



## **Comparative Survey of Selected Postural Deformities in School Children of Mantha Tahasil**

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### **Abstract**

The Purpose of the study was to do the comparative survey of selected postural deformities in school children of Mantha Tahasil. For this total N=300 students were selected with the mean age of (16+/-1.23) year from different schools of Mantha Tahasil. Further, the selected subjects were divided into two intervention group n=150 boys and n=150 girls. The selected postural deformities were upper limb .i.e. kyphosis (KYH), lordosis (LDS), scoliosis (SLS) and lower limb i.e. knock knee (KNK), bow leg (BLG) and flat foot (FTF). Gird chart technique, subjective observation and paper ink were used to assess the postural deformities. Percentage was applied as statistical tool for the study. The results of the study revealed that percentage of boys suffering from selected postural deformities were (KYH=28.7%), (LDS=34.7%), (SLS=15.3%), (KNK=10%), (BLG=6.7%) and (FTF=4.7%). The results of the study revealed that percentage of girls suffering from selected postural deformities were (KYH=18%), (LDS=25.3%), (SLS=18%), (KNK=13.3%), (BLG=8.7%) and (FTF=16.7%). Whereas, the percentage of total N=300 students suffering from postural deformities were (KYH=23.33%), (LDS=30%), (SLS=16.66%), (KNK=11.6%), (BLG=7.66%) and (FTF=10.66%).

**Keywords: - Kyphosis, Lordosis, Scoliosis, Knock Knee, Bow Leg, Flat Foot, Gird Chart**

**Introduction**

The postural refers to the position of the body, this mean the relationship between different parts of the body, analyzed in a given time frame and space (Fortin C, et al 2011). Quantitative postural evaluation is based on the feet and legs, the pelvis, the spine, the shoulders and the head (Kovač S, et al 2014). The body postural is defined by alignment and orientation of the segments of the body in a vertical position. If the muscles are strong enough to overcome the gravity of the earth, the body will remain vertical, (Ćirić A, et al 2015) but if the muscles are not strong enough, you can feel tired and the body dissolves (Kovač S, et al 2015). In this context, this work should be done. Focus on diagnosing these body segments. Complete posture and other parts of the body depend on the position of a part of the body. The minimum position of each part of the body is a prerequisite for proper posture. Every time activity changes, the position category also changes. A good posture is defined as a mixing mechanism to achieve customizable body behaviour. There are several theories to maintain the postural is existed, for example: Ankle and hip strategies (Negrini S, et al 2005).

Healthy positioning includes well-placed and stable feet and ankles, proper movement of the knees, hips and pelvis, as well as movement of the spine, shoulders and head (Kosinac Z, 2006). Posture deformation is considered to be anything that violates proper posture in any situation. Good posture help to improves social and economic efficiency because it is full of trust and can interact with the people appropriately.

**Methodology**

The population of the study total (N=350) students, from which for the purpose of the study (300) students suffering from postural deformities on the subjective based were selected, further separated into two intervention group boys n=150 and girls n=150 with mean age of (16+/-1.23) year were selected as the subjects. The selected subjects were students of different Govt aided school in Mantha Taluka. The postural deformities for the study were upper body and lower body postural deformities .i.e. kyphosis (KYH), lordosis (LDS), scoliosis (SLS), knock knee (KNK), bow leg (BLG) and flat foot (FTF). Gird chart was used for the assessment of kyphosis (KYH), lordosis (LDS), Scoliosis (SLS). For assessment of knock knee (KNK), bow leg (BLG)

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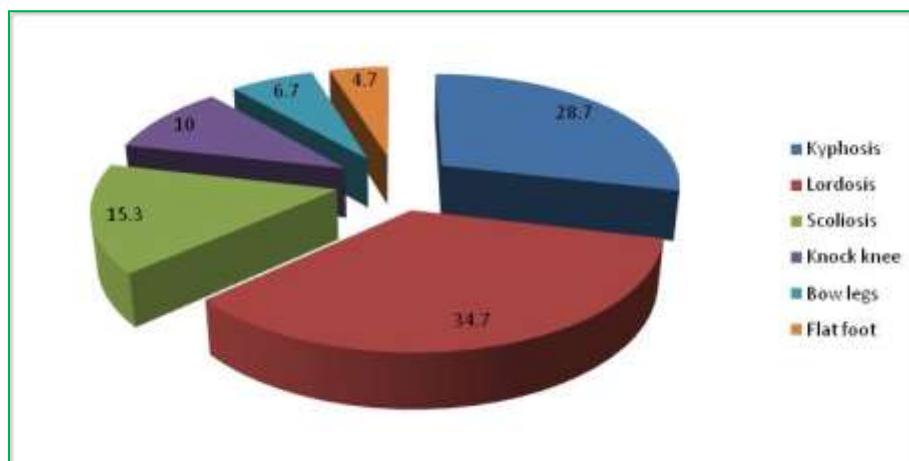
scale and subjective method was applied. Flat foot (FTF) was measured with paper ink technique. The data obtained were analysis with percentage method done with SPSS version 20.

**Statistical Analysis & Results**

The data collected on N=300 students (boys n=150, girls n=150) on selected postural deformities kyphosis KYH, lordosis LDS, Scoliosis SLS, knock knee KNK, bow leg BLG and flat foot FTF were analysis on percentage based and presented in table form.

