



EVALUATE THE BONE MINERAL DENSITY AND DETERMINE THE KNOWLEDGE AND HEALTH BELIEF AMONG WOMEN FOLLOWING OSTEOPOROSIS PREVENTION PROGRAMME AT SELECTED COMMUNITY AREA, CHENNAI

Mrs. G. Jelin Elizabeth^{*1}, Mrs. Prof. Parameswari² and Mrs. Dr. Hema V. H.³

¹Msc Student, Faculty of Nursing, Dr.M.G.R Educational and Institute, Chennai, Tamilnadu, India.

²Professor, Faculty of Nursing, Dr.M.G.R Educational and Institute, Chennai, Tamilnadu, India.

³Principial, Faculty of Nursing, Dr.M.G.R Educational and Institute, Chennai, Tamilnadu, India.

*Corresponding Author: Mrs. G. Jelin Elizabeth

Msc Student, Faculty of Nursing, Dr.M.G.R Educational and Institute, Chennai, Tamilnadu, India.

Article Received on 26/01/2020

Article Revised on 16/02/2020

Article Accepted on 06/03/2020

ABSTRACT

Introduction: The skeletal system is the support structure of our body. Bones do a brilliant job to sustain our life which necessitates the importance of maintaining bone health. A healthy skeletal system with strong bones is essential to overall health and quality of life. **Objectives:** The aim of the study was to evaluate the bone mineral density among women above 35 years and the effectiveness of Osteoporosis Prevention programme on the Knowledge and Health Belief regarding Osteoporosis among women, to find out correlation between Knowledge, Health Belief regarding Osteoporosis and Bone Mineral Density among women and association of the Knowledge, Health Belief regarding Osteoporosis and Bone Mineral Density among women with the selected demographic variables. **Methods:** Quasi experimental, post-test only design was adopted, samples were selected from Nazerthpet area and Meppur, ponnammalle, Chennai by using the purposive sampling technique, 30 sample were in study group, 30 sample were in control group. Osteoporosis Knowledge Questionnaire and Health Belief scale was used to assess the Knowledge and Health Belief regarding osteoporosis. For the study group investigator given education on prevention of osteoporosis foe 30 min weekly two times for 4 days. for control group the investigator did not give education. Post assessment was conducted on 14 days of the intervention. **Result:** BMD score revealed that 25(83.3%) had normal BMD and 5(16.7%) had osteopenia among women in the experimental group. During Post assessment, in study group experimental group, maximum 17(56.67%) were in the age group of 35 – 45 years, almost all were married, living in rural area. The overall posttest level of knowledge on osteoporosis among women revealed that, high level score of 17(56.67%) had adequate knowledge in the experimental group and 29(96.67%) had inadequate knowledge in the control group. The overall posttest level of Health Belief among women revealed that, 29(96.67%) had high level of Health Belief in the experimental group and 19(63.33%) had moderate level of Health Belief in the control group. The posttest mean score of knowledge in the experimental group was 21.77±4.53 and the posttest mean score in the control group was 4.50±3.71 test value of 't' knowledge (t = 16.147) was found to be statistically highly significant at p<0.001. **Conclusion:** The study concludes that education on osteoporosis prevention Programme helps to improve the knowledge and modify their health belief thereby adapting preventive behavior to reduce the occurrence of Osteoporosis.

KEYWORDS: Osteoporosis, Knowledge, Health Belief and Bone Mineral Density.

INTRODUCTION

Osteoporosis is the first of four Bone mineral disorders in Indians. Osteoporosis is a major public health problem and a metabolic disease. It occurs commonly in women than men and it is called as silent killer where millions of people are suffered and unaware of the condition. It is a major economic concern in less developed and developed countries. (Waquas 2017) According to the WHO criteria, osteoporosis is defined as a BMD that lies 2.5 standard deviations or

more below the average value for young healthy women (a T-score of <-2.5 SD) WHO (2017).

MATERIALS AND METHODS

Quasi experimental, post-test only design was adopted, samples were selected from Nazerthpet area and Meppur, ponnammalle, Chennai by using the purposive sampling technique, 30 sample were in study group, 30 sample were in control group. Osteoporosis Knowledge Questionnaire and Health Belief scale was used to assess the Knowledge and Health Belief regarding osteoporosis.

For the study group investigator given education on prevention of osteoporosis for 30 min weekly two times for 4 days. for control group the investigator did not give education. Post assessment was conducted on 14 days of the intervention.

RESULTS AND DISCUSSION

BMD score revealed that 25(83.3%) had normal BMD and 5(16.7%) had osteopenia among women in the experimental group. During Post assessment, in study group experimental group, maximum 17(56.67%) were in the age group of 35 – 45 years, almost all were married, living in rural area. The overall posttest level of knowledge on osteoporosis among women revealed that, high level score of 17(56.67%) had adequate knowledge in the experimental group and 29(96.67%) had inadequate knowledge in the control group. The overall posttest level of Health Belief among women revealed that, 29(96.67%) had high level of Health Belief in the experimental group and 19(63.33%) had moderate level of Health Belief in the control group. The posttest mean score of knowledge in the experimental group was 21.77 ± 4.53 and the posttest mean score in the control group was 4.50 ± 3.71 test value of 't' knowledge ($t = 16.147$) was found to be statistically highly significant at $p < 0.001$.

CONCLUSION

The study concludes that education on osteoporosis prevention Programme helps to improve the knowledge and modify their health belief thereby adapting preventive behavior to reduce the occurrence of Osteoporosis.

REFERENCES

1. Mithai a, Dhingra v, epidemiology, costs and burden of osteoporosis in Asia, international osteoporosis foundation, 2016.
2. Lauem, the epidemiology of osteoporosis, international osteoporosis foundation, 2016.
3. Juby ag, Davis, a prospective evaluation of the awareness, knowledge, risk factor and current treatment of osteoporosis in a cohort of elderly subjects, 2015.