XII INTERNATIONAL CONFERENCE ON KMC
Workshop and Congress
November 14-17,2018 / Bogotá,Colombia

Fondation kangourou Cameroun

WHAT ARE THE DETERMINING FACTORS OF THE PREMATURE BABY'S ABILITIES DEVELOPMENT ? : A correlational study of preterm KMC developmental characteristics in Cameroon.

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INTRODUCTION

Premature birth is known as a situation that can threaten the further development of the new born. This piece of work raises in a preventive perspective the need for identifying the factors that govern the development of the premature baby's abilities. The final goal of the study is to suggest preventive actions that could protect and promote a more secure abilities development in preterm babies.

METHOD

We performed 265 assessments of premature KMC babies between 24 and 37 weeks of gestational age using the Griffiths Mental Development Scales (GMDS). These babies were between 5 and 20 months of corrected age at the time of the assessment. On the other hand, we considered antenatal, perinatal and postnatal informations related to the babies parameters and the care received by them. These informations were cross-tabulated with the developmental test results of the babies.

RESULTS

We will present here only some of the results obtained.

A first striking result is that there is no significant correlation (Pearson correlation) between the gestational age and the general Developmental Quotient (DQ) of KMC infants (r=0,058; p=0,346) and no significant correlation between the gestational age and the DQ of each of the dimensions assessed by the GMDS. Another striking result is that the weight of the baby at 40 weeks is significantly correlated with the general DQ and with the DQ of each of the dimensions assessed by the GMDS:

Variables cross-tabulated	Pearson Correlation	Signification level
Weight at 40W and general DQ	r=0,266	p<0,001
Weight at 40W and motor skills DQ	r=0,268	p<0,001
Weight at 40W and sociability/autonomy DQ	r=0,212	p<0,001
Weight at 40W and hearing/language DQ	r=0,261	p<0,001
Weight at 40W and oculomotor coordination DQ	r=0,233	p<0,001
Weight at 40W and execution DQ	r=0,251	p<0,001

CONCLUSION

We have noticed that the GMDS is a reliable tool for reporting child development. About the results, we can say that contrary to many studies that claim a link between the degree of prematurity and a risk of disruption in baby's development, our results suggest that the degree of prematurity has no influence on the premature baby's abilities development providing the child is under KMC. Our results also highlight the fact that the period before 40 weeks is a critical moment for the further development of premature babies, specially regarding the weight gain: the higher the weight gain at 40 weeks, the better would be the abilities development. The compliance to the KMC has shown its efficiency in this regard. Therefore we can conclude that KMC can act as a preventive factor in the process of promoting the development of preterm baby's abilities. Could this result show a bigger consistency with a much larger sample?

SUMMARY BIBLIOGRAPHY

Aarnoudse-Moens C.S., Weisglas-Kuperus N., Van Goudoever J.B. et al. (2009). *Meta-analysis of neurobehavioral outcomes in very preterm and/or very low birth weight children*, in Pediatrics. Volume 124(2), 717-728.

Griffiths R. (1984). *The Abilities of Young Children*. Amersham: Association for Research in Infant and Child Development.

Lejeune, F. & Gentaz, E. (2015). *L'enfant prématuré: le développement neurocognitif et affectif*. Paris: Odile Jacob.