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## **JOURNAL OF EMERGING TECHNOLOGIES AND** INNOVATIVE RESEARCH (JETIR)

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# A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING OSTEOPOROSIS AMONG POST MENOPAUSAL WOMEN IN SELECTED RURAL AREAS OF JANDIALA GURU, AMRITSAR, PUNJAB.

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#### ABSTRACT

Osteoporosis is a significant medical and financial issue. Low bone mass and micro-architectural degradation of bone tissue are the hallmarks of osteoporosis, a systemic skeletal disease that increases bone fragility and fracture susceptibility. It affects a lot of postmenopausal women.

The purpose of the current study was to determine how well postmenopausal women residing in a few rural regions of Jandiala Guru, Amritsar, were informed about osteoporosis (Punjab). Data were gathered from a sample of 100 postmenopausal women living in rural Jandiala Guru using a self-structured questionnaire. The results of the study showed that post-menopausal women have average level of knowledge regarding osteoporosis. The majority of postmenopausal women (43.0 percent) had an average level of understanding of osteoporosis, according to the survey. The findings revealed that the majority of subjects (41.0%) were in the 45–50 age range, the majority (48.0%) had a secondary education, the majority (64.0%) were self-employed, and the majority (37.0%) got their information from newspapers and magazines. The majority of subjects (47.0 percent) had an income range of Rs. 5000–10,000. The study's findings indicate that postmenopausal women had average levels of knowledge about osteoporosis. Therefore, it is necessary to examine it and offer knowledge about preventative measures.

**Key words**: Knowledge, osteoporosis, post-menopausal women..

#### Introduction

The bone disease IS a costly disorder osteoporosis not only in terms of heath care dollars but also in terms of human suffering, pain, disability and health. It is estimated osteoporosis and its precursor, osteopenia, will affect approximately 40 million Americans people older than 50 years by 2012.2Every woman goes through the menopause at some point in her life. The phrase, which really means "Cessation of periods," is originated from Greek. Women who age more often develop osteoporosis. According to reports, osteoporosis affects 24.6% of men and 42.5% of women in India who are over 50.3World Health organization stated that osteoporosis is preventable disease, through appropriate education and lifestyle changes. It can be reduced among postmenopausal women. According to their research, youth postmenopausal women high risk as compared to past.4Women over 45 who have osteoporosis spend more days in hospitals than those who have diabetes, MI, or breast cancer combined. In postmenopausal women, osteoporosis increases the risk of fractures. In women over 50, osteoporosis will cause one in three fractures.5Women over the age of 50 make up one density of patients, and 12.50 percent of postmenopausal women are at risk for osteoporosis. According to estimates, India has 12 million instances of osteoporosis, and the country's daily

calcium and vitamin D deficiency rates are rising.6The incidence of osteoporosis have been found in postmenopausal women age of 50 years and having 12.5% risk of osteoporosis due to calcium & vitamin D

deficiency.7In India, study stated that among rural and semi urban women average age ofOsteoporosis women is 47.5 years and prevalence of symptoms among women were emotional problems as depression, irritability 90.7%, Headache 72.9%, lethargy654% dysuria 58.9% and musculoskeletal system problem and knowledge regarding osteoporosis was 1 by 50 women in rural area.8 According to a New Delhi-based study, Indian women are already entering menopause as early as the ages of 30 to 40, which puts them at a higher risk of developing osteoporosis and a host of other issues.9National family health survey of 1988-99 collected data of 90,000 married women between age of 15-49 years and covering 99% of India's population and they estimated that lack of knowledge regarding osteoporosis are cause to prone of osteoporosis and 3.1% women have already menopause and incidence rise to 8% between 35-39 years of age in women.10Global scenario on menopause estimated that 60,000 U.S. women reach menopause (final menstrual period) every day, that's over 2 million per year. In Canada estimated that by year 2026 almost one quarter of population will comprised by women over age 5% and average age of Menopause is 51.4%. In United States, about 12 million people over age by 50 are expected to have osteoporosis by 2010 and 40 million will have low bone mass and have risk of fractured. Indian women are starting menopause as early as the ages of 30 to 40according to a New Delhi-based study, which puts them at a higher risk of getting osteoporosis and a variety of other problems. 12 a study on "Knowledge and compliance from postosteoporosis patients." The mean age of the 1179 postmenopausal osteoporosis patients included was 59.9 years, with a standard deviation of 7.5. Only 22.6% of the patients demonstrated adequate understanding of osteoporosis (the criterion established was correct response to 80 percent of the questions). However, 63.6 percent of the patients said they wanted additional details regarding osteoporosis and their particular ailment.13 A study on 25 postmenopausal (50+ years) women's knowledge of osteoporosis, calcium consumption, and weight bearing physical activity (WBPA) was carried out. The findings revealed that standing at home and at work accounted for 90% of WBPA, with knowledge scores averaging 32 to 44 out of a potential 183 points. There was little understanding of osteoporosis and no correlation between age, WBPA, or calcium intake.14 A study was conducted on Hospital based preliminary study on Osteoporosisin post menopausal women related to risk factors. Post menopausal women of the age group 4665Ye were selected. Bone formation markers and are not vitamin D deficient. However, it has been demonstrated that calcium and vitamin D supplementation can lower fracture rates in elderly institutionalized patients. 18 A study was conducted on prevalence of disease worldwide, 25% women over age of 50 years have been found to succumb to freak age of bone due to having bone and mass and half of them are having risk of osteoporosis.19 In India, the data was scarce till 1990 through there several cases of bone fracture and low bone mass. Now as per estimation these are about 12 million cases of osteoporosis and also there are chances of increases in many folds due to poor calcium and vitamin intake and poor acceptable to hormone replacement therapy, osteoporosis is responsible for more that 1.5 million fractures annually, including 3,00,000 hip fractures, 700,00 spine (vertebral) fractures, 250,000 Wrist fractures and more than 30,000 fractures of other bones."20 A study was conducted on postmenopausal osteoporosis is characterized by increased fracture risk due to deficiencies in both the quality and quantity of bone. Treatment Strategies are aimed at reducing fracture risk. General nutritional and lifestyle measures are appropriate for all Women."21Non pharmacological approaches addressing the consequences fractures are integral parts of a comprehensive treatment program. Reducing both the frequency and the effects of falls complements the efforts of treating osteoporosis to reduce the incidence of fracture and their important clinical consequence.

