

[DOI: 10.20472/IAC.2017.031.016](https://doi.org/10.20472/IAC.2017.031.016)

MEI-CHUN CHEUNG

Department of Social Work, The Chinese University of Hong Kong, Hong Kong

JOANNE YIP

Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hong Kong

LAI-HING FOK

Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hong Kong

GARCIA KWOK

Institute of Textiles and Clothing, The Hong Kong Polytechnic University, Hong Kong

HEALTH-RELATED QUALITY OF LIFE IN ADOLESCENTS WITH MILD SCOLIOSIS

Abstract:

Introduction: According to the large population-based retrospective cohort study in Hong Kong, the prevalence of adolescent idiopathic scoliosis (AIS) by the age of 19 years in Hong Kong is 1.39% for Cobb angle 20° (Luk et al., 2010). AIS are characterized by uneven shoulders, spine curvature and uneven hips. At present, adolescents with mild scoliosis, that is, Cobb angle less than 20° do not receive any intervention in Hong Kong. Some of them are generally followed up by spine surgeon through clinical monitoring and re-examined the degree of curvature every 8-12 months, though they may have high growth potential and risk of curve progression during the age of 10-16 at puberty. Their health-related quality of life is generally overlooked, as compared to AIS.

Objective: To characterize the influence of mild scoliosis on health-related quality of life in the community-dwelling female adolescents in Hong Kong

Methods: A school pre-screening program in Hong Kong was conducted to examine the prevalence of mild scoliosis during 2012-2015. A total of 545 female adolescents were recruited from several local primary/secondary schools in Hong Kong. The adolescents were divided into two groups matched in terms of age and education: individuals with mild scoliosis ($n = 128$) who demonstrated positive results in the Adam's forward bending test and an angle of trunk rotation (ATR) of 3° measured by a scoliometer and normal controls without any demonstrated signs of scoliosis ($n = 417$). Their health-related quality of life was evaluated by the validated Scoliosis Research Society - 22 (SRS-22) Questionnaire, which consists of 22 items that assess five domains, including Function, Pain, General Self Image and Mental health.

Results: Compared with the age-matched adolescents, female with mild scoliosis showed significantly lower self-image ($p < 0.002$) and marginally poor function ($p < 0.023$). In particular, they were unhappier with their current lives ($p < 0.000$) and suffered from more severe level of pain ($p < 0.004$).

Conclusion: Based on the community-dwelling sample in Hong Kong, the results show that health-related quality of life can be impaired in adolescents with mild scoliosis. Therefore, the psychosocial care should be taken into account as a means of improving the management of mild scoliosis.

Keywords:

adolescent idiopathic scoliosis, quality of life

JEL Classification: I10, J13