Influence of Demographic Variables in Neonatal IVH: Incidence, Intervention, and Complications

Prematurity is the leading etiology for germinal matrix intraventricular hemorrhage (IVH). Although there is research in how to prevent IVH postnatally, the ideal intervention would be to prevent preterm births. It is well known that the cause of prematurity is multifactorial, however demographics do play a role including racial inequalities. It is a multifaceted framework that includes social environment, socioeconomic status (SES), social support as well as stress, preconceptional health and even epigenetics. This study is not designed to discuss all the potential etiologies for prematurity, rather focus on delineating the socioeconomic disparities with regards to IVH and then offering avenues for potential prenatal intervention.

The long term goals of this study are to construct a database of patients who developed neonatal IVH and analyze the neurosurgical treatment provided for those infants who developed posthemorrhagic ventriculomegaly (to determine the incidence of infants who require ventricular shunt insertions in the first year of life) and correlate SES to shunt functioning at 1 year.

The medical student’s role would be chart review, data collection and data analysis.