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**OVERVIEW OF QUANTITATIVE
ELECTROENCEPHALOGRAM**

CASS

**(QEEG) IN ELEMENTARY SCHOOL AGE IN NORMAL
CHILDREN VERSUS CHILDREN WITH SPECIAL NEEDS IN MAGELANG**

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Abstract: The Unit of the mental health of children and adolescents as the flagship product from Prof Dr Soerojo Psychiatric Hospital needs to improve the quality of service in the assessment and management for children with special needs. It takes a diagnostic tool that can provide information to all the clinical teams from various professions. A Quantitative- Electroencephalography (QEEG) can accurately identify parts of the brain that are experiencing anomaly and could guide the handling or intervention. QEEG guided intervention can significantly increase the success of stewardship rather than just a diagnosis of behavior. This research was a case-control study that aims to learn the description of the QEEG from elementary school age in children who did not have special needs and children with special needs in Magelang city. Place and time of research: This research was conducted in the Unit of children and Adolescents mental health (IKESWAR), an elementary school in the city of Magelang in April to August 2019. The results of this study showed the difference statistically between delta waves in the frontal region, Alphawaves (in frontal, temporal, parietal, auricular, and occipital region) and high beta (in the frontoparietal region) between children with special needs and normal children, The average peak frequency in children with special needs was lower than normal children. This study can be concluded that there is a differences overview of Quantitative electroencephalogram (QEEG) in normal children and special needs. Children with special needs have delta, alpha, and lower height waves in certain areas compared to normal children.

Keywords: Children with special needs, Quantitative electroencephalogram (QEEG)

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