

ABSTRACT

Title: Comparing the motor development of the infants living in the institution and a family care

Aim: The aim is to get and elaborate as much information from the Czech and foreign literature regarding the problem of motor development of the infants as possible, to observe and describe motor development of the infants and to compare development of the infants living in the institution with the development of the infants living in a family care using the anthropometric parameters [weight, length and body mass index (BMI)].

Methods: quantitative research, data collection

- comparison of physical and height of infants during the first trimenon based on data from the institution and from the pediatrician
- information and data are taken from accessible Czech and foreign publications specialized in motor development of the infants

Character of the file:

30 infants (15 girls and 15 boys) living in the institution in Kolín

30 infants (15 girls and 15 boys) living in the family care

Hypothesis:

Hypothesis number 1:

I assume that on the base of anthropometric parameters the development of the infants living in the institution might be retarded in contrary to infants living in the family care.

Results:

Anthropometric parameters of the infants living in the family care respond to the average quotas. The parameters of the infants living in the institutions are below the average quotas. Comparing the anthropometric parameters of the infants during the first trimenon, the negative impact of the long term care in the institution can be considered as possible. To elaborate statistic data I used Microsoft Office Excel and Statistica 7 CZ application.

Birth weight, length and BMI were significantly decreased in the girls living in the institution compared to the girls living in the family care (2765g \pm 375g, 48.7cm \pm 1.5cm, 11.9kg/m² \pm 1kg/m² vs. 3522g \pm 474g for birth weight, P = 0.000043, 50.3cm \pm 2.1cm for length, P = 0.02958, 13.8kg/m² \pm 1.1kg/m² for BMI, P = 0.000071, respectively). Weight, length and BMI in the 3 month were significantly decreased in the girls living in the institution compared to the girls living in the family care (5628g \pm 565g, 58.9cm \pm 2.3cm, 15.2kg/m² \pm 0.9kg/m² vs. 6074g \pm 599g for weight, P = 0.045143, 61.3cm \pm 2.3cm for length, P = 0.02958, 16.3kg/m² \pm 1.2kg/m² for BMI, P = 0.014214, respectively). Birth weight, length and BMI were significantly decreased in the boys living in the institution compared to the boys living in the family care (2955g \pm 327g, 48.9cm \pm 1.5cm, 12.2kg/m² \pm 0.8kg/m² vs. 3446g \pm 365g for birth weight, P = 0.000588, 50.5cm \pm 1.5cm for length, P = 0.010123, 13.9kg/m² \pm 1.2kg/m² for BMI, P = 0.033759, respectively). Weight, length and BMI in the 3 month were significantly decreased in the boys living in the institution compared to the boys living in the family care (5859g \pm 477g, 59.9cm \pm 1.5cm, 15.5kg/m² \pm 0.9kg/m² vs. 6412g \pm 845g for weight, P = 0.035613, 62.5cm \pm 2.2cm for length, P = 0.001070, 16.6kg/m² \pm 1.5kg/m² for BMI, P = 0.000225, respectively).

Key Words: family, institution care, infant, motor development, first trimenon, anthropometric parameters, weight, length, BMI