

Cystic Fibrosis patients in India are unknown compared to Moldova due to the lack of studies conducted in the Indian population and also non availability of screening or investigation methods. More than 1000 mutations have been identified in CFTR gene in different ways. $\Delta F508$, which means deletion of phenylalanine at the 508 position, is the most common mutation found. The most frequent mutations of the CFTR gene in Moldavian populations are $\Delta F508$, G542X & W1282X, and in India $\Delta F508$, -219insG & S169G.

Better understanding and screening of the population have increased the life expectancy of the cystic fibrosis patients. New screening methods need to be implemented into the health care systems as well as holding seminars for the health care professionals to improve the diagnosis and patient support. Early diagnosis will improve the life of patient and reduce mortality.

Key words: Cystic Fibrosis, CFTR, Genetic component, prevalence, $\Delta F508$.

295. FACTORS INVOLVED IN MUSCULOSKELETAL PAIN IN ELEMENTARY SCHOOL STUDENTS

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Background: Musculoskeletal pain in elementary school students is a current issue. Known risk factors include: family history of back pain, time spent watching tv or sitting at the computer, gender – female, practicing high intensity performance sports, history of back injury, altered general state of health.

Objectives: This study aims to identify a correlation between the onset of back pain and individual risk factors, including family history, time spent in certain activities (prolonged sitting in front of the tv or computer), physical stresses during sports, and backpack weight.

Materials and methods: The study was done on a sample of 225 students of grades 1 to 4, aged between 7 and 11 years old. The data was gathered through a 32-item questionnaire, in the city of Targu Mures over the period of a week, with the teachers and parents consent.

Results: 65,3% of the students had relatives that were suffering from back pain, 3,1% have had their back injured at some point, 56% spend between 1 and 2 hours in front of the tv/computer, 60% practiced some form of performance sport and for 30,6% of the students the length of the training session was about 1 hour. Most frequently, pain was localized in the back (16,8%) and shoulder (11,11%). For 85% of the students the weight of their backpack exceeded the limits stated in the current legislation. A relationship between musculoskeletal pain and risk factors -time spent in front of the tv/computer, practicing advanced sports-, was found.

Conclusions: A statistically significant relationship was found between musculoskeletal pain and the time spent in front of the tv/computer (for more than 2 hours a day), training in performance sports for more than one hour a day.

Keywords: Musculoskeletal pain, backpack weight, students.