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RESEARCH ARTICLE

“A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTION AND MANAGEMENT OF OSTEOPOROSIS AMONG WORKING WOMEN IN SELECTED EDUCATIONAL INSTITUTIONS, BENGALURU, WITH A VIEW TO CRAFT AN INFORMATION BOOKLET”

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Abstract

1. To assess the level of knowledge regarding prevention and management of osteoporosis among working women.
2. To determine the association between knowledge along with the demographic variables.

Methods: Descriptive approach was used for this study to assess the knowledge regarding prevention and management of osteoporosis among working women to collect data from 30 subjects selected by simple random technique through non probability sampling approach used which consists of 2 sections.

Results:

The majority of the respondents had moderate knowledge regarding osteoporosis.

Conclusion:

The study was concluded to assess the knowledge regarding prevention and management of osteoporosis among working women in selected educational institutions, Bengaluru, with a view to develop an information booklet. In this descriptive study was used taking 30 sample through simple random technique from two selected institutions Sri Krishna Institute of Technology and Acharya Institute of Technology. The data was analysed and interpreted by applying descriptive statistical method. Overall mean percentage of knowledge score is?

Methods: Research methodology involves the systemic procedure by the researcher which starts from the initial identification of problem to its final conclusion. It helps the researcher to project a print of the research undertaken.

Research approach: The selection of research approach is the basic procedure for the conduct of research inquiry. A descriptive approach was considered to be the most appropriate and adopted for the presence in order to assess the knowledge of regarding prevention and management of osteoporosis among working women.

Objectives:

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view to craft an information booklet.

Research design:

The research design refers to the researcher's overall plan for obtaining answers to the research questions it spells out strategies that the researcher adopted to develop information that is accurate, objective and interpretable. Descriptive research design was to achieve the objective of the study.

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Introduction:-

“The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge.”

~Stephen Hawking.

Most of the people instead of believing on what is written, they deceive of any information or knowledge regarding until it gets on their way. Knowledge should be acquired through experience or education by perceiving, discovering, or learning. Health is a fundamental aspect of quality of life, not only because being free from illness or injury directly affects our capacity to enjoy life, but also health indirectly affects our daily lives.

There are various kinds of diseases like breast cancer, heart disease, maternal health, depression and mental diseases, sexually transmitted diseases, diabetes, anemia, menstrual syndrome (pms) and Osteoporosis which is one of the common conditions among women mostly after age of menopause in India. It is Multi-factorial and ranging global health problem. It is the condition characterized by a decrease in the density of bone, decreasing its strength and resulting in fragile bones. It literally leads to normally porous bone that is compressible, like a sponge.

Osteoporosis currently affects over 53 million people in the United States. It is multi-factorial and emerging global health problem. It is the condition characterized by decrease in the density of bone, decreasing its strength and resulting in fragile bones. It literally leads to abnormally porous bone that is compressible, like a sponge. This disorder of the skeleton weakens the bone and results in frequent fractures in the bone. Deficiency of calcium and vitamins D can aggravate osteoporosis, but is not the main cause.

The data on prevalence of osteoporosis among women in India come from studies conducted in small groups spread across the country. Estimates suggest that of the 230 million Indians expected to be over the age of 50 years in 2015, 20 percent are osteoporotic women. 22 prevalence of osteoporosis ranging from 8 percent to 62 percent in Indian women of different age groups has been reported by several studies.

Osteoporosis and related fractures are a major cause of disability, institutionalization and death among aging women. Unless prevented or actively treated, osteoporosis will continue to limit both the quantity and quality of life for many older women and significantly add to the healthcare costs of this rapidly growing population group.

According to Ahlborg et al 2010, an increase in the number of fractures globally has come about due to increasing proportion of elderly women in the society. According to osteoporosis foundation facts sheet, 1 in 3 women who are over 50 years will suffer a fracture due to osteoporosis and this increase to 1 in 2 who are over 60 of age. Approximately 1.6 million by 2050.

Currently, there is an increasing incidence of hip fracture in the developed cities in Asia. This is due to socioeconomic development in many Asian countries and rapid ageing of the Asian population. 1 in 4 hip fractures occur in Asia and Latin America. This number of hip fractures will increase to 1 in 2 by 2050. (IOF)

Ageing men are also prone to being diagnosed with osteoporosis but to a lesser degree than women. Women suffer more because they live longer than the men due to bone loss that occurs during and after menopause.

