Assessment of Knowledge Regarding Prevention of Osteoporosis among the Perimenopausal Women

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Abstract: Osteoporosis is a disease of bones with serious implication on health. It is a bone disorder of elderly especially women, characterized by decreased bone mass and increased susceptibility to fracture. Age related bone loss begin soon after peak bone mass is achieved, that is about 35 years of age, withdrawal of estrogens at menopause or oophorectomy cause decreased calcitonin and accelerated bone re-absorption which continuous during menopausal years in addition to these some co-existing medical condition such as lactose intolerance, renal failure, and malabsorption syndrome will lead to osteoporosis, immobility is mostly contributes to the development of osteoporosis, Osteoporosis affects 55% of Americans age of 50 and above. Of these approximately 80% are women. It is estimated that 1 in 12 men over the age of 50 worldwide osteoporosis. It is responsible for billions of fractures.

Keywords: Osteoporosis, Knowledge, Perimenopause women

1. Background of the Problem

Osteoporosis is silent, bones are hidden but the drastic consequence of osteoporosis is visible in the lives of the millions suffers worldwide in osteoporosis, peak bone mass is attained between 6-25 years. Women begin to lose bone at the age of 30 years. Among women bone loss occur at rate of 0.5-1% per year. After menopause in women bone loss is 2-3% year. It is 8 times more common in women than men.

Termination of ovarian function and menustration is not an acute physiological event, rather the physiologic antecedent associated with the transition from premenopausal to postmenopausal follicular function which occurs in perimenopause.

Awareness about prevention of osteoporosis and their management will help all women to cope with change in situation.

2.1 Need and Significance of Study

According to the world health organization (WHO) Osteoporosis is second only to cardiovascular diseases as a global health problem and medical show that a 50 years older woman has similar life risk of dying hip fracture as from breast cancer.

Arthritis foundation of India (AFI) revealed that by the year 2013 India is expected to have over 23 million osteoporosis cases compared to the 26 million recorded in 2003. This means that million cases would be added each year. In India afflict those 10-20 years younger at age 50-60. "Osteoporosis – the silent thief".

Osteoporosis is a serious problem of bone. However, many of the problems associated with diseases can be significantly minimized by taking remedial measure, in addition to meditation such as diet calcium intake, protein supplement, and exercise preventing fall, alcohol, caffeine and salt intake.

2.2 Statement of the Problem

A study to assess the knowledge regarding prevention of osteoporosis among the perimenopause women attending outpatient department of SP Fort Hospital, Thiruvananthapuram.

Objectives

- To assess the knowledge regarding prevention of osteoporosis among perimenopausal women.
- Associate the relationship between the knowledge and demographic variable such as age, education, occupation, and marital status.

2. Methodology

The study was conducted among women between 35-45 years attending SP Fort outpatient department, Thiruvananthapuram. The approach for the present study was descriptive. Data from women between 35-45 years was collected through questionnaire. The data was analyzed by using appropriate statistical techniques.

A descriptive design with structured questionnaire is used for this study. It include two section, the first sector deals with demographic data and second section consist of questions to assess the knowledge regarding prevention of osteoporosis among perimenopausal women.

Sample size of the study was 30.

The sample technique was Convenience technique.30

The questionnaire was prepared with the help of our subject experts. It consists of two sections.

Section A

It consist demographic profile such as age, parity, education, living locality, source of knowledge, occupation and monthly income.

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Section B

It consists of 30 questions to access knowledge regarding the prevention of osteoporosis among the perimenopausal women between the age 35-45 years.

The questionnaire is to assess the knowledge regarding the prevention of osteoporosis in perimenopausal women, was administrated to the subjects with clear instructions on how to complete it. Maximum time was allotted for each participant to fill up the questionnaire.

3. Results

4.2.1 Distribution of sample according to age



Figure 4.2.1: Distribution of sample according to age

The above table and figure [4.2.1] shows that 50% of premenopausal women belongs to 36-40 years of age group and 30% belongs to 41-45 years of age and only 20% belongs to 30-35 years of age.

4.2.2 Distribution of sample according to living locality



Figure 4.2.2: Distribution of sample according to living locality

The above table and figure (4.2.2) shows that majority of perimenopausal women (80%) belongs to urban area and 20% belongs to rural area

4.2.3 Distribution of sample according to their religion





The above table and figure [4.2.3] shows that majority of perimenopausal women [60%] of this study belongs to Hindu religion, 26.7% belongs to Christian and 13.3% belongs to Muslim.

4.2.4 Distribution of sample according to family structure



Figure 4.2.4: Distribution of sample according to family structure.

The above table and figure [4.2.4] shows that about 63.3% of permenopausal women belongs to nuclear family and 36.7% belongs to joint family.

4.2.5 Distribution of sample according to monthly income



Figure 4.2.5: Distribution of sample according to monthly income.

The above table and figure [4.2.5] shows that half of the perimenopausal women [50%] have monthly income below 5000 and 23.3% belongs to 5000-15000 and other 23.3% belongs to 15001-25000, 3.4% belongs to above 25000.

