

## **The Prevalence of Skeletal Disorders among middle-School Girl Students in Ardabil in 2019**

### ***Abstract***

**Background:** *Postural disorders are adverse changes in the skeletal structure that have an important impact on the health of children in adulthood. It is important to know the physical condition of students and to provide appropriate solutions to eliminate such possible abnormalities.*

**Aim:** *To determine the prevalence of skeletal disorders among middle-school girl students in ardabil in 2019*

**Methods and materials:** *A total of 364 female students studying in middle schools in Ardabil in the academic year 2019 were included in this study by cluster sampling. The research tools were plummet (guideline), matrix sheet, mirror box and the personal characteristics questionnaire. Data were analyzed by SPSS software, version 24.*

**Results:** *Prevalence of postural disorders were as follows: uneven shoulders (53.8%), forward head (35.7%), lumbar lordosis (28.3%), kyphosis (24.5%), flat feet (11.5%) %, scoliosis (11.3%), hallux valgus (10.4%), genu varum (8.5%), genu valgum (5.5%), and flat back (2.2%). Also, there was a significant relationship between uneven shoulders ( $P=0.001$ ) and lumbar lordosis ( $P=0.006$ ) with students' body mass index status.*

**Conclusion:** *The results of the present study showed that the highest percentage of postural disorders among middle-school girl students in Ardabil was related to uneven shoulders and the lowest percentage was related to flat back. Also, the frequency of uneven shoulders was significantly higher among lean and very lean students and the frequency of lumbar lordosis was significantly higher among obese students.*

**Keywords:** *postural disorders, girls, middle-school.*