International J.of Multidispl.Research & Advcs. in Engg.(IJMRAE),
ISSN 0975-7074, Vol. 4, No. III (July 2012), pp. 223-238

FUZZY MEASURE OF MULTIPLE RISK FACTORS IN THE PREDICTION OF OSTEOPOROTIC FRACTURES: A COMPARISON STUDY OF INDIAN MEN AND WOMAN

A. M. BURANDE
Dayanand Science College, Latur-413512 India.

Abstract

The prevalence of osteoporosis in India is more common than thought of and the incidence is sustained rise exposing the population to the thread of osteoporotic fractures with a socio-economic impact .Osteoporosis in fact is emerging as a silent killer and needs to be addressed at the prevention level .This health problem requires cost-effective methods of prediction at early stages and symptoms of osteoporosis must be picked up prior to the occurrence of osteoporotic fractures. As on today BMD is the only authentic method to detect these symptoms at an early stage but this BMD study remains elusive for the common masses is inaccessible to a common man who is at great risk of sustaining such a fracture . Moreover osteoporosis is a multi factorial condition and the interaction between these multiple risk factors is understudied and under evaluated .This is where our "Theory of fuzz y measures is handy .The risk factors which can be evaluated by clinical method become the data base proving an alternative to the data base provided by BMD measurements, making this theory an cost effective measurement of picking up early and safeguarding the health of general population at layer. The result have be encouraging and demonstrate a greater potentate of application.

Keywords: Osteoporosis, Indian men and women, Bone Fracture, Early Prediction, Fuzzy measure.