

# International Multidisciplinary Research Journal

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# Golden Research Thoughts

**GRT**

## A STUDY ON POSTURAL DEFORMITIES AMONG HIGH SCHOOL STUDENTS

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### ABSTRACT

The purpose of the study was to analyze the postural deformities of male private high school students in malappuram city. 1341 male students were selected as subject from selected private high schools in malappuram city, and they were studying in 8th, 9th, and 10th standards. For scoliosis, Kyphosis, Lordosis, Round shoulder, Bow leg, New York state posture test and for Claw foot ,Flat foot , foot print test were selected as the variable of the study. New York state posture test an foot print test were measured in degrees.The result of the study showed that number of students having postural deformities in male private high school students in malappuram city.

**KEYWORDS** :Postural Deformities , growth and development , healthy families .

### INTRODUCTION

Good habits are essentially the base for good health. Health needs better structure and vice-versa. Posture is the index of personality. Good habits develop good posture. The early childhood and adolescent years in the life of an individual are crucial stages in the process of his growth and development. This is a period when a child is more impressionable and is most eager and ready to learn. Healthy children and healthy families are essential for human and national development. For the well being of the children it had been recognized that ill health and poor nutrition are violations of the

child's most basic right to survive and to develop normally in mind and body. Posture as an aspect of physical fitness, has an enormous popular and scientific literature. Posture "slump" indicates fatigue or poor condition and may be viewed as a barometer of muscular tone.

Erect posture is commonly associated with attitude of readiness, self confidence and assurance. A relaxed or slouched posture may generally cannot laziness and incompetence. For this reason the erect posture is the one most often aspired to and considered normal. A well- conditioned body makes possible good posture, the emotional concomitants of which might will be self respect, pride, self-confidence and courage. weak muscles, poor posture and weak will, are likely to go hand in hand. Development of good posture requires consideration of the mental, physical and morphological aspects.

Posture can be "inactive and active". Inactive posture are adopted for resting, sleeping or training general relaxation. In inactive postures, the essential muscular activity required to maintain life is reduced to minimum. Active posture required an integrated action of many muscles to maintain these. Active posture may be either "static or dynamic". A static posture is maintained by the interaction of group of muscles which work more or less statically to stabilize the joints, and in opposition to gravity or other forces whereas, a dynamic posture is required to form a efficient basis for movement, and the pattern of posture is constantly modified and adjusted to meet the changing circumstance which arise as a result of movement.

### **PURPOSE OF THE STUDY**

The purpose of study was to analyze the Postural Deformities of male Private high school students in Malappuram City.

### **METHODS**

The purpose of the problem was to study on postural deformities among high school students. In Malappuram city and were studying in 8th, 9th and 10th standards. For scoliosis, Kyphosis, Lordosis, Round shoulder, Bow leg, New York state posture test and for Claw foot ,Flat foot , foot print test were selected as the variable of the study. New York state posture test an foot print test were measured in degrees.

### **RESULT AND DISCUSSION**

Percent analysis done on the data collected from various groups of selected Private schools such as VIIIth Std. (437), IXth Std. (523) and Xth Std. (381) boys of Malapuram city totaling 1341 were evaluated for Postural Deformities of the upper body such as Scoliosis, Lordosis, Kyphosis and, Round shoulder and is presented in Table 1.

TABLE-1

PERCENT ANALYSIS DONE ON SELECTED POSTURAL DEFORMITIES OF UPPER BODY DONE ON BOYS OF PRIVATE HIGH SCHOOL IN MALAPURAM CITY

CLASS	VIII	IX	X	TOTAL
TOTAL NUMBER OF STUDENTS	437	523	381	1341
NUMBER OF STUDENTS HAVING SCOLIOSIS	15	14	10	39
PERCENTAGE	3.54%	2.73%	2.61%	2.94%
NUMBER OF STUDENTS HAVING LORDOSIS	11	12	7	30
PERCENTAGE	2.57%	2.32%	1.75%	2.19%
NUMBER OF STUDENTS HAVING KYPHOSIS	10	5	5	20
PERCENTAGE	2.26%	0.93%	1.33%	1.49%
NUMBER OF STUDENTS HAVING ROUND SHOULDER	38	46	34	118
PERCENTAGE	8.67%	8.71%	8.93%	8.78%

