

# EFFECTIVENESS OF MULTIDISCIPLINARY CARE ON REDUCING KINESIOPHOBIA IN PEDIATRIC CHRONIC PAIN POPULATIONS

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PEDIATRIC CHRONIC PAIN CLINIC AT SAFRA CHILDREN'S HOSPITAL, SHEBA MEDICAL CENTER, ISRAEL.

### INTRODUCTION

Chronic pain is an escalating concern among children and adolescents, posing substantial physical and psychological challenges and a major burden on families, caregivers and healthcare systems. Those afflicted often struggle with diminished participation in activities, resulting in feelings of isolation, depression, and anxiety, with potential long-term implications for their physical and psychological development. Consequently, chronic pain can induce Kinesiophobia—the fear of movement and avoidance of everyday activities—primarily due to apprehension of exacerbating pain or causing further harm. Consequently, these young individuals often adopt increasingly sedentary lifestyles, precipitating additional physical and mental health issues. Hence, comprehending the underlying sources of this fear is vital to facilitate the participation of youth with chronic pain in daily activities, devoid of fear or avoidance.

## OBJECTIVE



This study aims to evaluate the impact of multidisciplinary pain rehabilitation program on kinesiophobia in children and adolescents suffering from chronic pain.

#### METHODS

## STUDY DESIGN

This study employs a prospective observational design, where participants are not randomly assigned to groups, but rather their progress is observed following a predefined multidisciplinary treatment program

#### PARTICIPANTS

The study includes 30 children and adolescents with varying types of chronic pain, such as headaches, knee pain, and generalized pain, who were recruited from the Pediatric Chronic Pain clinic at Safra Children's Hospital, Sheba Medical Center, Israel

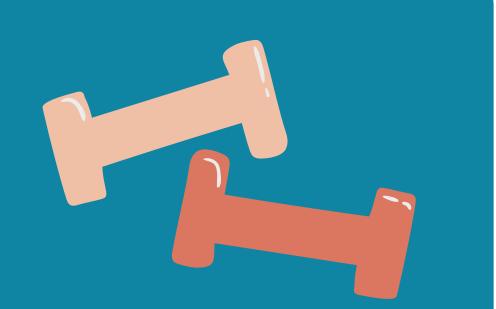
#### INTERVENTION

The core of the intervention is a 12-week multidisciplinary treatment program conducted through weekly day-hospital meetings.

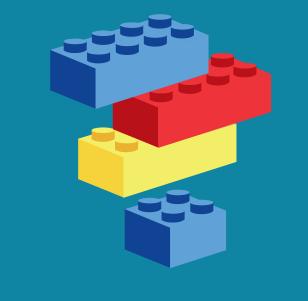
The treatment program integrates three key components: physiotherapy, occupational therapy, and psychology. Additionally, participants are monitored by a medical doctor.

### PHYSIOTHERAPY

The physiotherapy component involves physical assessments, the use of the TAMPA scale for kinesiophobia measurement, setting functional goals, aerobic warm-ups, and strength training exercises. The TAMPA scale is evaluated both at the beginning and end of the treatment to assess changes in kinesiophobia.



#### OCCUPATIONAL THERAPY



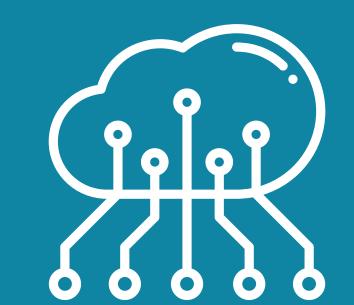
Occupational therapy is focused on addressing functional difficulties in daily life activities, including self-care, school functioning, leisure activities, and social participation. It includes references to ergonomics, energy management, environmental adjustments, and coping strategies. Elements of cognitive-behavioral therapy (CBT) are also incorporated to address thought patterns affecting functioning and pain management.

