# PHYSIOTHERAPY AS AN ESSENTIAL TOOL IN THE KANGAROO MOTHER CARE PROGRAM. EXPERIENCE AT THE HOSPITAL ROSARIO PUMAREJO DE LOPEZ (HPRL), VALLEDUPAR, CESAR, COLOMBIA

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The Kangaroo Mother Care Program has two years since implemented within the HRPL, This program opens the door to the actions of the physiotherapist who for the moment only is participating in action. Thus attention from neuromotor assessment of premature and / or low birth weight and intervention through different techniques to acquire movement patterns, stress reduction, pain, facilitating begins suction feeding of the womb, weight gain, among others. These have allowed as a great example of impact decreasing hospital stay from the start of physiotherapy care, weight gain, changes in stages towards effective suction, and facilitation approach the mother and / or caregiver to learning stimulation of children from inpatient and outpatient follow-up, bringing the percentage decrease in motor delay. The role of the physiotherapist within the hospital institution has transcended from the respiratory management to a comprehensive management of the child, allowing effective coordination within the interdisciplinary team of the PMC and showing results in supporting the work done by the related equipment within actions physiotherapist with this population in addition to care have been taken into account communication strategies and information to pervade the culture around quality of life and health. Therefore the development of investigative process is necessary to enable the production of evidence in this profession and so its effective liaison within the hospital phase of premature and / or low birthweight in the PMC is necessary.

## OBJECTIVES

The objectives of this research were evaluate the effect of the physiotherapy in children premature and of low weight to the birth within the program mother Kangaroo, through the characterization of the population from the component socio-demographic and physiotherapist, intervene it through strategies physiotherapy and finally determine how helped the physiotherapy within the program mother Kangaroo to them children of low weight to the birth and premature.

#### METHOD

This research is correlational, design quasi experimental, longitudinal because data collection was carried out in two different measurements (Hernández et al. 1991). The participant population consisted of sixty preterm infants (younger than 37. sem) and/or low birth weight infants in the Kangaroo mother program of the hospital Rosario Pumarejo de Lopez, which were assessed at birth and six months of corrected age, the assessment instruments used were battery of neurological of Prince INFANIB, motor of the infante AIMS scale evaluation , and variables such as weight at birth and at six months, gestational age, gender, vulnerable populations, diagnosis, mechanical ventilation.

# RESULTS

the results obtained to characterize the population show that there is the same percentage of children and girls within the investigation, these were attended six belonging to the ethnic group indigenous Arhuaco children, the highest percentage of children were born by c-section scheduled thirty-two weeks gestational age is the greatest number of children, the diagnosis of distress syndrome respiratory was the of mayar prevalence as well as the use of mechanical ventilation for treatment.

Table 1. Frequency distribution and proportion of socio-demographic variables and General characteristics of the children served.

GENDER	Frecuency	Porcentage TIPOTYPE OF		Frecuency	Porcentage	
			PREGNANCY			
Female	30	50	Único	55	91,7	
Male	30	50	Múltiple	5	8,3	
VULLNERABLE POPULATION			TYPE OF CHILDE	BIRTH		
No	54	90	Vaginal	15	25	
Etnia Arhuaca	6	10,0	Cesárea	45	75	
GERSTATIONAL A	GE		HOSPITAL STAY	,	1	
24,0	2	3,3	2	1	1,67	
26,5	1	1,7	3	1	1,67	
27,0	1	1,7	4	1	1,67	
27,4	1	1,7	5	3	5,00	
28,5	1	1,7	6	2	3,33	
29,0	3	5,0	7	3	5,00	
30,0	6	10,0	8	4	6,67	
31,0	3	5,0	8,2	1	1,67	
31,1	1	1,7	10	12	20,00	
31,2	1	1,7	11	3	5,00	
31,4	1	1,7	12	1	1,67	
32,0	7	11,7	14	2	3,33	
32,5	1	1,7	15	5	8,33	
33,0	4	6,7	16	1	1,67	
33,3	1	1,7	17	1	1,67	
34,0	4	6,7	18	2	3,33	
35,0	6	10,0	19	1	1,67	
36,0	8	13,3	20	2	3,33	
36,1	1	1,7	21	1	1,67	
37,0	3	5,0	22	2	3,33	
37,1	1	1,7	25	1	1,67	
38,0	2	3,3	28	1	1,67	
38,4	1	1,7	29	1	1,67	

MECHANIC VENTLATION			34	1	1,67
Si	32	53,3	39	1	1,67
No	28	46,7	41	1	1,67
DIAGNOSTIC			44	1	1,67
SDR	54	90	45	1	1,67
Nutritional	3	5	82	1	1,67
recovery	5				
Gastroschisis	1	1,667	Total	60	100
Encephalopathy	1	1,667			
Anemia of	1	1,667			
prematurity	Ŧ				
Total	60	100			

Source. Own elaboration.

Physiotherapeutic treatment by means of exercises constituted the central point of the therapeutic plan and its objective was to reset the motor function of the nervous system, generating postural patterns, tone and movement which evolved more and more, also reaching the sequences of the normal motor development from prone to standing and walking. The interventions physiotherapy is raised with the objective of, improve the State of the child premature or of low weight to the birth helping to the maturation of their systems, stimulation sensory, stimulation gold facial, postures of drainage, changes postural and massage; among the more prominent.