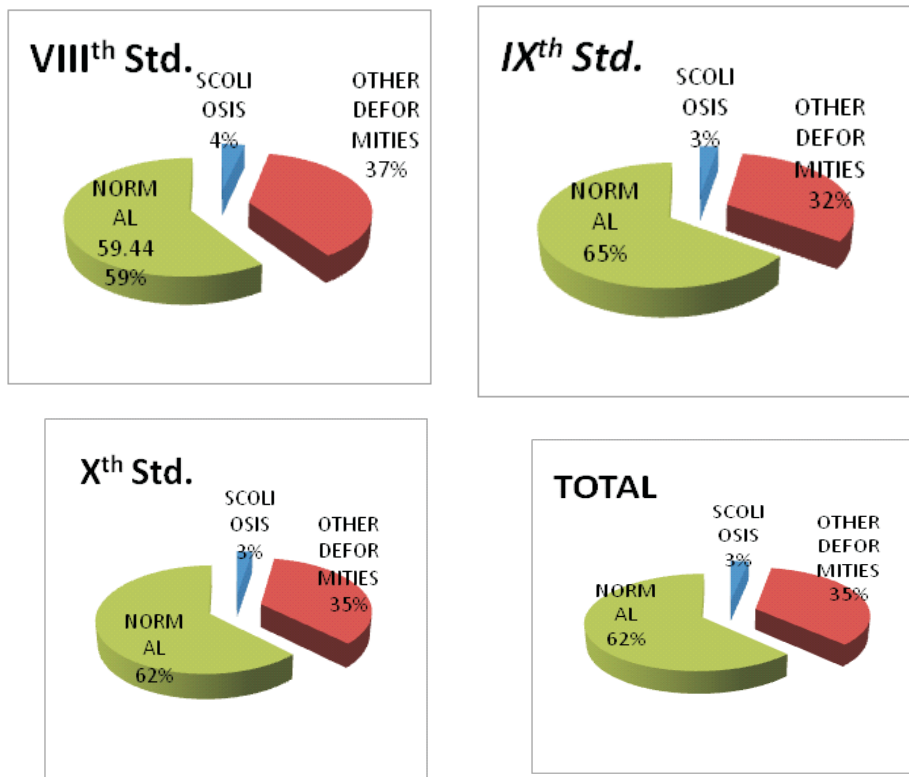


FIGURE 1: THE PERCENTAGE OF STUDENTS HAVING SCOLIOSIS OF DIFFERENT STANTARDS AND TOTAL.

Table 1 related to the Percent analysis done on VIIIth std. boys of selected Private high schools do shows 15 students having Scoliosis out of a total of 437 students and this is 3.54% of the total students evaluated for Postural Deformities. IXth Std. boys of selected Private high schools of Malapuram city do shows 14 students having Scoliosis out of a total of 523 students and this is 2.73% of the total students evaluated for Postural Deformities. Xth Std. boys of selected Private high schools of

Malapuram city do shows 10 students having scoliosis out of a total of 381 students and this is 2.61% of the total students evaluated for Postural Deformities. Total 39 students having Scoliosis out of a total of 1341 students and this is 2.94% of the total students evaluated for Postural Deformities.

