) had poor knowledge.

The analysis of section – III shows that the mean and standard deviation of the score obtained the sample was 37.08 and 6.305 respectively. The analysis of section – II shows that the mean and standard deviation.

Finding of section – III indicate that the association between selected

demographic variables and the knowledge score of women's or woman. The chi-square test was used to see the 0.05 level of significance for association between the selected variables.

With respect to associated demographic variables, the chi-square calculated value for all variables is more than P- value for the 0.05 level of significance.

The finding of this study showed that in the table No. 19 fulfill the objective (2) clearly indicates that association of the knowledge scores of women in Osteoporosis with selected demographic variable.

The finding of this study showed that in the table No. 20 fulfill the objective (3) clearly indicates that risk factor of Osteoporosis. Out of 100 women's 18% are having Heredity problem, 14% are having old age problem and 12% are having Hormonal, and 8% having Menopause problem problems.

OVERALL LEVEL OF KNOWLEDGE

The assessment of knowledge of women's about Osteoporosis disease in studied 100 subjects was as mean 18.54 and standard deviation 6.305.

5.4- COMPARISON OF EACH VARIABLE WITH THE KNOWLEDGE OF WOMEN'S ABOUT OSTEOPOROSIS DISEASE:-

Age:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 2.60 and "P" value > 0.05 .

Education:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 0.035 and "P" value > 0.05 .

Occupation:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 0.0113 and "P" value > 0.05 .

Socio economic status:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 0.076 and "P" value > 0.05 .

Type of family:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 0.066 and "P" value > 0.05 .

No. of child:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 1.588 and "P" value > 0.05 .

Previous knowledge:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 0.716 and "P" value > 0.05 .

Telemedia:-The study reveals that the education of women's about osteoporosis disease is significant as per requirement which also depict through chi- square test value 0.0586 and "P" value > 0.05 .