INTRODUCTION

INTRODUCTION AND BACKGROUND OF THE STUDY

“An ounce of prevention is worth a pound of cure”.

William Clark
Osteoporosis is defined by World Health Organization (WHO) as a bone mineral density that is 2.5 standard deviations or more below the mean peak bone mass (average of young, healthy adults); the term “established osteoporosis” includes the presence of a fragility fracture. The disease may be classified as primary type 1, primary type 2 or secondary. The form of osteoporosis is common in women after menopause.

About 200 million individuals worldwide. It affects men as well as women. One out of every 2 women and out of every four men over 50 is prone to develop osteoporosis – related fracture of the hip, vertebrae or wrist in their life time.

In India 1 out of 8 male and 1 out of 3 female suffer from osteoporosis & about 36 million patients (2013) and its risk will be reach up to 42 million in the 2020. The most affected age group is between 50 to 60 year ages. Osteoporosis is also a leading cause of hip fracture in India.

Mostly age groups after 50 year are on risk of osteoporosis. In western countries age group of 60 to 70 year are more prone to osteoporosis while in India it occurs in age of 50 to 60 years.

The leading cause of osteoporosis is a lack of certain hormones, particularly estrogen in women and androgen in men. Women, especially those older than 60 years of age, are frequently diagnosed with the disease. Menopause is accompanied by lower estrogen levels and increases a woman’s risk for osteoporosis. Other factors that may contribute to bone loss in this age group include inadequate intake of calcium and vitamin D, lack of weight-bearing exercise and other age-related changes in endocrine function.

Bone is a living, dynamic tissue that undergoes constant remodeling throughout life. This is necessary to allow the skeleton to increase in size during growth, respond to the physical stresses placed on it, and repair structural damage due to structural fatigue or fracture. This process requires a range of proteins and minerals, which are absorbed from the bloodstream.
Osteoporosis is a common musculoskeletal disorder, referred as silent diseases that often remains asymptomatic until bone fracture occur. Because of the high morbidity associated with fracture, prevention is a clinical priority. Osteoporosis is one of the metabolic bone disorder and remains and increasingly significant problem, affecting.

“To prevent “literally means “to keep something from happened”. The term “prevention” is reserved for those interventions that occur before the initial onset of disorder. Nursing care oriented to health promotion, wellness, and illness. Prevention can be understood is terms of health activities on primary, secondary, tertiary

In childhood, bones grow and repair very quickly, but this process slows down as you get older. Bones stop growing in length between the ages of 16 and 18, but continue to increase in density until late 20s. From about the age of 35, gradually lose bone density. This is a normal part of ageing, but for some people it can lead to osteoporosis and osteoporosis is a condition that affects the bones, causing them to become weak and fragile and more likely to break.

Primary prevention programmer addresses area such as adequate and proper nutrition, weight control, and exercise and stress reduction among the healthy individuals. Secondary promote early detection or screening and treatment of a diseases and limitation of disability. Tertiary prevention directed towards recover or rehabilitation of a diseases or condition after the diseases have been developed osteoporosis can be treated and prevented and early screening.

The key factor to avoid severe effects from osteoporosis is prevention. Women may protect themselves from severe bone loss by maintaining a balanced diet rich in calcium, performing regular weight-bearing exercise, limiting alcohol intake, not smoking, and considering hormone replacement therapy. Clinicians can help identify therapy goals for short term relief of menopausal symptoms and long term relief and prevention of osteoporosis and fractures. Physicians must consider individual needs and concerns and be cognizant that because a woman’s needs can change, re-evaluation is needed. Osteoporosis and its consequent fractures are a major problem in public health.