**FIGURE 2: THE PERCENTAGE OF STUDENTS HAVING LORDOSIS OF DIFFERENT STANTARDS AND TOTAL**

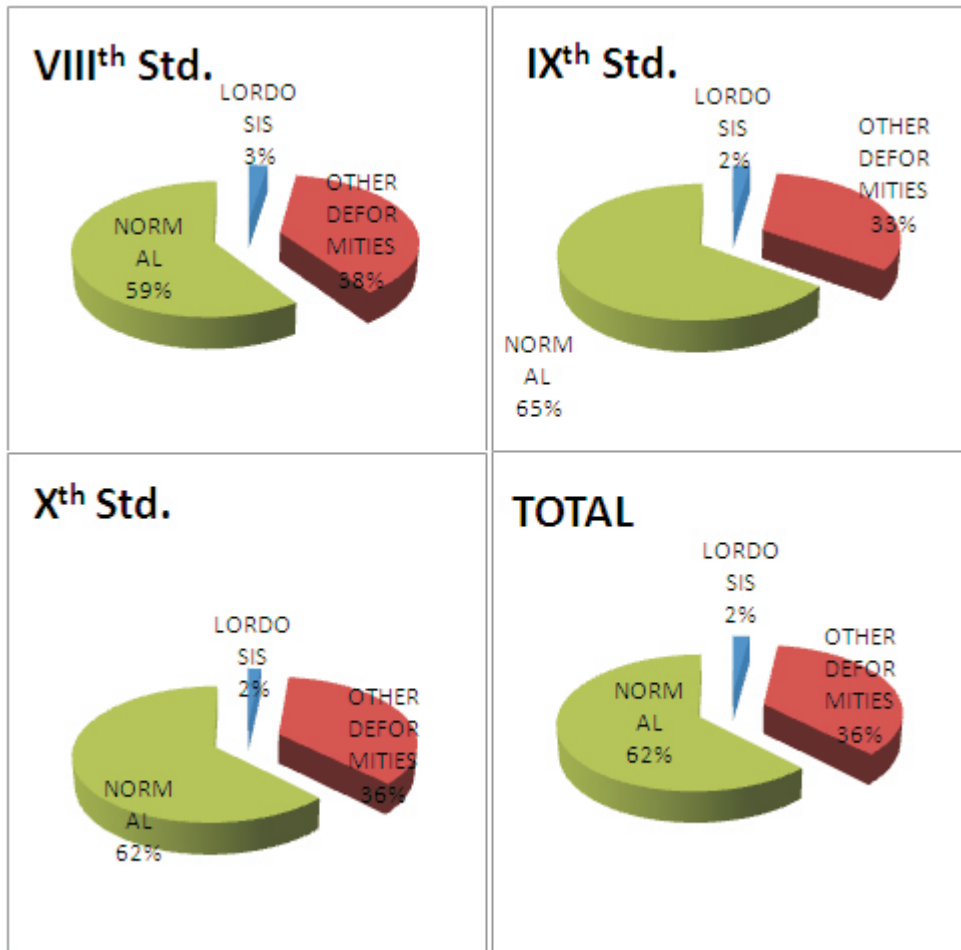


Table 1 related to the Percent analysis done on VIIIth std. boys of selected Private high schools do shows 11 students having Lordosis out of a total of 437 students and this is 2.57% of the total students evaluated for Postural Deformities. IXth Std. boys of selected Private high schools of Malapuram city do shows 12 students having Lordosis out of a total of 523 students and this is 2.32% of the total students evaluated for Postural Deformities. Xth Std. boys of selected Private high schools of Malapuram city do shows 7 students having Lordosis out of a total of 381 students and this is 1.75% of the total students evaluated for Postural Deformities. Total 30 students having Lordosis out of a total of 1341 students and this is 2.19% of the total students evaluated for Postural Deformities.