# PSYCHOLOGY

Psychological treatment includes parent training sessions and individualized sessions with the child, and occasionally dyadic sessions. Psychoeducation, characterizing the patient's difficulties, and adapting behavioral, cognitive, and relaxation techniques are key components of psychological intervention. The treatment aims to amplify the patient's sense of ability and develop techniques for maintaining progress after treatment ends.



## DATA COLLECTION



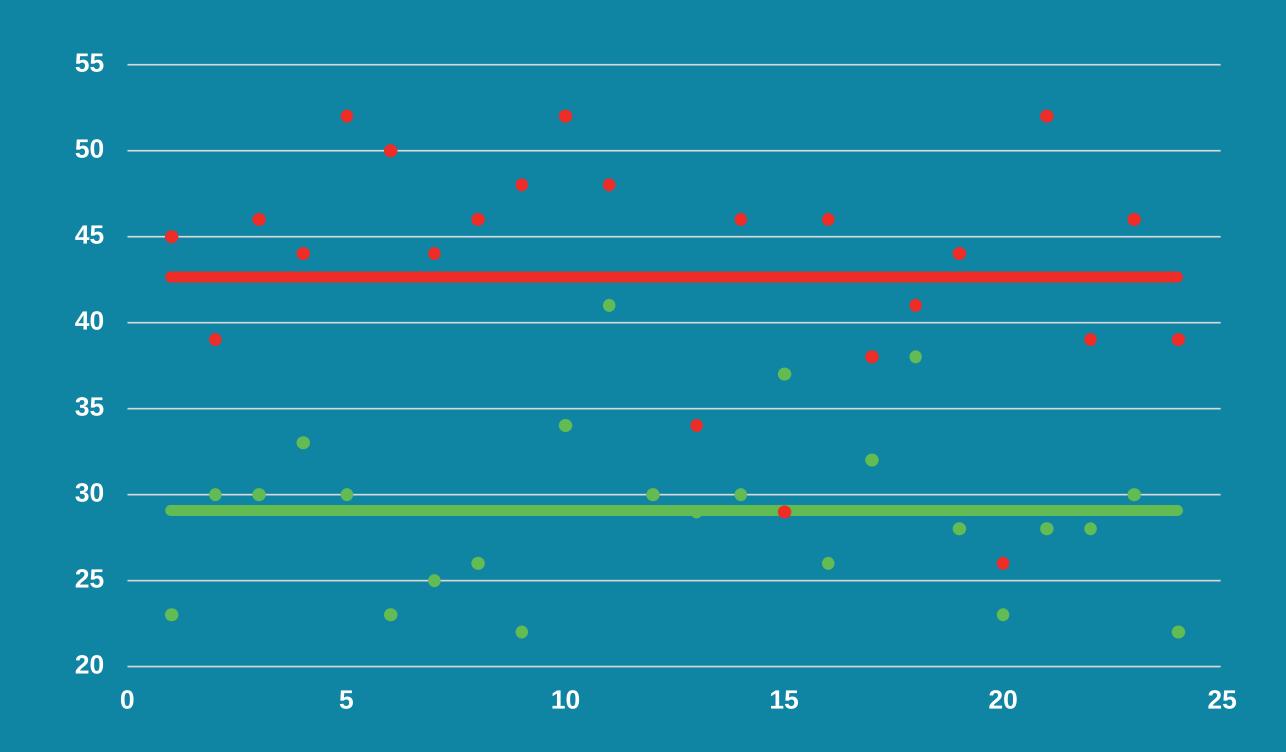
Data are collected through the administration of the Tampa Scale of Kinesiophobia (TSK) at the start and end of the 12-week program. The TSK is a self-reported questionnaire used to quantify fear of movement.

# RESULTS

Out of 30 patients participating in this study, 24 participants completed the program, four achieved their goals early and were released, and two dropped out. The average initial and final TSK scores are presented to show the change in kinesiophobia levels.

The average initial Tampa score was 42.66 (ranging from 26 to 52), indicating the clear presence of kinesiophobia.

## TAMPA SCORES



# CONCLUSIONS

The study concludes that the multidisciplinary treatment program appears to be effective in reducing kinesiophobia in children and adolescents with chronic pain.