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Mr. Speice

Independent Study & Mentorship

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Neurology and the NFL

Assessment 5 - Interview

Name of Professional: Dr. Suresh Kumar

Title: Neurologist

Company: Headache TBI & Memory Institute

Date of Interview: September 29th, 2018

Works Cited: Gupta, Antara A, and Suresh Kumar. "Neurology and the NFL." 29 Sept. 2018.

Assessment:

Continuing my research in the field of Neurology, I had the pleasure to interview Dr. Suresh Kumar, a neurologist at the Headache TBI and Memory Institute. Furthermore, Dr. Kumar has also been certified as a Brain Injury Expert due to his involvement in the NFL Concussion Program through which he conducts many research projects. Since Dr. Kumar was scheduled to present his research after our discussion, this informational interview was kept brief. Nonetheless, this allowed for an opportunity to listen to distinguished doctors present research about new neurological discoveries, and it was quite enriching.

To begin, Dr. Kumar explained the two branches of neurology that he specializes in: concussions and headaches. Concussions, which are caused by traumatic brain injury (TBI) often

lead to headaches and memory problems, and in order to diagnose this injury, MoCA tests are often used. During my shadowing experience with Dr. Dike, I actually had the opportunity to conduct MoCA tests on patients suffering from degenerative diseases such as Alzheimer's disease and other memory problems. This test consists of 30 questions, and scores below 26 often indicate some degree of memory loss. Thus, this test makes an excellent tool to help diagnose whether a patient has suffered memory loss after a severe blow to the head.

In addition, Dr. Kumar explained the different types of headaches that occur: sinus, cluster, tension, and migraine. Sinus headaches are characterized with pain behind the brow bone and cheekbones; cluster headaches occur around the eye socket; tension headaches are accompanied with squeezing sensations; and finally, migraines have symptoms of nausea and increased sensitivity to light. Dr. Kumar talked about how many people self-diagnose their headaches and immediately jump to the conclusion that they have migraines, so it is important to ask questions before trusting a patient's self-diagnosis. Dr. Dike and Dr. Aiyagari have also said this in the past, so it became quite apparent that making solid conclusions based solely on one's own data is crucial in preventing misdiagnosis. Since many of the patients that come to Dr. Kumar suffer from severe headaches that pain medication or a good diet is unable to solve, he often has to perform nerve blocks in order to numb sensation. As a student in the Health Science Clinicals program, I was able to observe anesthesiologists performing nerve blocks on patients right before they went in for surgery, and they required an ultrasound in order to locate the desired nerve. However, for occipital nerve blocks, Dr. Dike explained that he simply enters the local anesthetic at the base of the skull. Thus, in the future, it would be interesting to research

different types of nerve blocks and why some require less equipment than others in order to administer.

Following this brief interview, Dr Kumar allowed me to listen to him and his team practice their research presentation for their upcoming conference. Dr. Kumar and his team researched the effect of multiple concussions on anxiety and depression, and for the purpose of this project, they performed a retrospective analysis on 86 retired NFL players. In order to test for symptoms of anxiety and depression, the MoCA test, Patient Health Questionnaire (PHQ-9), and General Anxiety Disorder (GAD-7) were used. Overall, it was concluded that 73% of the studied NFL players showed mild to severe symptoms of anxiety and depression, which is about nine to ten times more than the average rate of depression for males (8%). Dr. Kumar explained that because of the masculine stereotype following football players, they often slide under the radar for mental illness diagnosis, which is quite dangerous for long term health. I found the study quite interesting, and it made me wonder whether such a correlation could be found in football players as early as middle school and high school. Overall, the entire process was quite like Science Fair, and when Dr. Kumar told me that he would love to have me on his team when I am in college, it made me quite excited.

I was quite surprised that Dr. Kumar had the time to continue researching despite dealing with patients around the clock, and he explained that passion makes everything possible. These words were quite inspiring, and it reminded me of Dr. Aiyagari who had also chosen passion over comfort which essentially allowed him to build a successful career. Thus, it becomes apparent that in the medical profession, passion is key in order to survive through the long years of schooling and busy schedule.