

# Knowledge of Osteoporosis

Diana Wilson

Msc. Nursing, Assistant Professor, Department of Mental Health Nursing, Savitribai Phule College of Nursing, Kolhapur-416003, Maharashtra, (India)  
diana7692003[at]yahoo.co.in

**Abstract:** ***Objective:** To assess the knowledge regarding Osteoporosis & its prevention among the women attending O. P. D. **Materials and methods:** In the present study all samples were from the age group of 60 years & above, total 60 samples were selected out of which majority of the samples had Age at menarche in the age group of 12-14 years 65%. The remaining samples belong to age group of 15-17 years 35%. For Age at Menopause, majority of samples attained menopause at Age group of 40-45 years 48.33% followed by 46-50 Years 43.33% and 51 & above 8.33% were Females (53.1%). 37.5% belonged to the age group of 19 years. The participants had source of Information, majority of samples 43.33 % had Television as the source of Information. 31.66% had Books, 18.33% had Newspaper & 6.66% Internet. In view of their Occupation, majority of samples 63.33% had other than Business 18.33%, Private Service 10.00% and Government service 8.33%. Majority of samples 86.33% had no history of fractures in the past, whereas 6.66% had fractures in both Lower limbs as well as Upper limbs in the Past. The findings of the study revealed that majority of the students had an Average knowledge scores (70 %) and 28.30% students had Poor Knowledge score. 1.7 % had Good Knowledge score. Osteoporosis, or porous bone (fragile bone disease), is a chronic, progressive metabolic bone disease characterized by low bone mass and structural deterioration of bone tissue, leading to increased bone fragility. One in two women and one in four men over age 50 will sustain an osteoporosis-related fracture during their lifetime. Osteoporosis is known as the "silent thief" because it slowly and insidiously over many years robs the skeleton of its banked resources. Bones can eventually become so fragile that they cannot withstand normal mechanical stress<sup>1</sup>. With osteoporosis, the bones become progressively porous, brittle, and fragile; they fracture easily under stresses that would not break normal bone. Osteoporosis frequently results in compression fractures of the thoracic and lumbar spine, fractures of the neck and intertrochanteric region of the femur, and Colles' fractures of the wrist<sup>2</sup>.*

**Keywords:** Descriptive, Knowledge, Osteoporosis, Women attending OPD

## 1. Introduction

India, with a population of 1.2 billion people, is the second largest emerging economy and second most populated country in the world. Life expectancy is 67 years and is expected to increase to 71 years by 2025 and to 77 years by 2050 currently, approximately 10% of India's population (more than 100 million) is aged over 50 years. Based on current patterns of growth, India's population is expected to grow by 16% to reach 1.4 billion by 2025. From 2025 to 2050 the population will increase by a further 34%, reaching 1.88 billion. Those above the age of 50 years will constitute 22% of the population in 2025 and 33% of the population in 2050. With estimates showing that approximately 80% of the urban Indian population is vitamin D deficient and hip fractures occur about a decade earlier than in Western nation, osteoporosis is a major concern for this ageing population.

## 2. Materials and Methods

A Descriptive study in which in this study, the demographic variables were Age, Age at Menarche, Age at Menopause, Source of Information, Occupation and History of fracture in the past.

The present study was conducted in Dr. D. Y. Patil Hospital & Research centre, Kadamwadi Kolhapur. The samples included in the study were 60 women attending O. P. D. of Dr. D. Y. Patil Hospital & Research centre, Kadamwadi Kolhapur who were willing to participate in the study and was available at the time of data collection.

Data collection is the precise, systematic gathering of information relevant to the research purpose or specific

objectives, questions or hypothesis of a study.

Prior permission was obtained from the concerned authority that is Principal of D. Y. Patil college of Nursing and Medical Superintendent of Dr. D. Y. Patil Hospital & Research centre; the group introduced themselves to the participants and willingness of the participants were ascertained. The respondents were assured the anonymity and confidentiality of information provided by them. Informed written consent was obtained from the subjects before the data collection.

The data collected were recorded systematically on each subject and were organized in a way that facilitates computer entry and data analysis.

The findings showed that majority of samples 70% had an Average knowledge compare to 28.30% who had poor knowledge & 1.70% had good Knowledge.

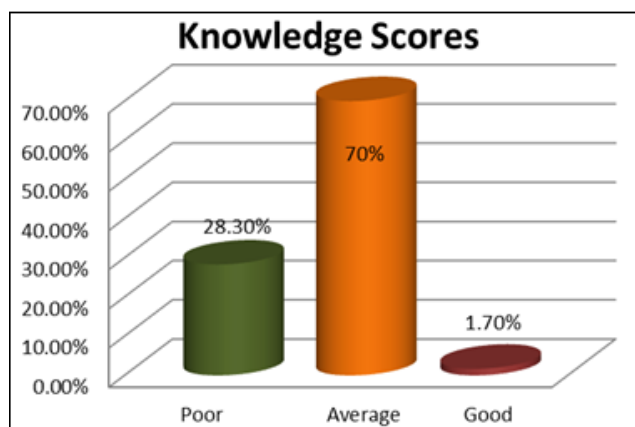
S. No.	Variables	Frequency (f)	Percentage (%)
1.	<b>Age</b>		
	60-65 Years	40	67%
	66-70 Years	10	16%
	71 & above	10	17%
2.	<b>Age at Menarch</b>		
	12-14 Years	39	65%
	15-17 Years	21	35%
3.	<b>Age at Menopause</b>		
	40-45 Years	29	48.33%
	46-50 Years	26	43.33%
	51 & Above	5	8.33%
4.	<b>Source of information</b>		
	Newspaper	11	18.33%