While these diseases and consequent fractures, spontaneous or caused by falls, place an enormous burden on the health care system and society, often they do not get the attention they deserve because they are incorrectly seen as an inevitable part of ageing or less serious than such conditions as heart disease or cancer.

Unpreventable risk factors are; Age, inherited genes, ethnicity, being tall female gender and menopause happening earlier than usual.

Preventable risk factors are; smoking, excessive alcohol consumption, impaired vision, lack of exercise or not doing enough, low weight, use of corticosteroids, secondary osteoporosis, falling often, inadequate sunlight and low bone density.

Menopause occurs over a period of several years and more so continuously meaning once it starts, it goes on and on. It marks the end of women's monthly period but symptoms show months or years after menopause and the rate of bones hereafter determine how an ageing woman's skeleton will be.

By the year 2050, the occurrence of hip fractures will rise globally in the female gender by 240 percent and male gender by 310 percent. The estimated number of hip fractures worldwide will rise from 1.66 million in 1990 to 6.26 million in 2050. This disease progresses fast and hence the importance of patient education. The disease progresses fast and hence the partly attributed to the number of increasing proportion of elderly women in the society."

Therefore my goal is to serve awareness of osteoporosis and evaluate the knowledge regarding osteoporosis which is a major issue among women in India. First to assess the knowledge regarding prevention and management of osteoporosis after menopause among women. Secondly, to determine the association of knowledge score along with demographic variables.

Need for the Study

This study was mainly designed to assess the knowledge regarding prevention and management of osteoporosis in the menopausal women. Osteoporosis is defined [a medical condition in which the bones become brittle and fragile from loss of tissue, typically as a result of hormonal changes, or deficiency of calcium or vitamin D.

Osteoporosis is a major public health problem, causing fractures of wrist, back and hip with high associated morbidity and mortality. Particular at risk are post-menopausal women. Osteoporosis is a disease that threatens more than 61 million post-menopausal women in India. More than 28 million post-menopausal women in America. It is a major public health problem in many parts of the world. 84 per cent of women those who are 80 years of age are affected, the average 75 years old women has lost 25 per cent of their cortical bone and 40 per cent of their trabecular bone with ageing.

Because of osteoporosis the number of hip fractures may increase threefold by the year 2040. Thus any reduction in osteoporosis among educated women may have a large impact on health care expenditure. The majority of young women are not consuming the recommended daily amount of calcium and are lacking sufficient osteoprotective exercise for building healthy bones. Health care providers and educational institutions either have missed opportunities to educate in their diet. Study recommended that nurses need to plan educational programs in all settings to teach women about the risk factors, prevention, diagnosis, and treatment of osteoporosis.

A cross-sectional survey was conducted to determine osteoporosis prevention in educated women at USA. 270 participants were selected. Information was gathered in two clinics in Southern Texas. The results of the study showed that, 37 per cent of participants reported that calcium supplementation and 41 per cent of participants reported that regular weight bearing exercises will prevent osteoporosis, 41 per cent of the post-menopausal women were currently using hormone replacement therapy.

A descriptive study was conducted to assess the knowledge about osteoporosis in educated Indian women at Nagpur. Participants were 73 educated women, correlation was seen between the level of knowledge with other variables. Data were collected by using questionnaire. The results of the study showed that. Definition of osteoporosis were given by 74 per cent, but there was lack of awareness regarding osteoporosis.

The investigator has observed many educated women who are affected with osteoporosis like back pain, shortened stature, dorsal kyphosis, abdominal distension, impaired respiration, loss of height and fatigue.

Hence, the investigator felt the need to assess the knowledge of educated women related to osteoporosis which will be helpful to health professionals to carry out health awareness campaigns to enhance the health related knowledge of public in general, educated women in specific. Currently, it is estimated that over 200 million people worldwide. In USA the

osteoporosis and low bone mass are currently estimated to be a major public health threat for almost 44 million U.S. women.

The bone serves function to support and protect the various organs of the body, produces red and white blood cells, store minerals, provide structure and support for the variety of shapes and sizes and have a complex internal and external structure stores crucial nutrients, minerals, and lipids and produces blood cells that nourishes the body and play a vital role in protecting the body against infection.

