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**Original article:**

**Status of bone mineral density in adult population using calcaneal ultrasound bone densitometer: A study from Assam, India**

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**Abstract:**

**Introduction:** Osteoporosis, an important cause of fracture in India is highly unrecognized and un-addressed issue. This condition is characterized by low bone mineral density (BMD) for which screening is not routinely done. Again there is paucity of literatures regarding the prevalence of low BMD among adult population from this part of the country. With growing awareness of the condition and its complication demands special attention to be paid to early detection and treatment. The present study was carried out to study the bone mineral status of adult population in a rural block of Assam and also to find out some of its correlates.

**Materials and methods**: the study was conducted among the attendants of routine health camps, organized in the block. A total of 93 subjects (60 females and 33 males) were screened by using calcaneal ultrasound heel bone densitometer.

**Results & observation**: The study reveals that though the prevalence of osteoporosis and osteopenia were more in 50-60 years (85.71%) and > 60 years group (87.5%), high prevalence of osteopenia (68.75%) was also noted in younger 40-50 years group. Low BMD was found to be increasing with age, but it is more so in female than male. Significant association was found between BMD and socio-economic status, nutritional status, type of diet and menopausal status.

**Conclusion**: This study indicates that adult populations are equally at risk of osteoporosis as the elderly group and should be targeted for preventive interventions to prevent growing increase of the condition and its complications.

**Keywords**: Calcaneal bone mineral density, osteoporosis, osteopenia, body mass index, socio-economical status