CLINICAL PROFILE OF PEDIATRIC PATIENTS WITH NEURAL TUBE DEFECTS IN A TERTIARY HOSPITAL IN DAVAO CITY FROM JANUARY 2014 – JANUARY 2019: A FIVE-YEAR RETROSPECTIVE STUDY

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ABSTRACT

OBJECTIVES: To describe the clinical profile of pediatric patients with Neural Tube Defects (NTDs) in Southern Philippines Medical Center (SPMC) from January 2014 – January 2019.
DESIGN: The study used retrospective descriptive research design, and was done through chart retrieval in the Medical Records Section of SPMC.
SETTING: The study was conducted in SPMC, a tertiary government hospital in Davao City.
PATIENTS/PARTICIPANTS: This study included pediatric patients 0 to < 19 years old with final diagnosis of neural tube defects and/or its types admitted in SPMC from January 2014 to January 2019.
MAIN OUTCOME MEASURE(S): The main outcome measures were the demographic profile of NTD, maternal risk factors, associated congenital anomalies and outcome of NTD.
RESULTS: Majority (41%) of NTDs seen at SPMC from January 2014 to January 2019 were newborns 0 day old presenting with open type NTDs, 68% of them died before 24 hours of life. The median maternal age upon delivery is between 19 to 34 years old. Its occurrence in both sexes were equally distributed. Maternal infection (24%) followed by poor prenatal check – up (20%) were the identified maternal risk factors for the defect. Teenage mothers have a significant increased risk of having a child with NTD. Cases seen were mostly located in the cranium. 74% of cases reviewed had open type NTDs with myelomeningocoele as the most common subtype. 60% of cases were discharged alive but suffered from complications, of which hydrocephalus is the most common. Among the 49 mothers sub-grouped based on history of prenatal intake of folic acid, it revealed that no to poor intake of folic is proportional to mothers with poor prenatal check – up. These non - takers of folic acid also have five times chance of bearing anencephalic child.
CONCLUSION: This study supported the government's mandate on maternal health and nutrition during pregnancy. With NTDs' high mortality rate and debilitating complications, multidisciplinary management approach and intensification of health prevention strategies are needed to improve the quality of life of every child.

Keywords: *Neural Tube Defects, Congenital Anomalies, Folic Acid*