

“Increasing Incidence of Stroke Among Young Adults: Revealing Hypertension as the Hidden Crisis”

Synopsis Submitted to



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DISSERTATION SYNOPSIS

TITLE

“Increasing Incidence of Stroke In Young Adults: Revealing Hypertension as the Hidden Crisis”

INTRODUCTION

Stroke, historically considered a disease of the elderly, is increasingly affecting young adults in India. Recent epidemiological studies reveal a disturbing trend: a significant rise in stroke incidence among individuals under 40 years of age, with hypertension emerging as a major risk factor. Often termed the "silent killer," hypertension is frequently undiagnosed in youth due to its asymptomatic nature. The rapid urbanization of Indian society, coupled with sedentary lifestyles, unhealthy diets, and psychosocial stress, has exacerbated the prevalence of hypertension. Despite these alarming trends, awareness, diagnosis, and management of hypertension among young adults remain suboptimal. Understanding the correlation between hypertension and stroke in this demographic is crucial for designing effective preventive strategies. This study aims to investigate the relationship between hypertension and stroke among young adults in India and to propose actionable interventions.

RESEARCH QUESTIONS

- What is the correlation between the increasing prevalence of hypertension and the rising incidence of strokes among young adults in India?
- What are the key lifestyle, demographic, and healthcare access factors contributing to hypertension and stroke risk in this population?
- What strategies can be implemented to improve awareness, early detection, and management of hypertension among young adults to mitigate stroke risk?

OBJECTIVES

- To assess the prevalence of hypertension among young adults (18–40 years) in India.
- To determine the association between hypertension and stroke incidence in young adults.
- To identify lifestyle, demographic, and healthcare-related risk factors contributing to hypertension and stroke.
- To suggest evidence-based interventions for improving hypertension awareness, detection, and management among young adults.

HYPOTHESIS

There is a significant positive correlation between hypertension and the incidence of stroke among young adults in India.

MATERIAL AND METHODS

STUDY DESIGN

Narrative/ Traditional Literature Review

STUDY POPULATION

Inclusion criteria: Studies and reports focusing on adults aged 18–40 years in India, addressing hypertension and/or stroke.

Exclusion criteria: Studies focusing exclusively on populations outside the specified age group or outside India.

DURATION OF STUDY

Three months (March 2025 – June 2025).

SAMPLE SIZE

All eligible studies and datasets published meeting inclusion criteria.

DATA COLLECTION PROCEDURE

- Systematic literature review using databases such as PubMed, Scopus, and Google Scholar.
- Extraction of relevant data on hypertension prevalence, stroke incidence, risk factors, and intervention outcomes.
- Cross-verification of data from multiple sources for reliability.

OPERATIONAL DEFINITIONS

Hypertension: Systolic BP ≥ 140 mmHg and/or diastolic BP ≥ 90 mmHg, or self-reported use of antihypertensive medication.

Stroke: A clinical syndrome characterized by rapidly developing neurological deficit(s) due to vascular causes, confirmed by imaging or clinical diagnosis.

ETHICAL CONSIDERATIONS

- As this is a secondary research study, no direct human participation is involved.
- All data will be sourced from publicly available and ethically approved studies.

- Data privacy and confidentiality will be maintained by anonymizing all extracted information.
- Proper citations and acknowledgments will be provided for all sources.

IMPLICATIONS OF RESEARCH

This research will provide critical insights into the growing burden of stroke among young adults in India, driven by undiagnosed and uncontrolled hypertension. The findings will inform public health policy, advocate for routine blood pressure screening in youth, and support the development of targeted educational and intervention programs. Ultimately, this study aims to contribute to the reduction of stroke incidence and improve cardiovascular health outcomes in India's young population.

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