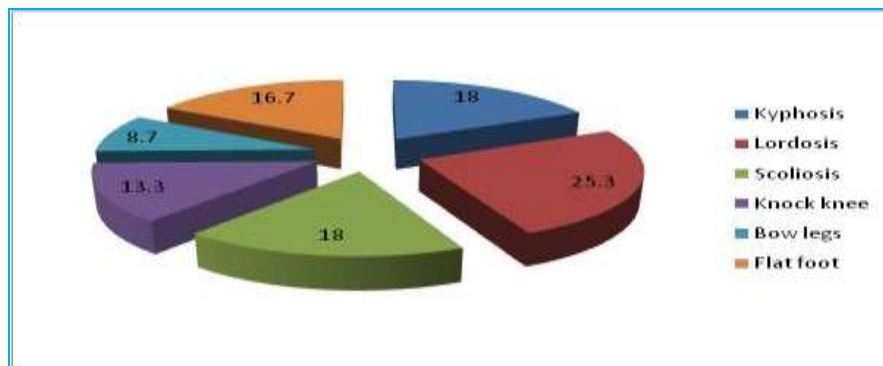
**Table 1: Percentage Analysis of Selected Postural Deformities in Boys School Children of Mantha Tahasil**

S.no	Postural Deformities	Frequency (150)	Percentage
1.	Kyphosis	43	28.7%
2.	Lordosis	52	34.7%
3.	Scoliosis	23	15.3%
4.	Knock knee	15	10.0%
5.	Bow legs	10	6.7%
6.	Flat foot	7	4.7%



**Comparative Survey of Selected Postural Deformities in School Children of Mantha Tahasil****Table 2: Percentage Analysis of Selected Postural Deformities in Girls School Children of Mantha Tahasil**

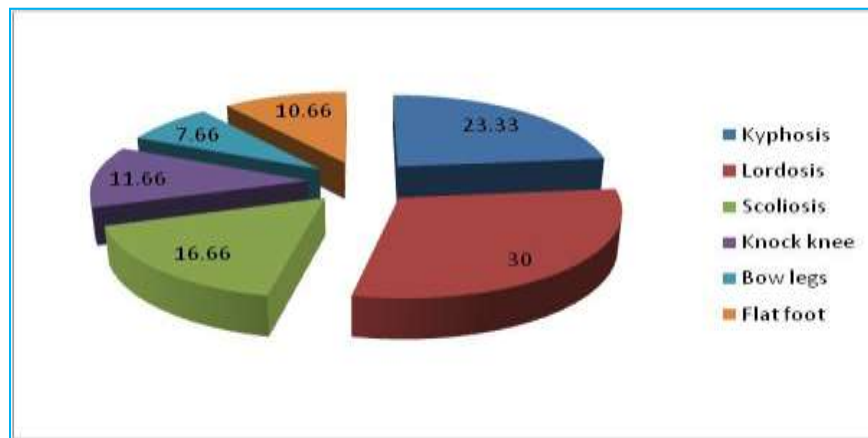
S.no	Postural Deformities	Frequency (150)	Percentage
1.	Kyphosis	27	18.0%
2.	Lordosis	38	25.3%
3.	Scoliosis	27	18.0%
4.	Knock knee	20	13.3%
5.	Bow legs	13	8.7%
6.	Flat foot	25	16.7%

**Table 3: Percentage Analysis of Selected Postural Deformities in boys & Girls School Children of Mantha Tahasil**

S.no	Postural Deformities	Frequency (300)	Percentage
1.	Kyphosis	70	23.33%
2.	Lordosis	90	30%
3.	Scoliosis	50	16.66%

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4.	Knock knee	35	11.66%
5.	Bow legs	23	7.66%
6.	Flat foot	32	10.66%

**Discussion of finding**

In present scenario postural deformities are considered as the one of the common problem easily observes in school going children. Several studies were conducted in different area regarding the postural deformities among the school children. Most of the studies revealed that children are suffering from postural deformities from very early age. This study was carried out with similar purpose to indentify the school going children of Mantha Tahasil suffering from selected postural deformities like kyphosis (KYH), lordosis (LDS), scoliosis (SLS), knock knee (KNK) 11.66%, bow leg (BLG) and flat foot (FTF).

The results collected from actual 300 children suffering from postural deformities highlighted that, 23% were found to be in problem of (KYH), 30% school children suffering from (LDS), 16.6% had (SLS), 11.66% had (KNK), 7.6% (BLG) and (FTF) was 10.6%.

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The percentage of boys on selected postural deformities revealed that, (KYH), 28.7% school children suffering from (LDS), 34.7% had (SLS), 15.3% had (KNK) 10%, (BLG) 6.7% and (FTF) was 4.7%.

The girl students suffering from postural deformities were (KYH), 18% school children suffering from (LDS), 25.3% had (SLS), 18% had (KNK) 13.3%, (BLG) 8.7% and (FTF) was 16.7%.

The results obtained from 300 school going subjects revealed that, most of the percentage of student were suffering from postural deformities like (KYH), (LDS), & (SLS) which are upper body postural deformities. This is due to decreased motor activity, prolonged sitting on the computer from early childhood, poor posture at school, too many backpacks, inadequate nutrition, increased traumatic lesions, congenital spinal abnormalities and spending few hours of exercise. Previously the Muscular fatigue occurs in the spine, due to this children take incorrect postural and repeated action of the movement lead toward the postural deformities in further stages (Stamenka Mitova, 2015). The similar results were found in the study of Róbert Rusnák, et al 2019; M. Srpoňová and Z. Hudáková 2013; J. Vajičková, 2005).

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