	Television	26	43.33%
	Book	19	31.66%
	Internet	4	6.66%
	<b>Occupation</b>		
5.	Business	11	18.33%
	Govt. servant	5	8.33%
	Pvt. service	6	10.00%
	Other	38	63.33%
	<b>Fracture in the past</b>		
6.	Upper limbs	4	6.66%
	Lower limbs	4	6.66%
	No	52	86.66%

### 3. Results

In the present study all samples were from the age group of 60 years & above, total 60 samples were selected out of which majority of the samples had Age at menarche in the age group of 12-14 years 65%. The remaining samples belong to age group of 15-17 years 35%. For Age at Menopause, majority of samples attained menopause at Age group of 40-45 years 48.33% followed by 46-50 Years 43.33% and 51 & above 8.33% were Females (53.1%). 37.5% belonged to the age group of 19 years. The participants had source of Information, majority of samples 43.33 % had Television as the source of Information. 31.66% had Books, 18.33% had Newspaper & 6.66% Internet. In view of their Occupation, majority of samples 63.33% had other than Business 18.33%, Private Service 10.00% and Government service 8.33%. Majority of samples 86.33% had no history of fractures in the past, whereas 6.66% had fractures in both Lowerlimbs as well as Upperlimbs in the Past.

The findings of the study revealed that majority of the students had an Average knowledge scores (70 %) and 28.30% students had Poor Knowledge score. 1.7 % had Good Knowledge score.



### 4. Conclusion

Concerning knowledge of the studied sample about osteoporosis; it was found that 38.4 % of the studied sample had no knowledge regarding the meaning of osteoporosis, more over 75.9 % of them didn't know the proper action in case of osteoporosis and 46.4 % of them stated that female more susceptible to osteoporosis.

Ethical approval for this study was obtained from Savitribai

Phule College of Nursing, Kolhapur

### References

- [1] Lewis Sharon, Dirksen Shannon Ruff, Heitkemper Margaret McLean et al: Medical-surgical nursing: assessment and management of clinical problems. 9<sup>th</sup> ed. Missouri: Elsevier Mosby Inc; 2014. P.1553
- [2] Suzaanne C S, Brenda G B, Janice L H, Kerry Hcheever. Brunner and Suddarth's Text book of medical surgical nursing. 11<sup>th</sup> ed. India: Wolterskluwer Pvt. Ltd; 2008. p.2057.
- [3] Healthy Living available from World Wide Web <http://healthmeup.com/opinion-healthy-living/osteoporosis-in-indian-women/25100>
- [4] Find out exercises that can help women overcome osteoporosis. Available from World Wide Web <http://www.dnaindia.com/lifestyle/10-exercise-forms-suitable-for-women-with-osteoporosis-1963962>
- [5] 20% women osteoporotic by 2015: Study Available from World Wide Web <http://www.sify.com/news/20-women-osteoporotic-by-2015-study-news-health-llzt5rgefbsi.html>
- [6] Health In focus: Available from World Wide Web <http://www.medindia.net/news/healthinfocus/world-osteoporosis-day-2012-108722-1.htm>
- [7] Mithal A, Bansal B, Kyer CS, Ebeling P. The Asia-Pacific Regional Audit-Epidemiology, costs, and burden of osteoporosis in India 2013: A report of International Osteoporosis Foundation. Indian J EndocrMetab 2014; 18: 449-54
- [8] Shatrugna V, Kulkarni B, Kumar PA, Rani KU, Balakrishna N. Bone status of Indian women from a low-income group and its relationship to the nutritional status. OsteoporosInt 1827; 16.
- [9] Marwaha RK, Tandon N, Garg MK, Kanwar R, Narang A, Sastry A, et al. Bone health in healthy Indian population aged 50 years and above. OsteoporosInt 2011; 22: 2829.
- [10] Dhanwal DK, Siwach R, Dixit V, Mithal A, Jameson K, Cooper C. Incidence of hip fracture in Rohtak district, North India. Arch Osteoporosis 2013; 8: 135-9
- [11] Patil Sapna S, Hasamnis Ameya A, Jena SK, Rashid AK, Narayan KA. Low Awareness of Osteoporosis among Women Attending an Urban Health Centre in Mumbai, Western India. Malays J Public Health Med 2010; 10: 6-13.
- [12] Osteoporosis striking early, women more at risk: TNN | Oct 21, 2014