**FIGURE 3: THE PERCENTAGE OF STUDENTS HAVING KYPHOSIS OF DIFFERENT STANTARDS AND TOTAL**

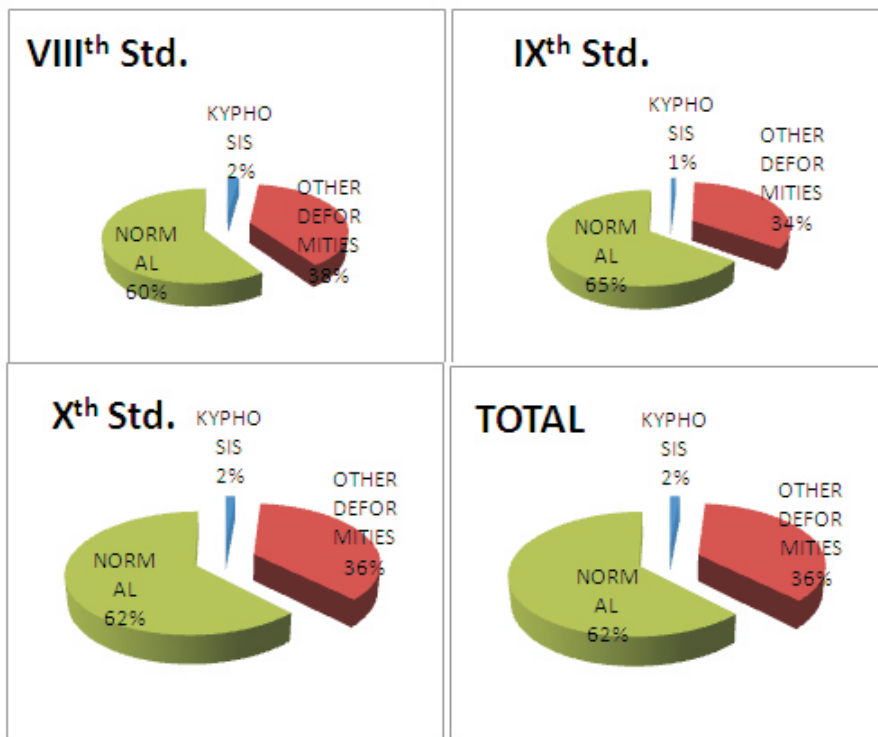


Table 1 related to the Percent analysis done on VIIIth std. boys of selected Private high schools do shows 10 students having Kyphosis out of a total of 437 students and this is 2.26% of the total students evaluated for Postural Deformities. IXth Std. boys of selected Private high schools of Malapuram city do shows 5 students having Kyphosis out of a total of 523 students and this is 0.93% of the total students evaluated for Postural Deformities. Xth Std. boys of selected Private high schools of Malapuram city do shows 5 students having Kyphosis out of a total of 381 students and this is 1.33% of the total students evaluated for Postural Deformities. Total 20 students having Kyphosis out of a total of 1341 students and this is 1.49% of the total students evaluated for Postural Deformities.



**FIGURE 4: THE PERCENTAGE OF STUDENTS HAVING ROUND SHOULDER OF DIFFERENT STD. AND TOTAL**

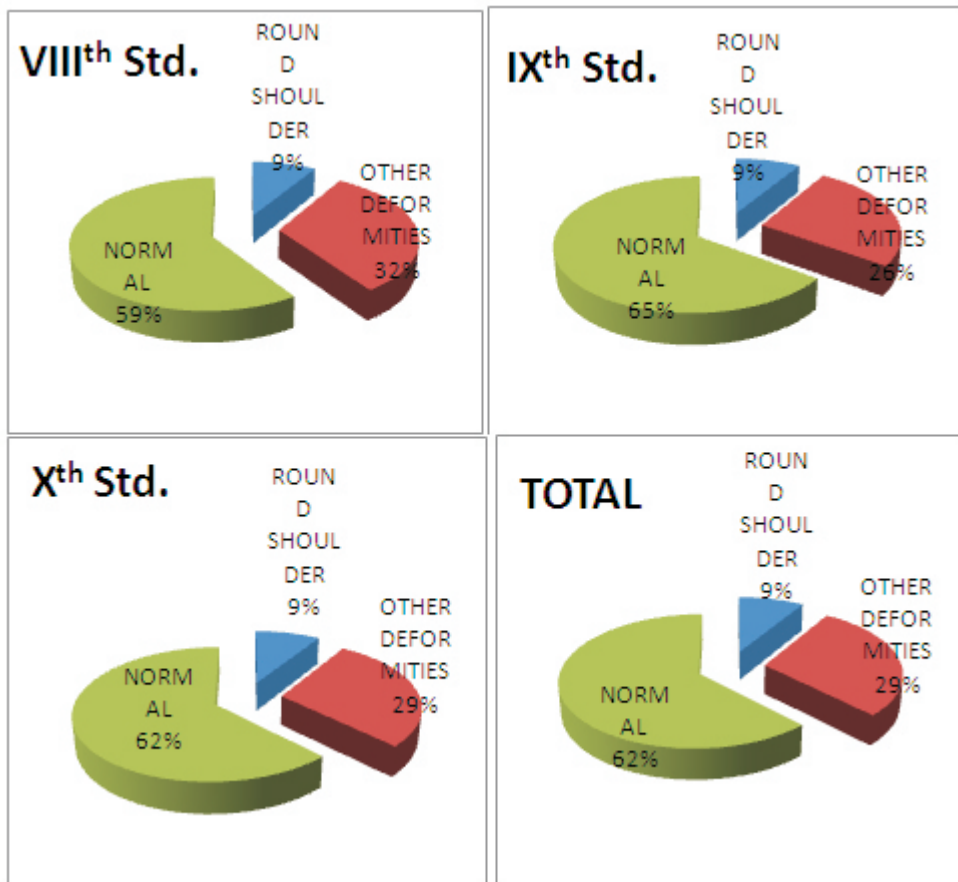


Table 1 related to the Percent analysis done on VIIIth std. boys of selected Private high schools do shows 38 students having Round shoulder out of a total of 437 students and this is 8.67% of the total students evaluated for Postural Deformities. IXth Std. boys of selected Private high schools of Malapuram city do shows 46 students having Round shoulder out of a total of 523 students and this is 8.71% of the total students evaluated for Postural Deformities. Xth Std. boys of selected Private high schools of Malapuram city do shows 34 students having Round shoulder out of a total of 381 students and this is 8.93% of the total students evaluated for Postural Deformities. Total 118 students having Round shoulder out of a total of 1341 students and this is 8.78% of the total students evaluated for Postural Deformities.



