Neurodevelopmental Profiles of Individuals suspected of having Fetal Alcohol Spectrum Disorder with Sentinel Facial Features in Angeles City

Vivien Nelle P. Maglanque[1], Christian Jemverick S. Manio[2], Isabella Danielle R. Quiwa[3] and Deanna Elisha Z. Ronquillo[4]
Angeles University Foundation

Abstract

Alcohol, a neurobehavioral teratogen, directly penetrates the placenta therefore causing aberrant embryonic development leading to lifelong constellation of structural, behavioral and neurocognitive anomalies termed as Fetal Alcohol Spectrum Disorder (FASD) (Raghavendra & Pratima, 2008). Despite the rampant alcoholic consumption in the Philippines (World Health Organization, 2004), there is still an apparent paucity of information pertinent to the pervasive implications of exposure to alcohol in utero. Hence, through a descriptive research design, the current study sought to delineate the neurodevelopmental profiles of individuals suspected of having FASD with Sentinel Facial Features in Angeles City. Out of the 4,000 grade one students initially screened, 13 were found to exhibit the cardinal facial anomalies associated with the condition. Notably, one limitation of the study is that only five consented to undergo the neurodevelopmental assessment. Relative to the assessment findings, it was identified that impairments cut across the evaluated neurodevelopmental domains, with an apparent deficits in learning and behaving appropriately. These challenges are relative to low scores on tests which evaluate cognitive functioning, language, memory, attention, executive functioning, affect regulation and adaptive behavior. In general, the results of the assessment per se is akin with the existing literature but with marked variations particularly in neuroanatomy, processing speed, adaptive functioning, mathematical computational skills, motor coordination and visual-motor skills. Given that this is a follow-up study of the pioneer FASD research in the Philippines, it is therefore the researchers' hope that the results of the paper would pave way to an increase public awareness relative to the dangers of prenatal alcohol exposure, leading to greater prevention techniques and increment in support movements to those affected and even to their families.