

Article Critique

Student's Name

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ARTICLE CRITIQUE

Parkinson's disease (PD) is one of the chronic diseases and a progressive movement disorder that is caused by several factors such as environmental and genetic interactions. The primary objective of Tsuboi was to investigate the environmental and genetic interactions in the pathogenesis of the Parkinson's disease. Tsuboi objectives are relevant to the study because the article has critically examined the complexity and the clinical features of PD. The author has also relied mainly on the review of the existing evidence based literature to emphasize on the genetic and environmental factors that leads to PD. For instance, the author has critically explained how an individual's interaction with the herbicides and pesticides can affect the liver and the evidence has been retrieved from the existing literature. This aspect has enabled the author to justify the objectives of the study significantly. This essay critically examines various aspects highlighted in the article including the assumptions and the methodology.

The article has also succeeded in highlighting the relationship pathogenesis of PD with age. The article has integrated the use of evidence-based research on individuals more than 50 years and it established that age is also a contributing factor. This finding is related to the purpose of the study which is to identify the factors that have the potential to trigger PD. However, the author has not clearly identified the most vulnerable population. The observations made by the author in the article review is also paramount in determining the cases of PD as a combination of the nature and nurture. The interactions experienced

between people's genetic compositions and the environmental exposures also lowers the risk of getting PD. This aspect is applicable in the real life situation because individuals can inherit a particular genetic makeup that increases the effects of the toxicants. This implies that these individuals are likely to experience unique symptoms when diagnosed with the same condition.

The main research questions that guided the author basing on the findings are to what extent can genetic mutation influence the chances of getting PD? In response to this question, the author has examined the differences that in the clinical features between PD with LRRK2 mutation and the sporadic PD.

The main weakness of the article is that the author has not utilized the in-text citations which can help the reader identify the specific article. This aspect makes it difficult for the reader to engage further reading on the evidence-based literature. The article has also failed to analyze the specific diagnostic criteria that can be implemented in managing PD. According to Jankovic, there is no specific diagnostic procedure for PD. However, the nursing practitioners can use various imaging and brain scanning procedures that can be useful in diagnosing PD. Another mistake is that the research has not based its findings or content on a particular theory. According to Browner, a good clinical research should be based on a particular theoretical or conceptual framework that provides the audience with a significant platform for meta-analysis. The primary strength of the study is that the author has selected articles dealing genetic and environmental studies in relation to PD. For instance, the author used the articles that focused on familial and sporadic PD

patients to showcase how LRRK2-G2019S mutation can lead to the spread of PD. The author has also acknowledged that PD is a risk factor to the old age specifically 50-years old and above. This aspect has been utilized to emphasize on the complexity of PD pathogenesis.

The study also assumes that PD can be controlled and prevented by taking caffeine. However, the author has not explained the process involved in controlling the effects of smoking. The article is also based on the assumption that PD is less prevalent on the smokers and caffeine users. However, it has reviewed only one research article that has information and findings regarding the prevalence in smokers and caffeine users. Additionally, there are passive and active smokers with variation in tobacco intake. On the other hand, their people consuming more than three cups of caffeine per day. Therefore, it would be more liberal for the author to establish the required quantity of caffeine to be taken to make the study complete. This aspect would provide a spectrum for understanding the quantity of caffeine to be taken as a preventive measure for PD.

The findings that caffeine can be used as a preventive technique for PD can also be judged as misleading. This aspect is because there are other effects that can be detrimental with prolonged use of caffeine. Romano and Russo have pointed out that excessive consumption of caffeine can cause irritability and insomnia. These effects can jeopardize the operation of the nervous system which has direct relation to the PD.

In conclusion, an individual exposure to the chemicals such as herbicides and pesticides is a significant risk factor for PD. This aspect is due to the

prevalence of metals such as lead and manganese in these chemicals. Another implication derived from the article is that genetic composition has significant relationship to the prevalence of PD. Therefore, this information is important to the nursing practitioners in the process of seeking an appropriate intervention for the patients. The patients can be asked about the family history in relation to PD which can be an important step for determining the prevalence of PD in the future generation.