# HUBUNGAN ANTARA LINGKAR KEPALA, STATUS GIZI DAN ASUPAN ZAT BESI (Fe) DENGAN PERKEMBANGAN MOTORIK ANAK USIA 6-24 BULAN

### Artikel Penelitian

Disusun sebagai salah satu syarat untuk menyelesaikan studi pada Program Studi Ilmu Gizi, Fakultas Kedokteran Universitas Diponegoro



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## THE ASSOCIATIONS BETWEEN HEAD CIRCUMFERENCE, NUTRITIONAL STATUS, AND IRON INTAKE WITH CHILDREN'S MOTOR DEVELOPMENT AGED 6-24 MONTHS Aulia Rohmanita Gesang\*, Diana Nur Afifah\*\*

#### ABSTRACT

**Background:** Motor development is a development to control body movement through coordinated activities among central nervous system, nervous, and muscles. The motor development is effected by some factors such as head circumference, nutritional status, and iron intake (Fe). Child development need to find the attention because there is critical time which is need to get beneficial stimulate to improve the potential. The critical life time potential is the first of two years life period.

**Objective:** The purpose of this research was to examine the associations between head circumference, nutritional status and Iron intake (Fe) with Children's motor development aged 6-24 months.

**Metodh:** The research design is *cross sectional* with the sample of 64 children that taken by *purposive sampling*. Head circumference data and nutritional status gathered by anthropometric measuring. The data Iron intake is gathered by interview using questioner on *food frequency semi quantitative*. Children's motor development is measured by using the health ministry Development Pre Screening Questioner. Nutritional status is presented in the index of HAZ, WAZ, and WHZ based on WHO-NCHS. Those data was analized with the test of *rank Spearman*.

**Result:** The lowest score of children's motor development is 6 and the highest is 10. 46 children (71,9%) had normal motor development, 17 children (26,6%) had recontrolled, and 1 child (1,6%) had reconciled. Head circumference and nutritional status (HAZ,WAZ,WHZ) had no associations with children's motor development (p>0,05). Iron intake had association with children's motor development (r=0,470;p=0,000).

**Conclusion:** Iron intake (Fe) had association with the children's motor development aged 6-24 months.

Keywords: Head circumference, nutritional status, iron intake (Fe), motor development.

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