4.2.6 5 Distribution of sample according to education



Figure 4.2.6: 5 Distribution of sample according to education.

The above table and figure $\left[4.2.6\right]$ shows that 30% of woman belongs to high school education and other 30% of

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woman belongs to degree level of education, belongs to professional education, 13.3% belongs to primary education.

4.2.7 Distribution of sample according to occupation



occupation.

The above table and figure (4.2.7) shows that 60% of the perimenopausal women belongs to house wife division, 20% belongs to government workers, 13.3% belongs to daily wages workers and only 6.7% belongs to private workers.

4.2.8 Distribution of sample according to family history of osteoporosis

Table 4.2.8



Figure 4.2.8: Distribution of sample according to family history of osteoporosis

The above table and figure (4.2.8) shows that 66.7% of the study samples are having family history of osteoporosis.

4.2.9 Distribution of sample according to the source of information



Figure 4.2.9: Distribution of sample according to the source of information.

The above table and figure (4.2.9) shows that majority of study sample are getting information from T. V and only 13.3% of the women got knowledge from Book and Magazine.

4.3 Section II Analysis of Knowledge Score

All the assigned score of each of the item were assessed and a meanscore was calculated. The findings are presented in the following table.

4.3.1 Distribution of Perimenpausal women according to knowledge score



according to knowledge score.

The above table and figure (4.3.1) shows that 56.6% of women have poor knowledge level. About 26.6% women have average knowledge level.

Section 1: Demographic variables

Thy characteristics of study subject were as follow;

- The among the study population 50% of the perimenopausal women belongs to 36-40 years of age, 30% belong to 41-45 years of age and only 20% belongs to 30-35 years.
- Out of 30 samples most of them were living in urban area, and rest 20% were living in rural area
- About 60% of subject under study were Hindu, 26.7 % were Christian and 13.3% were Muslim.
- Among the study sample 63.3% of the perimenopausal women belongs to nuclear family.
- Distribution of study sample according their income shows that about 50% have family income below 5000
- Among the study sample 30% of perimenopausal women belongs to high school. education and other 30% of women belongs to degree level of education 20% belongs to professional education, 13.3% belongs to primary education and 6.7% are technical level of education
- Majority that is 60% of perimenopausal women of our study had house wife, 20% were government employee, 13.3% were daily wags and only 6.6% were private employee.
- Majority of study sample (66.7%) have family history of osteoporosis'

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• Majority that is 86.7% of the study sample use T. V as a source of information

Section II: Analysis of knowledge

Analysis reveals that 56.6% of perimenopausal women have poor knowledge level, 26.6% of the perimenopausal women have an average knowledge level, 16.6% of the perimenopausal women have the good knowledge level about prevention of osteoporosis.

Section III Association between selected Demographic variables and knowledge

- The difference in knowledge level according to age of perimenopausal women is not statistically significant
- Statistically there is no significant relation between knowledge and residence
- Statistically there is significant relation between knowledge and religion
- Knowledge and type of family of perimenopausal women statistically significant
- No significant relation between knowledge and monthly income
- Statistically there is significant relation between knowledge and education
- No significant relation between knowledge and family history of osteoporosis.
- Knowledge and occupation of perimenopausal women is statistically significant.
- No significant relation between knowledge and source of information.
- Based on the finding of the study the following conclusion were drawn
- Perimenopausal women having poor level of knowledge regarding prevention of osteoporosis.
- Demographic variable have significant association with knowledge of perimenopausal women

4. Conclusion

Osteoporosis is largely preventable for most of the women and is very important because there are treatment for osteoporosis, but it is not cured completely. The five steps which are recommended by NOFF (National Osteoporosis Foundation) are daily supplementation of Vit. D, Calcium, engaging regular exercises, avoid smoking and alcoholism, and regular consultation with the health experts which will reduce the incidence of osteoporosis.

References

- [1] Basavanthappa. Medical surgical nursing.2nd ed. Vol.2. Jaypee; 2007. p.510-516.
- [2] Black Hawks. Medical surgical nursing.7th ed. Saunders; 2005. p.596-605.
- [3] Howkins and Bourne. Shaw's Text book of Gynecology.13th ed. Jaypee; 2008. p.14-18
- [4] Ignatabicius. D Donna, Workman M. Linda. Medical surgical nursing. 2nd ed. Saunder's; 1995. p.143-149.

Journals References

- [5] Faizal shoib Dane Todd. Management and cause of osteoporosis. American journal of nursing.2007 july; .24-26.
- [6] Kavitha. D. Osteoporosis and risk assessment. Nighingale nursing time.2009 February; 60 (5): 39-41.
- [7] Ikalkarni. M, S. N Marakkanaver. Osteoporosis and its prevention. Nightingale nursing times.2007 April; 80 (9): 5-8.
- [8] Radhamma. K. Common myths about osteoporosis. Nighingale nursing times.2007 October; 4-6

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