**TABLE-2**  
**PERCENT ANALYSIS DONE ON SELECTED POSTURAL DEFORMITIES OF LOWER BODY DONE ON BOYS OF PRIVATE HIGH SCHOOL IN MALAPURAM CITY**

CLASS	VIII	IX	X	TOTAL
TOTAL NUMBER OF STUDENTS	437	523	381	1341
NUMBER OF STUDENTS HAVING KNOCK KNEE	28	33	28	89
PERCENTAGE	6.41%	6.21%	7.28%	6.66%
NUMBER OF STUDENTS HAVING BOW LEG	18	22	15	55
PERCENTAGE	4.03%	4.24%	4.04%	4.10%
NUMBER OF STUDENTS HAVING CLAW FOOT	0	0	0	0
PERCENTAGE	0	0	0	0
NUMBER OF STUDENTS HAVING FLAT FOOT	57	52	44	153
PERCENTAGE	13.07%	9.87%	11.54%	11.47%

**FIGURE 5: THE PERCENTAGE OF STUDENTS HAVING KNOCK KNEE OF DIFFERENT STD. AND TOTAL.**

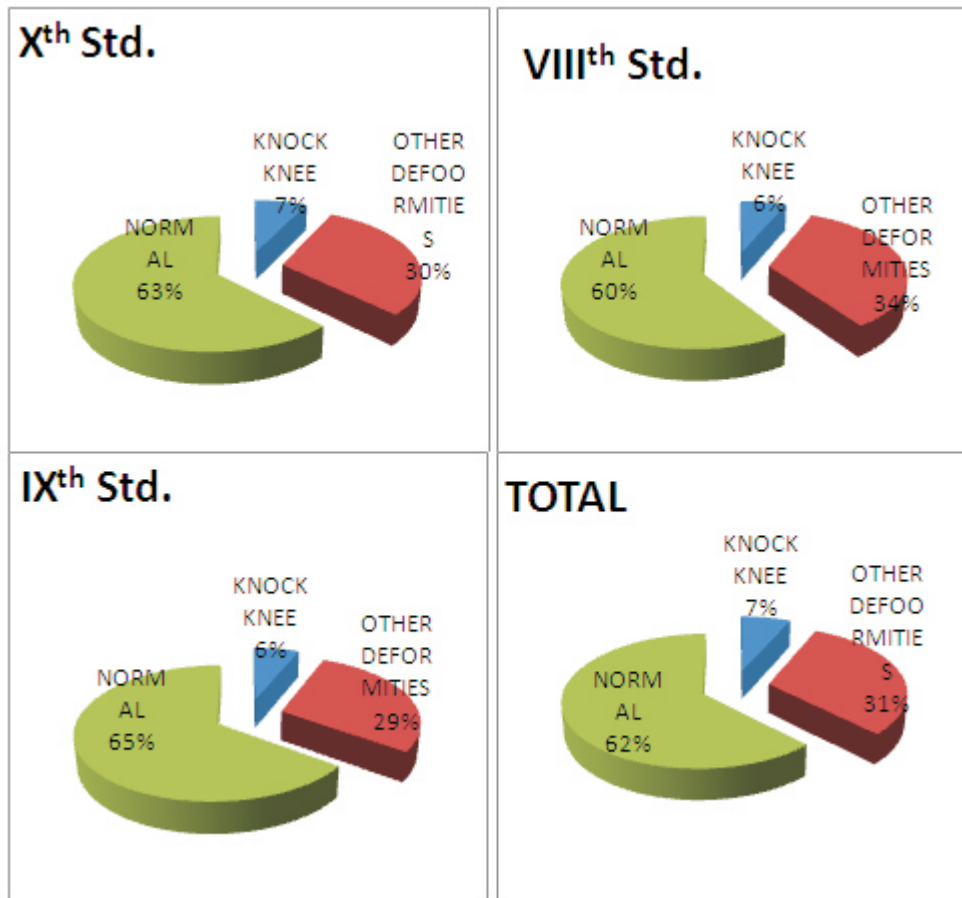


Table 2 related to the Percent analysis done on VIIIth std. boys of selected Private high schools do shows 28 students having knock knee out of a total of 437 students and this is 6.41% of the total students evaluated for Postural Deformities. IXth Std. boys of selected Private high schools of Malapuram city do shows 33 students having knock knee out of a total of 523 students and this is 6.21% of the total students evaluated for Postural Deformities. Xth Std. boys of selected Private high schools of Malapuram city do shows 28 students having knock knee out of a total of 381 students and this is 7.28% of the total students evaluated for Postural Deformities. Total 89 students having knock knee out of a total of 1341 students and this is 6.66% of the total students evaluated for Postural Deformities.

