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Summary of Research on Demographic Factors and Dementia Diagnosis

Abstract

The study investigates the relationship between demographic factors and dementia diagnosis using NHIS survey data. Key findings include significant associations with age groups and educational levels, highlighting the need for public health initiatives to address aging populations and educational disparities.

I. Introduction

A. Importance of Public Health and Aging

- Aging increases the risk of chronic diseases, including dementia.
- By 2030, 1 in 6 individuals globally will be aged 60 or older, increasing public health challenges.

B. What is Dementia?

- Dementia encompasses various cognitive impairments affecting memory and daily tasks, with Alzheimer's being the most common form.
- The economic burden of dementia care is projected to rise significantly, necessitating urgent public health attention.

C. Objective

- To analyze non-genetic demographic factors related to dementia prevalence and inform public health strategies.

II. Literature Review

A. Dementia Prevalence

- Studies show a growing global prevalence of dementia, particularly among aging populations.
- Higher education levels correlate with lower dementia incidence.

B. Economic Impact

- Dementia imposes substantial financial burdens on individuals and healthcare systems, with costs expected to escalate.

C. Demographic Disparities in Diagnosis

- Factors like race, socioeconomic status, and education influence dementia prevalence and access to timely diagnosis.

III. Methodology

A. Data Set Surveying and Collections

- Utilized NHIS dataset for demographic and health-related data.

B. Dataset Creation and Preprocessing

- Cleaned and processed data to focus on relevant demographic variables.

C. Data Visualization

- Employed frequency tables and stacked bar charts for visual analysis of data.

D. Statistical Analysis

- Used Chi-square tests and Cramer's V to assess associations between demographic factors and dementia diagnosis.

IV. Results and Discussion

A. Data Visualization Inference

- Tables and charts indicated a higher prevalence of dementia in older age groups and individuals with lower education levels.

B. Statistical Analysis Inference

- Significant associations were found for age (strong) and education level (moderate) with dementia diagnosis. Other demographic factors showed weaker associations.

V. Conclusion

- The study underscores the complex role of demographic factors in dementia diagnosis, emphasizing the need for targeted public health strategies to mitigate the impact of dementia among at-risk populations.

Key Takeaways

- **Age and Education**: Strongest demographic factors associated with dementia.
- **Public Health Initiatives**: Need for programs addressing educational disparities and support for aging populations.
- **Further Research**: Suggested to explore demographic influences on dementia diagnosis and care.

Action Items

- Develop public health strategies focusing on educational access and support for older adults.
- Conduct further studies to understand the role of demographic factors in dementia diagnosis and care disparities.