#### I Methodology

- **2:1 Research** approach & Design: non experimental approach and discriptive research design.
- 2:2 Variables Under Study: Age, Education, Occupation, Status, Source of information and income.
- **2:3 Research Setting :** The study was conducted in Jandiala Guru. Ruralarea of Amritsar(Punjab). The female population was 450 out of which 125 women were in age group of 45-57 yrs. 100 women were post menupausal women out of 125.
- **2:4 Sample size and sampling technique:**The total sample size was 100 post menupausal women and convenience sampling technique wasused to select the sample.
- **2:5 Selection and development of the tool :** Questionnaire was self structured tool used. The tool consisting of following two parts;

#### Part 1:Socio- Demographic data

It consists of 5 items related to demographic variables such as age, education, occupational status ,source of information and income.

#### Part 2: structured multiple choice questionnaire

Self structured tool to assess the level of knowledge regarding osteoporosis among post menopausal women. It consisted 30 items related to osteoporosis, each item with the score of one for the corrected answer.

**2:6 validity of tool:** Validity of tool was confirmed by the experts opinion regarding the relevance of the items. Self structured tool was with 35 items.

#### 2:7 Reliability of tool:

Reliability of tool was calculated by applying split half technique and computed Spearman's Brown coefficient formula it was r = 0.7 highly reliable.

#### 2:8 Pilot Study:

Pilot study is a miniature of major study the pilot study was conducted to ensure the relibility of tool and feasibility of the study.

#### 2:9 Data Collection:

Data collection was conducted during the month of May 2022 after discussing the purpose and objectives of the study with the experts of the institution to collect data. The tool was administered to postmenupausal women. Then the researcher introduced herself to the respondents and took verbal permission from them by explaining the purpose of collecting data. They were assured that their responses would be kept confidential.

#### 2:10 Ethical Consideration:

The adolescent girls were also explained about the purpose of the study and verbal consent was taken from them for their participation. The postmenopausal women were assured that the information given by them will be kept confidential and will be purely used for a research purpose.

#### 2:12 Difficulty Faced By the Investigator:

- 1) Researcher found difficulty for arrangements of postmenopausal women.
- 2) Difficult to arrange all the postmenopausal women at a time as sometimes they were occupied with important works. So researcher had to reschedule the section

#### **III Result**

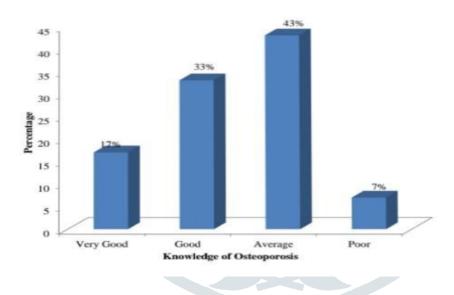
The maximum of postmenopausal women had average level of knowledge 43% (43) as followed by 33%(33) had good knowledge and minimum 17%(17) had very good knowledge about osteoporosis. Hence its concluded that the maximum postmenopausal women had average knowledge regarding osteoporosis.

Findings related to the knowledge of post menopausal women.

**Figure and Tables** 

### Knowledge score

Level of Knowledge	N	%
Very good	17	17%
Good	33	33%
Average	43	43%
Poor	7	7%



#### **IV Conclusion**

Osteoporosis is a preventable disease through appropriate education and lifestyle changes, the incidence of osteoporosis can be reduced. It is important all menopausal women should have necessary knowledge regarding risk factors of osteoporosis and preventive health behaviour. Researcher strongly felt that menopausal women are at risk and unaware about this silent killer, impacting knowledge to women can prevent osteoporosis to certain extent. The need for prevention of osteoporosis is mus

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