**FIGURE 6: THE PERCENTAGE OF STUDENTS HAVING BOW LEG OF DIFFERENT STD. AND TOTAL.**

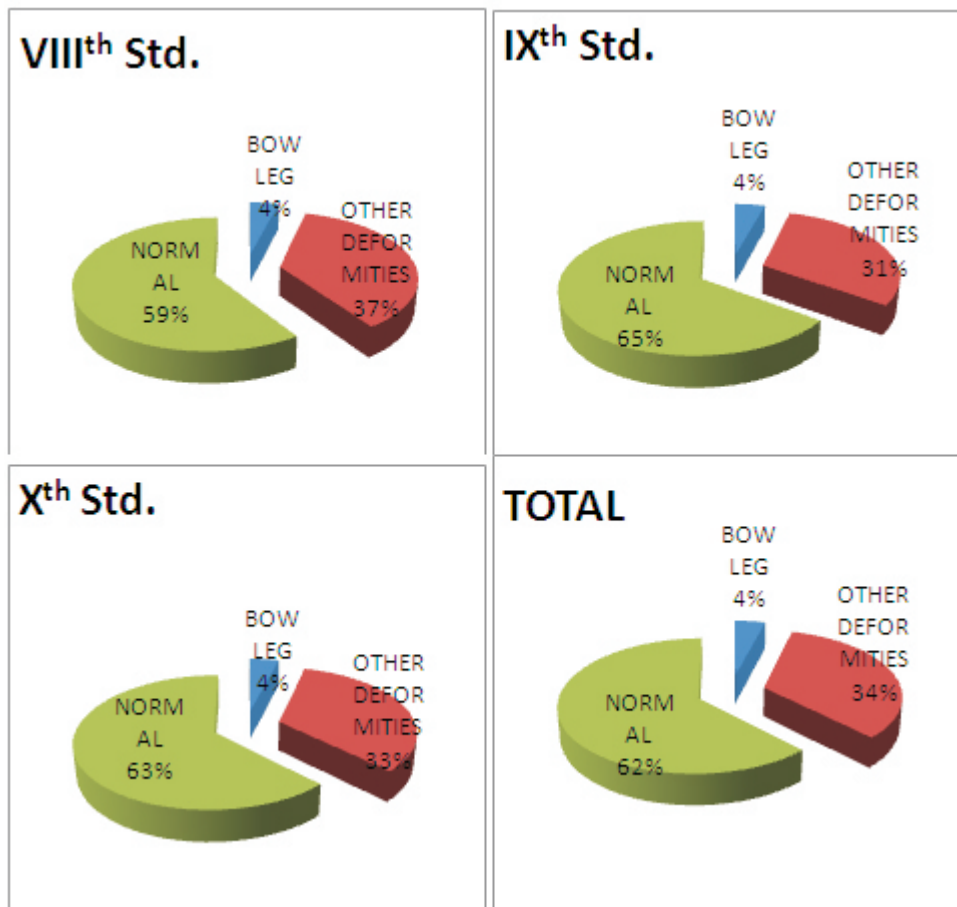


Table 2 related to the Percent analysis done on VIIIth std. boys of selected Private high schools do shows 18 students having bow leg out of a total of 437 students and this is 4.03% of the total students evaluated for Postural Deformities. IXth Std. boys of selected Private high schools of Malapuram city do shows 22 students having bow leg out of a total of 523 students and this is 4.24% of the total students evaluated for Postural Deformities. Xth Std. boys of selected Private high schools of Malapuram city do shows 15 students having bow leg out of a total of 381 students and this is 4.04% of the total students evaluated for Postural Deformities. Total 89 students having bow leg out of a total of 1341 students and this is 4.10% of the total students evaluated for Postural Deformities.

FIGURE 8: THE PERCENTAGE OF STUDENTS HAVING FLAT FOOT OF DIFFERENT STD. AND TOTAL.

