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A study of postural deformities among rural and urban school going children of Kashmir

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Abstract

The present study was carried out to study the postural deformities among the rural and urban school going children of Kashmir under age group 13-19. It has three fold objectives; the first objective was to study the prevalence of postural deformities among rural school going children of Kashmir, the second objective was to study the prevalence of postural deformities among urban school children of Kashmir. And the third objective was to compare the postural deformities between rural & urban school going children of Kashmir.

The study was delimited to the rural and urban school going children of Kashmir. The study was also delimited to children of age group 13-19 years. The study was further delimited to the selected postural deformities viz. kyphosis, scoliosis. Lordosis, bow-leg, knock-knee and flat –feet. The total sample size was 200 (100 rural, 100 urban) school going children of rural & urban areas of Kashmir. Kyphosis was measured more in urban school going children while as knock-knee & flat feet were measured more in rural areas respectively. The kyphosis, scoliosis, lordosis, bow-leg, knock-knee were measured with the help of plumb line while as the flat- feet was measured with the help of foot impression. Frequencies & Percentage were used to analyze data. The study revealed that (11%) school going children were posturally deformed. It was found that rural school going children (7%) were more posturally deformed than that of urban school going children (4%). The data of study was analyzed to test the association between the rural and urban school going children under age of 13-18 years.

Keywords: Postural deformities, rural and urban school, children of Kashmir etc.

Introduction

The word posture comes from the Latin verb ponere, which means “to put or place”. The general concept of human posture refers to ‘the carriage of the body as a whole, the attitude of the body, or the position of the limbs (the arms and legs)’. POSTURE is described as one in which head is held erect, the chest is forward, the shoulders are drawn back and the abdomen is retracted. Posture involves the alignment of body parts to achieve balance in sitting, standing, walking or physical activity. The boney skeleton and muscles govern the balance, which varies with age, occupation, type of activity, physique and health. Posture means carriage or the manner of holding one’s body. Posture is important because there is a relationship between good health and good body posture. Good posture may be defined as that accustomed position which enables the body to do it functions effectively. The proper use of energy is possible when we are in a good posture.

Posture Abnormalities

The spine has natural curves that help balance you upright as you sit, stand, walk or otherwise move. The vertebral column sometimes develops exaggera or deformed curves, resulting in conditions such as kyphosis, excessive lordosis or scoliosis: These may be called deformities or postural abnormalities. They represent a deviation of the spine away from an ideal alignment. Other postural abnormalities include a flat low back, and kyphosis. Apart from those there are some other postural deformities like bow-leg, knock-knee, flat feet, etc.

Need of Good Posture

Sitting and standing with good posture places the least strain on our muscles and ligaments and keeps the different parts of the body balanced.

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Our back has a natural curve and when the curve is resting or neutral, the muscles are being used properly and therefore experience the least strain. We can have good (or bad) posture when we are standing, sitting or lying down.

Objectives

The objectives of the present study, entitled "postural deformities among rural & urban school going children of Kashmir" are__

- (i) To study the prevalence of postural deformities among rural school going children of Kashmir.
- (ii) To study the prevalence of postural deformities among urban school going children of Kashmir
- (iii) To compare the postural deformities between rural and urban school going children of Kashmir.

Method & Procedure

Sample: Two hundred subjects including boys and girls from rural as well as urban areas of Kashmir under age group of 13-19, in which 100 subjects were from rural and 100 subjects from urban schools, were taken as a sample for present investigation on random sampling basis.

Tools: Plumb-Line and foot impression tools were used for sampling because of the limitations of equipments. Plumb line and foot impression are the orthodox tools used to measure postural deformities.

Table 1: Shows the overall deformities in rural and urban school going children of Kashmir. No. of Subjects Possessing Deformity

S. No.	Type of Deformity	Rural	Urban	Total
1	Kyphosis	02	06	08
2	Scoliosis	02	-	02
3	Lordosis	01	-	01
4	Bow-Leg	02	-	02
5	Knock-Knee	06	03	09
6	Flat-Feet	03	01	04

Procedure

Plumb Line: Samples were collected from various Secondary & Hr. secondary schools of both rural as well as urban areas of Kashmir under age group 13-19. For collecting data, subjects were asked to stand in attention position and a plumb line was used to check their proper posture. The plumb line was dropped from top (head) to bottom (between the heels). Any deviation in the plumb line showed the signs of postural deformities. The alignment of shoulders, thighs and knees were also checked with the same procedure.

