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## Analytical study of postural deformities among school going children from Bathinda district Punjab

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### Abstract

The major types of body posture in human being are two: 1. Good posture and 2. Bad posture. The research subject was an analytical study of postural deformities in school children of rural area in Bathinda. For this study 200 school children (100 Boys & 100 Girls) of rural area in Bathinda have been selected. The age group of school children is 10-18years. The main objective this study is to find out the ratio of the school children who have suffered from postural deformities. For the data collection on the subject the posture grid chart has been used. The data have been analysed by using percentage method. After that the researcher has found that knock knee postural deformities are very high and flat feet posture deformities are very low in rural area of Bathinda.

**Keywords:** Deformities, kyphosis, lordosis, scoliosis, knock knee, bow leg, flat foot

### Introduction

The location of the body segments requires the least of effort from the muscles and ligaments. This will lead to this balanced motionless state. In its most essential form the posture is static, standing with no movement. When we stand, the segments of our body, the head, torso or limbs, arrange themselves in sure way. There may be the body in a state of muscular and skeletal balance if the posture is good and is sheltered against damage and deformity to the joints, muscles, vertebrae and other tissues. From the mechanical point of view the perfect posture is one in which the different segments of the body neck, chest and stomach are balanced upright one upon the other. The weight of body is borne mostly by the bony skeleton with a minimum of energy spending and strain by muscles and ligaments. This is a case when the long axis of its segments forms a vertical line as a replacement for zigzag. More muscular power needs to be prolonged to maintain the location of the body when any part of the body is out of its natural placement. The strength used this way is exhausted energy.

### Methods

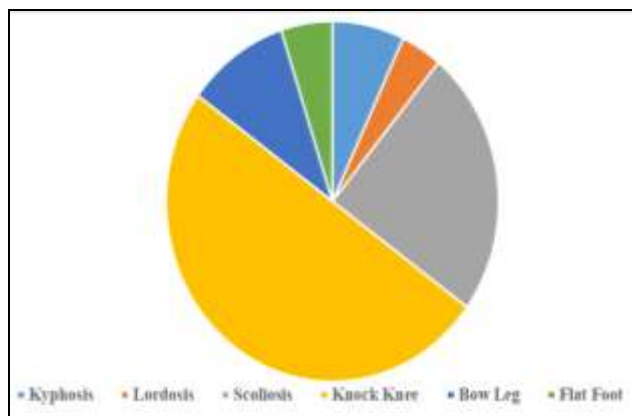
The study is entitled "An analytical study of postural deformities in school children of rural area in Bathinda" For the study the researcher used 200 school children (100 Boys & 100 Girls) as a sample for this study. The age group of subject was 10-18 years. The samples were collected from different schools in rural area (Kot Shamir) of Bathinda. The sampling was done through the random sampling method.

### Analysis

**Table 1:** Showing the percentage of postural deformities in school boys of rural area

Sr. No	Deformities	No of Students 100	% Age
1	Kyphosis	7	7%
2	Lordosis	4	4%
3	Scoliosis	24	24%
4	Knock Knee	50	50%
5	Bow Leg	10	10%
6	Flat Foot	5	5%

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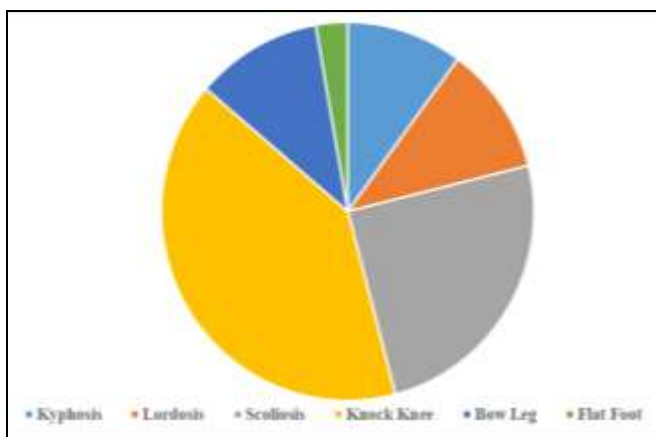


**Fig 1:** Showing the percentage of postural deformities in school boys of rural area

The above table no 1 shows percentage wise data of rural boys. As per table 7% boys were found suffering from Kyphosis, 4% suffering from Lordosis and 24% suffering from Scoliosis. 50% boys were found suffering from Knock Knee, 10% suffering from Bow legs and 5% suffering from Flat Foot. On the basis of the above analysis it may be concluded that the Knock Knees deformities are very high and Lordosis deformities are very low in school boys of rural area.

**Table 2:** Showing the percentage of postural deformities in school girls of rural area

Sr. No	Deformities	No of Students 100	% Age
1	Kyphosis	11	11%
2	Lordosis	12	12%
3	Scoliosis	22	22%
4	Knock Knee	40	40%
5	Bow Leg	12	12%
6	Flat Foot	3	3%

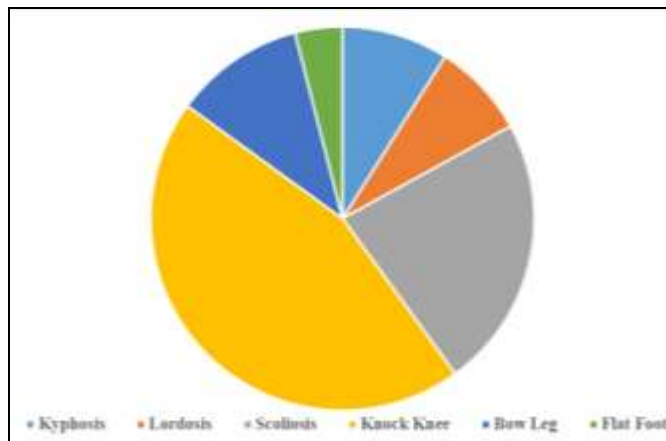


**Fig 2:** Showing the percentage of postural deformities in school girls of rural area

The above table no 2 shows percentage wise data of rural girls as per table 11% girls were found suffering from Kyphosis, 12% suffering from Lordosis and 22% suffering from Scoliosis. 40% girls were found suffering from Knock Knee, 12% suffering from Bow Legs and 3% suffering from Flat Foot. An analysis gives us conclusion that the Knock Knees deformities are very high and Flat Feet deformities are very low in school boys of rural area.

**Table 3:** Showing the percentage of postural deformities in school children's of rural area

Sr. No	Deformities	No of Students 200	% Age
1	Kyphosis	18	9%
2	Lordosis	16	8%
3	Scoliosis	46	23%
4	Knock Knee	90	45%
5	Bow Leg	22	11%
6	Flat Foot	8	4%



**Fig 3:** Showing the percentage of postural deformities in school children's of rural area

According to above table no 3 showing percentage wise data of rural children as per table 9% children were found suffering from Kyphosis, 8% suffered from Lordosis and 23% suffered from Scoliosis. 45% boys were found suffering from Knock Knee, 11% suffered from Bow Legs and 4% suffered from Flat Foot. It is concluded that the Knock Knees deformities are very high and Flat Feet deformities are very low in school children of rural area.

### Conclusion

Following the suitable statistical process it may be concluded that there are more postural deformities in rural area of Bathinda. The Knock Knee deformities are very high. Scoliosis deformities are less than Knock Knee, Bow Legs deformities are less than Scoliosis, Kyphosis is less than Bow Legs, and Lordosis is less than Kyphosis. But a Flat Feet postural deformity is very low in rural area of (Kot Shamir) Bathinda District.

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