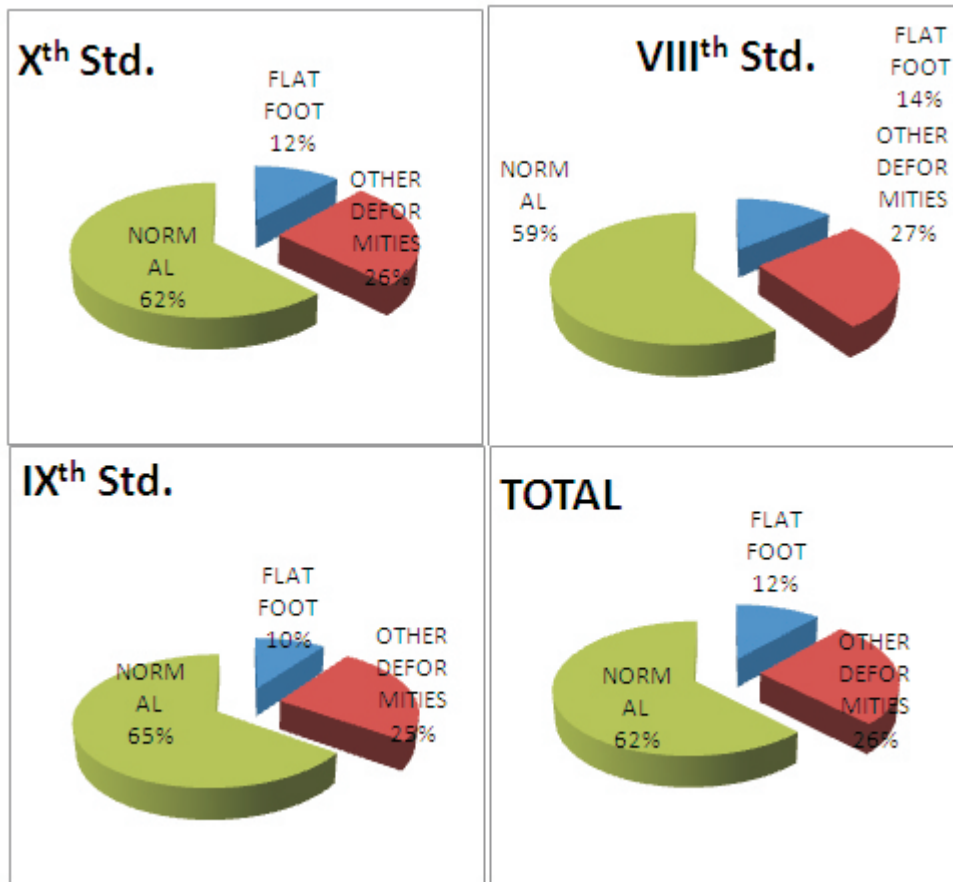


Table 2 related to the Percent analysis done on VIIIth std. boys of selected Private high schools do shows 57 students having flat foot out of a total of 437 students and this is 13.07% of the total students evaluated for Postural Deformities. IXth Std. boys of selected Private high schools of Malapuram city do shows 52 students having flat foot out of a total of 523 students and this is 9.87% of the total students evaluated for Postural Deformities. Xth Std. boys of selected Private high schools of Malapuram city do shows 44 students having flat foot out of a total of 381 students and this is 11.54% of the total students evaluated for Postural Deformities. Total 153 students having flat foot out of a total of 1341 students and this is 11.47% of the total students evaluated for Postural Deformities.

FIGURE 7: THE PERCENTAGE OF STUDENTS HAVING CLAW FOOT OF DIFFERENT STD. AND TOTAL.

