

## **ABSTRACT**

### **Contribution of the equine therapeutic procedure in the postural control in children with Down syndrome in Asopormen Institute**

JULIAN ALBERTO GOMEZ ALVAREZ - CARLOS ALBERTO GOMEZ GOMEZ - JENNY JULIANA GUARIN FLOREZ  
Investigación realizada por estudiantes de la especialización en Neurorehabilitación de la  
Escuela Colombiana de Neurorehabilitación.

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#### **SUMMARY**

The study "Contribution of the equine therapeutic procedure in the postural control in children with Down Syndrome" carried out within the Rehabilitation Colombian School, wanted to determine the effect of the equine therapeutic intervention in improving postural control within this population. As variables were studied postural control and the equine therapeutic intervention.

The study was quantitative and descriptive methodology. Information sources were considered the medical records and observation with clearly defined and measurable indicators such as diseases and muscular fitness. The first determined the initial state of patients, and observation, the progress and the final state of the indicators. As a result there was a substantial improvement in rates of disease and muscular fitness of the studied group, compared before and after of the equine therapeutic intervention.

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#### **OBJECTIVE:**

To determine the effect of the equine therapeutic intervention in the improvement of the postural control in children with Down syndrome between 3 to 8 years old in the Asopormen educative center in Bucaramanga city.

## METHOD:

The variables that were observed in individuals of the studied group were measured independently in each one of them, allowing with the analysis of the results to describe the effect of the equine therapeutic intervention in postural control of patients treated. However it is considered that while containing some elements of correlational studies, equine therapeutic intervention variable as well as the relationship between therapy and postural condition were not quantified, thus determining the scope of research as descriptive.

## BACKGROUND:

Children with Down syndrome are motor disability caused by a malfunction of the nervous system, muscle and bone. This alteration limits to varying degrees the activities that the patient can make according with their disability. There are many benefits that regular participation in psychomotor activities provides to children and adolescents with Down syndrome; traditional therapies do not always produce the expected results because they require the patient to remain long periods of time in medical centers, sometimes causing negative reactions for their well-being and health.

## RESULTS:

37% are children of 5 years old (3), 24% are 8 years old(2) and a 13% for the ages of 4, 6 and 7 years old respectively; the majority group was male (62%) (5) and the female group was the 38% (3); the prevalence indices in the motor deficiencies before and after the intervention decreased in the winged scapulas, depressed chest, pectoral's retraction, muscular weakness in upper trunk, ciphosis, dorsal scoliosis and hiperlordosis; in the muscular groups in scapula, shoulder and trunk increased the muscular strength so the equine therapeutic intervention was considered as positive.

## CONCLUSIONS:

According to the analysis of clinical records (stance form & muscular strength) before the treatment, children with Down Syndrome in this study presented some stance alteration and muscular weakness in the upper trunk non including the hypotonus; after the Equine therapeutic treatment some of the children improved significantly their postural alteration as well as like the muscular strength of upper trunk, we could conclude that if we improved the muscular strength in upper trunk could improve the suitable postural alignment in these children with Down Syndrome and thus the equine therapeutic intervention would become positive for them.

## RECOMMENDATIONS:

Considering the population in study from four years old, the parents should be concerned about the current stances alterations and to find a way of therapeutic intervention.

## BIBLIOGRAPHY:

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