Team No: DC20063

Dataset: Health Information National Trends Survey (HINTS5, Cycle 3) [Level 4] **Team Members:** Sanaa Mironov (Undergraduate) and Sandesh Timilisina (Masters)

School: UMBC

Abstract

Over the last few decades, there have been significant advancements in the field of diagnosing and treatment of various fatal diseases, including cancer [1]. However, there is still a considerable cost involved in the treatment and cure of such fatal diseases. According to the reports of the National Cancer Institute and Mesothelioma Center, more than 600,000 people lost their lives due to cancer, and 63% of the cancer patient family reported financial struggles following a cancer diagnosis [2,3]. With a focus on preventive measures and early diagnosis, both the number of cancer cases and the cost involved can be significantly reduced to achieve sustainability in the healthcare system.

Across different aspects of cancer prevention and treatment, focusing on understanding the health-related behavior and awareness level of the people can dramatically help to reduce the chances of cancer. Moreover, motivating people to adopt healthy behavior and monitoring people's status quo in health care will significantly help to alleviate the increasing cancer cases and the cost involved in cancer treatment. In this project, we analyzed different social, economic, and psychological factors that influence the health-related decisions and behavior of the people. The dataset that we used for this project was the Health Information National Trends Survey (HINTS) dataset made available by the U.S. National Cancer Institute (NCI).

We are using the information obtained from peoples' cancer-related perceptions and knowledge to come up with sustainable measures to improve the overall well-being of the people. We primarily focused on understanding how improving the current health-related information-seeking behavior of individuals can influence the health behavior of the people. Here, we studied how people access health-related information and their trust level on the available resources. We also analyzed the impacts of different social and economic factors such as age, income, race, educational attainment on the perception of people about their health. By analyzing different aspects of the dataset, we aim to suggest what areas can contribute to increasing the health-related awareness and decisions made by the people.

References:

- 1. https://www.sciencedirect.com/science/article/pii/S221353831730019X
- 2. https://www.cancer.gov/about-cancer/understanding/statistics
- 3. https://www.asbestos.com/featured-stories/high-cost-of-cancer-treatment/