



Research article

**Prevalence of common musculoskeletal problems seen in special school children's in rural area**

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**ABSTRACT**

This paper outlines the importance of a healthy well-being of brain which is reflected by a good stance and posture. The most prevailing complain among special school children is found to be postural defects. Various special schools of rural areas were taken in consideration, that is total 70 special students were selected, from various special schools. The informed consent was obtained. They were provided with Numerical pain rating scale and Questionnaire. Using inferential statistics and descriptive method statistical analysis was done it proved to be highly significant. Our research showed that maximum number of children of special school had knee pain as compared to other joints, hamstrings pain being most common, with back pain more common than whole body pain. The study concluded that most of special school children have knee pain, hamstrings pain, back pain most commonly with respect to age and gender.

**Keywords:** physically challenged, differently abled, hamstring pain, back pain, joint pain.

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**INTRODUCTION**

A healthy well-being of brain is reflected by a good stance and posture [1]. Among special school children postural defects are very common [2]. Spinal deviations can be easily evaluated or discovered by the means of posture screening during early schooling [3][4]. The study aims to detect the occurrence of posture alterations in musculoskeletal pain in special school students. This present study was aimed to detect the postural changes and that may cause postural abnormalities among school going children's. Functional and specified morphological bag round is shaped depending on the human physical, postural, motor habit, it is manifestation of physical and psychological state of one's healthy living [5]. Advancing changes of our living environment, sedentary lifestyle, limitation of physical activities faced by special school students in day to day life and inadequate nutrition are inseparably associated with the progress of civilization [6]

Wide spread in children's and teens symptoms and cause of faulty posture are very common [7]. Various extrinsic and intrinsic components may affect posture in children such as age, height, sex, weight, socioeconomic level, the physical environment of a child, hereditary factors, emotional and psychological factors [8], improper

postural habit, physiological changes during puberty, the presence of pain, the testing environment and living style [9].

The way person sits, stands or walks exclusively define the posture of him /she, depending on that there are two types a good posture and a bad posture. Repetitive strain, overuse and work related musculoskeletal disorders usually result in musculoskeletal pain. [10]. Very rare studies are being carried out on special school children's especially of rural areas.

**METHODOLOGY**

Various special schools of rural areas were taken in consideration, that is total 70 special students were selected, from special schools. The informed consent was obtained. They were provided with Numerical pain rating scale, Wong Baker scale and Questionnaire. Using inferential statistics and descriptive method statistical analysis was done and software used in the analysis was SPSS 22.0 version and Figure pad prism 7.0 version and  $p < 0.005$  is proved to be highly significant.

Design of study: Cross sectional

Technique of Sampling: Cluster random sampling.

Study setting: In special schools.

Sample size: 70

Study duration: 1 year

Inclusion criteria:

Age: From 10 years to 20 years. Male and female both. Musculoskeletal pain due to faulty posture only. Special schools only.

Exclusion criteria:

Age above 20 years and below 10 years. Other injuries. No other schools

Outcome measure

Numerical Pain Rating scale and Questionnaire were used.

## RESULT

Figure 1: Comparison of joint pain

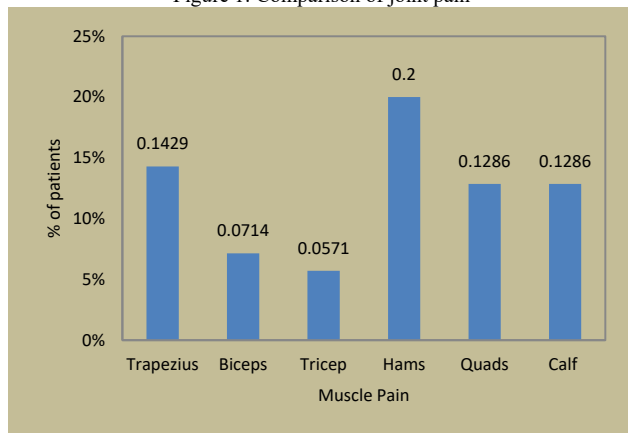


Table 1: Comparison of muscle pain

Muscle Pain	No of patients	Percentage
Trapezius	10	14.29
Biceps	5	7.14
Tricep	4	5.71
Hams	14	20
Quads	9	12.86
Calf	9	12.86

Table 2. Comparison of back pain and whole body pain

	No of patients	Percentage
Back Pain	30	42.86
Whole Body Pain	12	17.14

## DISCUSSION

Our study show that knee joint pain is most common among all the musculoskeletal pain. Musculoskeletal pain affects the posture significantly. Bad posture and lack of exercise may lead to musculoskeletal pain over various joints and muscles. Musculoskeletal complaints including musculoskeletal pain (MSP) were largely neglected till recent times owing to their nonfatal nature. In recent times, studies have shown that rheumatic musculoskeletal symptoms are the most common morbidities among the Indian communities with prevalence ranging from 7.08% to 33.09%. A prevalence study of special school shows that maximum number of children of special school have knee pain as compared to other joints, hamstrings pain being most commonest, with back pain more common than whole body pain. Self-worth of individual plays a very important role in perception

of pain and understanding the relation between disability and pain among adolescents [10].

## CONCLUSION

Our study concluded that most of special school children's have knee pain, hamstrings pain, back pain most commonly with respect to age and gender.

### Strength

Less resource required

### Limitation

1. Since we had conducted the study with the whole body pain, further studies can be conducted on pain at the specific site.

2. Such research can be further conducted on special school children of urban areas.

3. We didn't have equal number of special children of same gender, due to which we couldn't conclude the gender prevalence.

## REFERENCES

- Singh N, Qureshi MI, Damke S, Bele A, Wane M., 2020. "Combined effect of spiral suit and physical therapy in rehabilitation of quadriplegic cerebral palsy patients in rural areas". *J Datta Meghe Inst Med Sci Univ.* 15(4), 626.
- Purushe D, Phansopkar P., 2019. "A Research Protocol- Musculoskeletal screening using pGALS in girls and boys aged between 5 and 12 years". *J Crit Rev.* 6(6), 902-07.
- M L, J B, M F, M R, M F, J JM, 2013. "Risk factors of postural defects in children at school age". *Ann Agric Environ Med.* 20(3).
- Mathew AJ, Chopra A, Thekkemuriyil DV, George E, Goyal V, Nair JB, et al., 2011. "Impact of musculoskeletal pain on physical function and health-related quality of life in a rural community in south India: a WHO-ILAR-COPCORD-BJD India study". *Clin Rheumatol.* 30(11), 1491-7.
- Jackson DL, Haglund BL, 1992. "Tarsal Tunnel Syndrome in Runners". *Sports Med.* 13(2), 146-9.
- Jawade S, Naidu N, Vardharajulu gg, 2020. "Efficacy of strength training program on muscle performance by determining 1 repetition maximum in adults". *Eur J MolClin Med.* 7(2), 1946-54.
- Schneider T, Selvarajah E, 2016. "Tarsal Tunnel Syndrome in Sport". *Achilles Tendon.* 377-82.
- O'Brien C, Byrden R, 2017. "Tarsal Tunnel Syndrome- A New Way to Diagnose an Old Problem". *World J Neurosci.* 07(01), 172.
- Zade R, Deshmukh M, 2019. "A Comparative Study Based On Two Stretching Protocol for Piriformis Tightness: A Research Protocol". *J Crit Rev.* 6(6), 911-4.
- Naqvi W, Sahu A, Goyal C, 2020. "The Art and the Science of Manuscript Publication: Tips and Tricks for Health Science Students and Professionals". *Indian J Forensic Med Toxicol.* 14(4), 4331-4339.

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