

# Service Priorities and Programmes Electronic Presentations

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Submitting author: Ms SUNG Cindy

Post title: Occupational Therapist I, Kwai Chung Hospital, KWC

A retrospective study of risk factors for osteoporosis in adults with intellectual disabilities in community

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## **Keywords:**

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#### Introduction

The life expectancy of the people with intellectual disabilities is increasing due to advancement in medical and social care. One important aspect of concern in aging is bone health. People with intellectual disabilities have increased risk factors related to osteoporosis. It may induce fractures that result in hospitalization when the injuries are serious. The major risk factors related to them include female, falls, epilepsy, anti-epileptic drugs, immobility, menopause, old age, low bone mineral density (BMD), nutrition, cigarette smoking & low body mass index (BMI).

### **Objectives**

(1) to review the prevalence of osteoporosis in a community sample (2) to identify the risk factors related to osteoporosis of all outpatients of learning disabilities who attended the Mobile Combined Clinic operated by the outreaching team of the Psychiatric Unit of Learning Disabilities in Kwai Chung Hospital. (3)to advice on further investigation for diagnosis of osteoporosis and interventions for clients with osteopenia or osteoporosis

# **Methodology**

A cross-sectioned survey was conducted in a community sample (n = 194) for screening of bone mineral density which was a measurement of osteoporosis. The staff in the community settings such as sheltered workshops (SWS) or Day Activity Centres (DAC) were interviewed on a simple questionnaire for risk factors of osteoporosis. The screening instrument for osteoporosis is the sonometer which provided a quick screening in less than 15 seconds. It was operated by the multi-disciplinary team members after training. Pearson correlation was used in the data collected from osteoporosis screening to corelate potential risk factors for osteoporosis.

#### Result

194 outpatients from mild to severe grade learning disabilities from 5 sheltered

workshops (SWS) and 4 day activities centres (DAC) attended the Mobile Combined Clinic for health screening and osteoporosis was one part of the services. 181 clients completed the osteoporosis screening. There were 90 clients (49.72%) from SWS and 91(50.28%) from DAC. 71 clients (39.24%) had mild grade learning disabilities, 95 (52.48%) moderate grade and 15 (8.28%) were of severe grade. The age ranges of the sample were from 20 -75 years old with mean age 48.66. 44 clients (24.30%) had normal range of bone mineral density (BMD,72 (39.78%) had osteopenia & 65 (35.91%) had osteoporosis. The 8 risk factors related to osteoporosis with Pearson correlation at 0.05 significant level were age(p=0.000) menopause(p=0.000),body mass index(p=0.001), passive lifestyle (P=0.000), fall in recent 3 years (p=0.008), fracture in recent 3 years(p=0.013), epilepsy (p=0.04) & anti-convulsion medication (p=0.028) Conclusion and recommendations: As over 75% of clients suffer from various degree of osteopenia or osteoporosis, intervention for improvement is urgently required.