Due to its characteristics, the premature have difficulty processing environmental stimuli and as well as difficulties for the internal organization, these are evident in color changes of the skin, increased respiratory effort, problems of regulation of body temperature and the inability to maintain a State of alert calm. These signs affect the ability of the child to interact with parents and with the environment, dedicating their effort only to self-regulation. The intervention initially is oriented to the child, to the parents and to the relationship between both as aspect important for achieve changes favorable in the development of the less. Parents should support to the newborn by modulating their environment and controlling stimuli to help keep stable in the Organization of their conduct. It is important to note that these aspects are fundamental physiotherapy interventions directed to premature infants or low weight at birth from an edge preventive and assistance. The main objectives for the management of children were: promoting the development of normal movements, reduce abnormal movement patterns, promote interaction between parents and children, modify the sensory stimulation in the environment of the intensive care unit to promote the Organization of behavior and physiological stability.

The areas of surgery were positioning, or postural care, therapy oro-motora, regulation of tone and stimulation neuro sensory, respiratory function, the newborn support network. Is also noted that hospital stay of children decreased in relation to the intervention of the function performed orofacial which helps promote the pattern of suction, postural control are intervened in this head and neck, occlusion, tone and muscle strength, sensitivity, reflexes bite suction and chewing, ventilatory function and nutrition, biomechanics of suction, swallowing : compression and extraction finally is made the analysis of them variable measures to the initial it intervention physiotherapy and to the end, taking in has that the duration of such intervention was of six months,

is found as or result to the perform the analysis of test t of student that the half of them differences for the weight was of 6.15 kilograms in the weight end (six months of age corrected) for the percentiles or percentages of motor development is 2.36 in favour of the last assessment, in the case of the INFANIB and abnormality category tends towards the initial with an average of 0.5, and 1.5 respectively. A confidence interval at 95% to the difference in average showed a range between 6.28 kg., for initial weight and 6,0 Kg, to the end, range for percentiles of initial development was 0.7% and 4.0% for the final. This is compatible with that has differences significant between each variable evaluated with a level of significance of the 0.00%.

Table 2. T-test for related samples

		Related differences							
			Desviación	Error típ. de la	95% Confidence interval for the difference				Sig.
		Media	típ.	media	Upper	Lower	t	gl	(bilateral)
Par 1	PESO_I - PESO_F	- 6.150,76667	537,20669	69,35309	۔ 6.289,54187	-6.011,99146	- 88,688	59	0,000
Par 2	PERCCENTILES_I - PERCENTILES_F	-2,36667	6,37252	0,82269	-4,01286	-0,72047	-2,877	59	0,006
Par 3	INFANIB_I - INFANIB_F	0,55000	0,74618	0,09633	0,35724	0,74276	5,709	59	0,000
Par 4	CATEGOR_ANOR_I - CATEGORI_ANO_F	1,51667	1,89103	0,24413	1,02816	2,00517	6,213	59	0,000

Source. Own elaboration.

The problems in the area of public health within the Department of Cesar raised scenarios in which the profession of physical therapy has failed to carry out sufficient presence, as well as contributions within the actions, plans or programmes, which could intervene priority issues such as mortality and morbidity, which may be associated with environmental factors , style of life, factors of risk occupational, etc. Within these problematic them birth preterm and of low weight to the birth are of great impact in these indicators. Physiotherapy within their established roles to this document establish a dimension of actions necessary for deepening and analysis, achieving joint needed to link to the dynamic, not only departmental, national and international. Within them actions of the physiotherapist with such population besides them care is must have in has them strategies of communication and information that allow permeate the culture on the quality of life and health. This role proposed reinforcing areas such as training in education in health, human and social.

## CONCLUSIONS

Generally concludes that benefits and actions of physical therapy in preterm infants or low weight birth within the program mother Kangaroo are to monitor the behavior of low weight at birth in order to establish its tendency as event tracer of nutritional status and health of the live births, which can help reduce the burden of this condition in children's health establish the determinants and risk factors associated to orient interventions based on the current regulations in benefit of the prevention and control of low weight at birth and as line basis, the maintenance of a stable breathing, facilitating the emergence of systematized movement patterns and acquire the postural alignment, facilitating interaction fibreoptic and vice versa, prevention of musculoskeletal deformities , stimulation of skills oromotoras, manage information sensory, collection and contribution of information to them members of the team medical and personal of nursing, participation in the Group interdisciplinary in the attention integral of the child as well as in them decisions of output, intervention and management of the child, care of the child during its stay in the PMCI and PMCA, guide, orientation and training of them parents or network of support in the stimulation and development of the child , prevention through stimulation of difficulty in learning processes, early detection of alterations caused by prematurity and/or low weight at birth and therefore act promptly to provide better living conditions through the development of attachment, the affective link and proper nutrition through a strict outpatient follow-up, that ensures a comprehensive biopsychosocial development , consolidation of the adaptation Kangaroo ambulatory management, detection time of any existing deterioration, monitoring the development neuropsicomotor.

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