

Final Product Set-Up and Completion Summary

Objective/Purpose:

Through my final product, I hoped to be able to find a method/system that can efficiently diagnose patients with Parkinson's Disease earlier thus allowing them to get treatment earlier and possibly decreasing the mortality rate of the disease. After compiling various research, I aimed to conduct a comparative analysis and come to a conclusion on which biomarker proved to be the most effective at identifying PD. With my research findings, I wish to provide patients with the ability to get an earlier diagnosis and be treated earlier before later stages of the disease.

Methodology:

1) Materials:

My final product was completed solely through the use of online web-based research and peer-reviewed published studies in scientific journals. Furthermore, the materials that I used included my laptop, a notebook for notes, and online articles found through MackinVia.

2) Procedures and Process:

My final product involved copious amounts of research. Due to COVID, I was forced to find all my information online through articles and studies rather than through a mentor. Because of this, my process was based solely upon my online research. I spent time revising my proposal, compiling my research, creating an outline for my final product,

and then completing the actual final product. Throughout this process, I used many sources to learn about the ongoing research on my topic to come to a conclusion.

Utilization of Higher-Level Thinking Skills:

Initially, I did not intend to incorporate any higher-level thinking skills, but as I completed my final product, I realized that in order to synthesize all the information and come up with a valid thesis, I needed to think deeper into my topic. As I compiled my research articles and derived the necessary information, I made connections between each of the articles and the information. I was able to form links between the information, allowing me to develop a conclusion using my higher-level thinking skills. Through the utilization of these skills, I was able to come to a conclusion of which biomarker was the most effective.

Results:

Through my final product, I was able to conclude that the current diagnosing and treatment systems are beneficial to patients with later-onset stages of the disease, but it could be improved through the incorporation of treatments during earlier stages. I found that blood-based biomarkers served as the most promising as compared to the other biomarkers. Furthermore, I found that diagnosing PD is essential so that patients can receive the proper treatment and advice regarding care. In addition, diagnosing PD early is vital because treatments such as levodopa/carbidopa are more effective when administered early on in the disease. Through the research completed in my analysis, improvisations to both the diagnosing and treatment systems could be adopted to yield a more beneficial and earlier recovery

process. Lastly, I found that with the adoption of the new systems incorporated in these studies as well as future studies, there could be a dramatic improvement in the recovery and quality of life of patients with Parkinson's disease.

Conclusions/Interpretations:

Overall, my final product was successful in that it taught me about the intricacies of Parkinson's Disease and the modern treatments as well as the future of the healthcare industry in regards to the disease. With my research findings, I can expand my topic by finding ways to provide many future patients with the ability to get an earlier diagnosis and be treated earlier before later stages of the disease as I do further research. The research showed me the potential this field has as the healthcare industry changes in the future.

Application/Meaning:

My research on this topic can be applied in the future in that I wish to be able to distribute a method/system potentially incorporating a blood-based biomarker that can efficiently diagnose patients with PD earlier thus allowing them to get treatment earlier and possibly decreasing the mortality rate of the disease. If I can distribute this system to healthcare services that can in turn help Parkinson's patients, it can positively impact many lives in that patients can receive treatment in earlier stages of the disease before it's too late.