

Research Assessment #2

Date: 10 September 2017

Subject: Environmental Exposure in Relation to the Development of Childhood Cancer

Source:

Zachek, Christine M., et al. "Children's Cancer and Environmental Exposures." *LWW, Journal of Pediatric Hematology/Oncology*, Oct. 2015.

Assessment:

As long as I have been interested in pediatric oncology, I have always wondered why are some children more susceptible to cancer than others. After researching and assessing "Children's Cancer and Environmental Exposures" from the Journal of Pediatric Hematology/Oncology, I have learned that to this day the cause of cancer is still unknown. Although, new research is being done each day linking different factors to a child's diagnosis. Recently, different factors in the environment such as, ambient air pollution, pesticides, house dust, and paternal smoking have been linked to childhood leukemia, lymphomas, brain tumors, and other solid tumors.

The article is a research report from the results of a survey done on nurse practitioners, fellows, and attending physicians, in the pediatric oncology unit. The results of the survey showed most doctors with 10 or more years of experience are more aware of the importance of environmental factors within the diagnosis of a child. Doctors who recently entered the field however, are not aware of this data. After reading the article I came to the conclusion that the risk of these common everyday factors that could be causing childhood cancer, are not being taught through medical school. The doctors who are aware of the different external factors that can cause cancer have learned through experience and similarities between patients. However, an overwhelming majority of both experienced and less experienced doctors reported not feeling comfortable talking about the possibility of environmental factors in the child's diagnosis with the patient or the patient's family. This can be attributed to the fact many doctors are afraid of placing blame on the parents, in an already emotionally tense time. From this article I have learned that most doctors attribute a cancerous diagnosis to genetics or simply bad luck. While often, this is the most likely answer, doctors are refusing to further research other possibilities beyond the most accepted explanation of, genetics. Fewer than 1% of cancer research money goes towards researching environmental factors. Knowing there is not funding or researching being done to further investigate the issue, the article strives to bring awareness and inform medical professionals. I still wonder what other unknown factors could be causing cancer in children? And why do medical professionals not feel the need to place funding in this

area of research? I feel there is a urgency to begin further investigating these factors, as it could potentially save a child's life.

As I continue researching, I will be sure to take into account less universally accepted research, such as the data stated in this article, as possibly crucial information. I hope to find more possible causes to childhood cancer, as I believe learning the root of the problem, could possibly lead to the ability to stop the cancer before it forms. I will use the knowledge I gained through this research to guide me as I continue to build upon my knowledge of the pediatric oncology field, and that it entails. New breakthroughs in medicine are constantly being made, and by staying up to date on the latest research and theories, I am confident I will be able to successfully grow as a doctor.