Bone is often stereotyped as simply a protective and supportive framework for body. Through it does perform these functions, bone is actually a very dynamic one that is constantly remodelling and changing shape to adapt to the daily forces put upon it. Moreover, bone osteoporosis can affect both males and females, but it is likely to occur in women after menopause, because of the sudden decrease in estrogen, the hormone that normally protects against osteoporosis. As the bone becomes there is a higher risk of a fracture during a fall or even a fairly minor knock.

Objectives:-

Research objectives set the purpose and focus of the research with the fundamental questions that will be addressed. Defining research objectives means what the researcher needs to investigate and how he is going to do it. This chapter deals with the statement of the problem, objectives of the study, operational definitions, hypothesis and limitation of the study.

Statement of the problem:

"A study to assess the knowledge regarding prevention and management of osteoporosis among working women in selected educational institutions, Bengaluru, with a view to develop an information booklet"

Objectives:-

1. To assess the level of knowledge regarding prevention and management of osteoporosis among working women.
2. To determine the association between knowledge along with the demographic variable.

Hypothesis:

H: there will be significant difference between the knowledge scores and the demographic variables. There will be significant association between the knowledge of the educated women with selected sociodemographic variables (Age, education, religion, marital status, occupation, monthly family income, diet and knowledge about osteoporosis).

Assumptions:

The investigator assumed that:

1] The structure knowledge questionnaire will be an effective tool in evaluating the knowledge of the respondents.

Delimitations:

1. Teaching and non-teaching women of selected educational institutions, Bengaluru.
2. The sample size is limited to 30
3. Age between 20-60 years.

Review of literature:-

A literature review is an evaluative information found in the literature related to selected area (institution) of study which give theoretical base of the research and determining nature of research. This research study was mainly designed for the women as the data on prevalence of osteoporosis among women in India come from studies conducted in small groups spread across the country, estimates suggest that 46 million are women with osteoporosis in the year 2015.

In this study, the women of selected institutions (subset) is taken to represent the whole population as the age group between 20 to 45 years of women. This descriptive study will be conducted in selected institutions of Bangalore with the specific age group. Osteoporosis-related fractures are associated with substantial pain, suffering, and increasing longevity. In 2013, estimates suggested that about 50 million people in India had T-score of less than 1.3. (International health of journal health-dovepress).

Statistical association of prevalence of osteopenia and osteoporosis was found to be significant with age group; gravida status; attainment of menopause; body weight and physically active status of the women. The statistical association was not significant in relation to the rank status of their husband, as well as dietary pattern of the women but still it has to be substantiated by conducting larger community based trials in future.

Conclusion:-

A study to assess the knowledge regarding prevention and management of osteoporosis among working women in selected educational institutions, Bengaluru, with a view to develop an information booklet"

In this study, descriptive approach was used by taking 30 sample through simpler random technique from two selected institutions Sri Krishna institute of technology and Acharya institute of technology.

The data was collected by using structured self-administered questionnaire. Data was analysed and interpreted by applying descriptive statistical method.

The basis of the findings of the study are as follows:

1. The overall mean knowledge of osteoporosis.
2. Overall mean percentage.

The following conclusions were drawn from the study

1. The subjects were having moderate knowledge regarding osteoporosis.
2. Information booklet was distributed to improve the knowledge among subjects.

Summary

The main of the study was to assess the knowledge regarding prevention and management of osteoporosis among working women in selected educational institutions, Bengaluru.

The information gathered from sample to assess the knowledge regarding osteoporosis in educational institutions is found to be MODERATE among women.

Major findings

A major finding of the study was summarized below,

1. The maximum respondents 63.34% were from the age group 20-30.
2. Majority of respondents 53.3% were from masters of degree.
3. Majority of 73.3% were Hindu.
4. 50% of respondents were married and 50% were unmarried.
5. Majority of respondents 43.4% were having monthly family income with range of Rs.26,000- 34,000/-
6. Majority of respondents 66.7% were non-vegetarian.

Implication for Nursing Administration:

- 1} The working women in educational institutions will have proper knowledge regarding prevention and management of osteoporosis with the view to develop an information booklet.
- 2} The teaching staff in the educational institutions will increase the awareness of osteoporosis by improving knowledge.

Implication for Nursing Research

1. The findings of the study can be disseminated through printed journals so that further research can be made useful.
2. This is the reference for the research scholar.

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