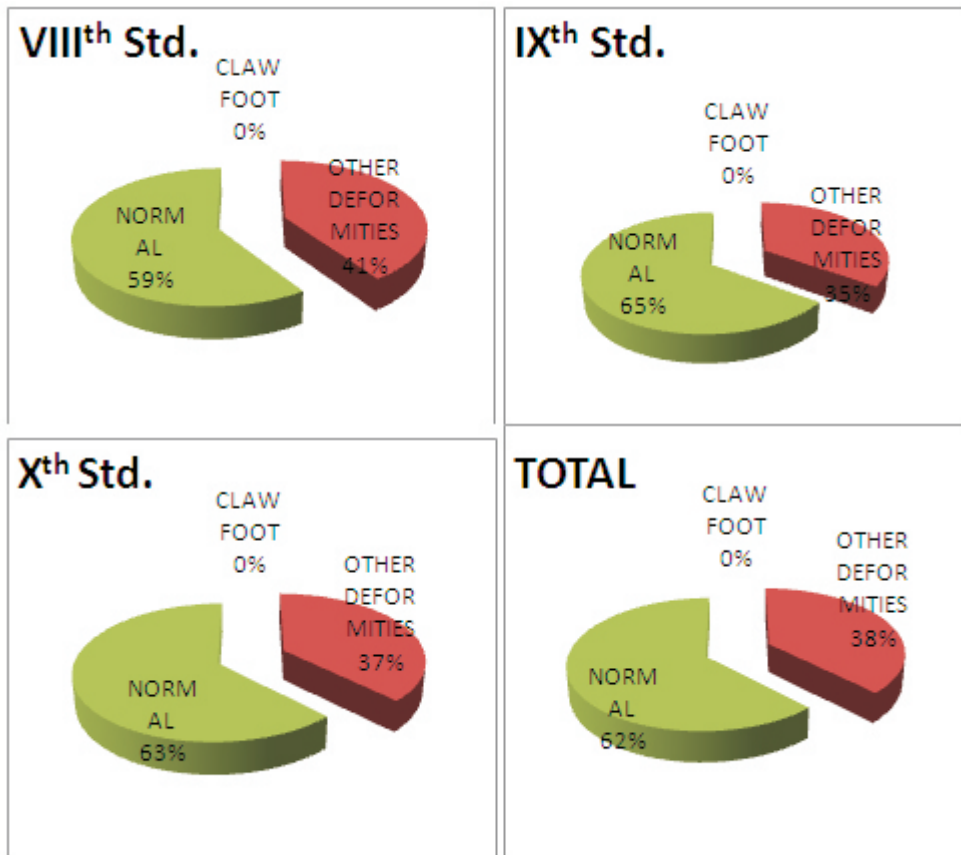


Table 2 related to the Percent analysis done on 8th, 9th and 10th std. boys of selected Private high schools of Malappuram city do shows 0 students having claw foot out of total of 1341 students.

**SUMMARY AND CONCLUSION**

The present study was undertaken to find out the prominent Postural Deformities of VIIIth Std., IXth Std. and Xth Std. boys of selected Private high schools of Malapuram city. For the purpose of the the study, all the VIIIth Std. boys numbering 437 and IXth Std. boys numbering 523 and Xth Std. boys numbering 381 there by making the total to 1341 students of selected 6 Private high schools of Malappuram city were selected as subjects. All the subjects were tested for four Postural Deformities of the Upper body namely Scoliosis, Lordosis, Kyphosis and Round Shoulder. Besides four Postural Deformities of the Lower body such as Knock knees, Bow leg, Claw foot and Flat foot evaluated using the New York Posture Test. No attempts were made to equate day to day life and the exercise pattern followed with regarded to the concern study. Percent analysis were done to find out the percentage of having different Postural Deformities in VIIIth Std., IXth Std. and Xth std. Thereafter the percentage of occurrence of Postural Deformities among the whole population was also calculated.

**Within the limitations is this study, the following conclusions were drawn:-**

1. The highest percentage of Scoliosis was found among VIIIth Std. boys and lowest percentage was found among Xth Std. boys.
2. The highest percentage of Lordosis was found among VIII th Std. boys and lowest percentage was found among Xth Std. boys.

- 3.The highest percentage of kyphosis was found among VIIIth Std. boys and lowest percentage was found among IXth Std. boys.
- 4.The highest percentage of Round shoulder was found among Xth Std. boys and lowest percentage was found among VIII th Std. boys.
- 5.The highest percentage of Knock knee was found among Xth Std. boys and lowest percentage was found among IXth Std. boys.
- 6.The highest percentage of Bow leg was found among IXth Std. boys and lowest percentage was found among VIIIth Std. boys.
- 7.Claw foot was identified in any of the subjects of any standards.
- 8.The highest percentage of Flat foot was found among VIIIth Std. boys and lowest percentage was found among IXth Std. boys.
- 9.The highest percentage of Postural Deformities was found in Flat foot in VIIIth Std., IXth Std., Xth Std and total.
10. The second highest percentage of Postural Deformities was found in Round shoulder in VIIIth Std., IXth Std., Xth Std and total.
- 11.The third highest percentage of Postural Deformities was found in Knock knee in VIIIth Std., IXth Std., Xth Std and total.

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