Foot Impression: A flat surface or flat board was used on which the subjects were asked to place foot leaving behind an impression which showed whether the arch is fallen or not. The impression was drawn by sand.

Analysis and interpretation of data

The collected data was tabulated and computerized to draw out the meaningful conclusions. Frequency and percentage were used to analyze the data. The outputs generated are presented in the tables and graphs below.

Table shows overall deformities among the Rural & Urban School going children of Kashmir.

Table 1.1: Prevalence of Kyphosis in rural School going children of Kashmir

	Observation	% Age
Kyphotic	02	02%
Non-Kyphotic	98	98%
Total	100	100%

The table no. 1.1 shows that 02% subjects were suffering from Kyphosis

Table 1.2: Prevalence of Scoliosis in rural school going children of Kashmir

	Observation	%age
Scoliotic	02	02%
Non-Scoliotic	98	98%
Total	100	100%

The table no. 1.2 shows that 02% subjects were suffering from Scoliosis.

Table 1.3: Prevalence of Lordosis in rural school going children of Kashmir

	Observation	%age
Lordotic	01	01%
Non-Lordotic	99	99%
Total	100	100%

The table no. 1.3 shows that 01% subject were suffering from Lordosis.

Table 1.4: Prevalence of bow-Leg in rural school going children of Kashmir.

	Observation	%age
Bow Legged	02	02%
Non Bow Legged	98	98%
Total	100	100%

The Table no. 1.4 shows that 02% subject were suffering from Bow-Leg

Table 1.5: Prevalence of Knock-knee in rural school going children of Kashmir

	Observation	%age
Knock Kneed	06	06%
Non Knock Kneed	94	94%
Total	100	100%

The table no. 1.5 shows that 06% subjects were suffering from Knock-knee.

Table 1.6.

	Observation	%age
Flat Feet	03	03%
Non Flat Feet	97	97%
Total	100	100%

The table no. 1.6 shows that 0.3 subjects were suffering from Flat-Feet

Table 2.1: Prevalence of Kyphosis in urban school going children of Kashmir

Kyphotic	06	06%
Non-Kyphotic	94	94%
Total	100	100%

The table no. 2.1 shows that 06% subjects were suffering from Kyphosis.

Table 2.2: Prevalence of Scoliosis in urban school going children of Kashmir

	Observation	%age
Scoliotic	00	00%
Total	100	100%

The table no. 2.2 shows that no subjects were suffering from Scoliosis

Table 2.3: Prevalence of Lordosis in urban school going children of Kashmir

	Observation	%age
Lordotic	00	00%
Non-Lordotic	100	100%
Total	100	100%

The table no. 2.3 shows that no subjects were suffering from Lordosis.

Table 2.4: Prevalence of Bow-Leg in urban school going children of Kashmir

	Observation	%age
Bow Leg	00	00%
Non Bow Leg	100	100%
Total	100	100%

The Table no. 2.4 shows that 00% subjects were suffering from Bow-Leg

Conclusion

It was concluded that after interpretation and analysis of the result, the postural deformities were prevalence in rural school going children of Kashmir. The postural deformities were prevalence in urban school going children of Kashmir. There was a significant difference in the number of postural deformity cases among rural & urban school going children of Kashmir.

Suggestions

After analysis of the results and discussion with the supervisor, following suggestions are given in order to help the young generation of both rural and urban school going children of Kashmir to develop a good posture-

- Physical education teacher should aware the children about the need and importance of good posture and also how to maintain a good posture.
- Various counseling programs should be conducted by the authorities, which will help the schools and the society to develop and maintain good posture.
- Stress should be laid on personal hygiene. Proper dressing and footwear should be checked.
- Yoga should be introduced in the daily routine to avoid any sort of postural deformities.
- Variety of physical activities should be introduced so that every student will show active participation.
- Postural deformities should be diagnosed at early stage and the remedial correct that should be given to such individual accordingly.
- Sitting, standing, walking, lying, etc., habits should be checked and corrected at early stages.

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