

# **Physical therapy treatment once a month versus once a week for posture improvement in children and adolescents**

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**Clinical Trials NCT03046472**

**Background:** Life time prevalence of Low Back Pain among Children and Adolescent ranges from 32% to 66%. This prevalence gets higher with age and among 17 years old it's equal to prevalence among adults. Previous episode of Low Back pain is a predicting risk factor to the next one, hence we should do preventative care at a young age, even before the first attack occur. Poor posture was found as one of the risk factors for Low Back Pain in children. Adolescence with neutral posture had less prevalence of Low Back Pain than those with poor posture. Prolong slouch sitting was associated with Low Back Pain. Prevention education programs, focusing on knowledge, did not show effective change in posture behavior. Hence, the researchers concluded that it's better if they focus on exercise

**Research objective:** comparison between physical therapy treatment for good posture once a week versus once a month, on postural behavior, thorax curve angle and Low Back Pain

**Research design:** randomize, Interventional, blinded

(Late note: this trial ended to be non-randomized due to unwillingness of participants in once a week program, therefore once in a week program was offered to everyone and only 17 out of 50 chose it).

**Population:** the study will include 50 children and adolescents age 10-18 years suffering from poor back posture, with or without Low Back Pain

**Procedure:** The study will consist of two groups: both groups will get personal meeting once a month and a program of exercising at home every day. Treatment group will have in addition group meeting once a week and control group not. The intervention program will include physical awareness and practice for good posture, and exercises for flexibility, strength and muscle endurance.

<b>Study Phase</b>	<b>Executed by</b>
<b>First meeting</b>	
Providing explanation and get signatures from participants and their parents on consent forms	Neta Vitman PBT MPE student
Participant and parents answering questionnaires Inclinometer test Postural observation	Yael Gilo BPT blinded to group allocation
Comprehensive physical therapy Checkup Treatment including tailored exercise plan and instructions for postural awareness	Neta Vitman PBT MPE student
Allocation for study groups	Neta Vitman PBT MPE student
<b>Second meeting after 4 weeks</b>	
Treatment including adjusting tailored exercise plan and instructions for postural awareness	Neta Vitman PBT MPE student
<b>Third meeting after 8 weeks</b>	
Treatment including tailored adjusting exercise plan and instructions for postural awareness	Neta Vitman PBT MPE student
<b>Fourth meeting after 12 weeks</b>	
Participant and parents answering questionnaires Inclinometer test Postural observation	Yael Gilo BPT blinded to group allocation
Last treatment of trial including tailored adjusting exercise plan and instructions for postural awareness. ( if goals have not been achieved yet, Treatment will go on in the clinic after trial is finished)	Neta Vitman PBT MPE student

**Measurement tools:**

Digital Inclinometer for measuring thorax curve angle.

Postural observation for measuring postural habits.

Back pain and postural habits questionnaire for measuring LBP on VAS SCALE, postural knowledge and habits of participant, including demographic data.

**Research hypothesis:** postural behavior, thorax curve angle and Low Back Pain will get better in both groups but more in the treatment group.