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 Original Research Paper
 Orthopaedics

 A Study of Orthopaedic Morbidities among females visiting a Tertiary Medical Institute of Raipur

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ABSTRACT INTRODUCTION: The focus of women's health has shifted toward postmenopausal women since recent trends suggest an increase in their numbers and life expectancy. Long-term consequences of changes in ovarian hormonal levels include morbidities associated with Osteoporosis and Other Musculoskeletal problems

like Osteoarthrirtis . Orthopedic problems are very common after menopause and significantly affect the health of Indian women. Therefore, present study was conducted among postmenopausal women **METHOD**: Study was designed as a cross sectional Analytical study . Study was conducted in women of postmenopausal age

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group attending orthopedic outpatient department (OPD) during study period and who were ready to participate were included in the study. Verbal consent & data was collected from them by interview technique. A predesigned, structured questionnaire was used to collect necessary information. Questions were mainly pertaining to their complaints related to orthopedic problems. The clinical findings and X-ray findings were obtained.

RESULTS: Among Total students participated in the study the overall magnitude of dental caries was found to be 72%. The prevalence of dental caries was significantly higher among students belonging to family having less per capita monthly income. The prevalence was significantly lower among students who had brushing habits twice a day as compared to those having brushing habit once daily or not every day.

CONCLUSION:Backache, and osteoarthritis were common orthopedic problems. Osteoarthritis was significantly associated with obesity.

KEYWORDS: Orthopedic Morbidities , rural , females

INTRODUCTION

Postmenopausal women are generally affected by osteoporosis and fracture rates among them are approximately twice as high as men. The cause of osteoporosis is very complex but it is clear that hormonal changes after menopause increase the rate of bone resorption, leading to greater risk of osteoporosis. This silently progressing metabolic bone disease is widely prevalent in India and is a common cause of morbidity and mortality in women.1 The occurrence of osteoporosis in postmenopausal women is a very common problem especially in India, as Indian women are exposed to many risk factors like low calcium diet, lack of exercise, family history and in general, lack of health awareness. The prevalence of osteoporosis increases with age and it is estimated that 70% of women over the age 80 years have osteoporosis.2 The problem of backache becomes more pronounced in postmenopausal women.3 During this period of women's life, the likelihood of weight gain and manifestation of low back pain increases due to the changes of the muscles and skeleton structures as a result of aging, occupational or other factors. Osteoarthritis is also one of the common health problem among elderly women.

There is a growing recognition that various morbidities occur in postmenopausal age group, yet information on the levels and patterns of these health problems experienced by women in India is sparse. Only a few studies have been undertaken to understand the effects of menopausal transition in relation to aging process on general health profile of women in postmenopausal life.

Orthopaedic problems are very common after menopause and significantly affect the health of Indian women. Therefore, present study was conducted among postmenopausal women attending a hospital in a rural area to assess morbidity pattern with special reference to orthopaedic morbidity.

METHEDOLOGY

After local ethical committee approval study was done Over a period of 4 months .A cross sectional Analytical Study was conducted in Orthopaedics Department of a tertiary Medical Institute of Raipur District CG, India . All the women in postmenopausal age group attending orthopaedic outpatient department (OPD) during study period and who were ready to participate were included in the study. Women who had not achieved menopause and who were not ready to participate were excluded from the study. 400 was sample size.

After explaining purpose of the study and obtaining verbal consent, data was collected from them by interview technique. A predesigned, structured questionnaire was used to collect necessary information. Questions were mainly pertaining to their complaints related to orthopedic problems. The clinical findings and X-ray findings were obtained from individual case records prepared by resident doctors and other faculty members of orthopedic department. Modified BG Prasad's classification was used for determining economic status.¹⁰

A significance level of 0.05 was used in all analyses. Information was analysed by using the Microsoft Excel and SPSS (Version 20, IBM, USA). Chi square test was used to test the statistical significance.

RESULTS

Our study was conducted among 400 women of postmenopausal age who visited orthopaedic OPD during the study period. Majority of the women were from the age group of 55-65 years. Sixty-four percent women were married, 68.6% were illiterate and most of them were from low socioeconomic status. Majority of women seeking healthcare from orthopaedic department had either joint pain (predominantly knee) or backache. Some of the women had backache as well as knee pain. Only few women in postmenopausal age group had other orthopedic complaints like fracture, sprain and ligament problems . Out of 400 women, 61% were suffering from backache. Degenerative disease (osteoporosis) was the most common cause of backache observed in our study. Common X-ray findings observed among our study subjects were osteoporotic changes in spine, osteophytes in vertebrae or wedge compression . Joint pain with predominant involvement of knee joint was another common symptom observed in our study participants. Out of 400 women having orthopedic problems, 52.6% were suffering from osteoarthritis. Reduction of medial joint space and reduction of bone trabeculae with increase in lucency were the X-ray findings observed in our study among patients suffering from knee joint pain. Body mass index of patients

DISCUSSION

Backache and joint pain as a manifestation of osteoporosis and osteoarthritis, respectively, were the most common problems among our study subjects. Similar finding was observed by Scharla et al in their study, 85.1% postmenopausal women had back pain and 41.8% had joint pain.⁵ Many studies showed that the prevalence of osteoarthritis increases in old age and more so in women than men. Females are found to have more severe osteoarthritis and involvement of knee joint is more common.^{6,7,8} In our study, osteoarthritis was present among 52.6% women. Obesity is a well-known risk factor for osteoarthritis and in our study also it was significantly common among obese women. Similar to our finding, the prevalence of osteoarthritis was 49% in the study conducted by Mandal et al and 57% in the study conducted by Lena et al.⁹

CONCLUSION:

Orthopaedic morbidities are very common in postmenopausal women.Osteoporosis and osteoarthritis are the common orthopaedic problems and large number of these health problems can be prevented and managed by simple measures likeexercise, dietand properhealthcare.

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