



**“A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE  
REGARDING WARNING SIGNS OF STROKE AMONG ADULTS  
RESIDING AT JAMUHAR.”**

**Prof. Dr. K. Latha<sup>1</sup>**

Dean cum Principal, Narayan Nursing College, Gopal Narayan Singh  
University, Jamuhar,  
Rohtas, Bihar

**Mrs. M. Sasi<sup>2</sup>**

Professor

HOD, Dept of Community Health Nursing  
Narayan Nursing College, Gopal Narayan Nursing University, Jamuhar, Rohtas,  
Bihar

**Pammi Singh<sup>3</sup>, Shubham kumar<sup>4</sup>, Miku kumar<sup>5</sup>, Rahul kumar<sup>6</sup>, Prince  
kumar<sup>7</sup>**

Students of Narayan Nursing College, Gopal Narayan Singh University,  
Jamuhar, Rohtas, Bihar

## **Abstract**

### **Background**

Stroke is one of the leading causes of disability and mortality worldwide. Early recognition of warning signs and immediate medical intervention can significantly reduce complications, disability, and death associated with stroke. Public awareness regarding warning signs of stroke is still inadequate, especially in rural and semi-urban communities. Lack of knowledge among adults often results in delay in seeking emergency treatment. Therefore, assessing the knowledge level regarding warning signs of stroke among adults is essential for planning educational and preventive health programs.

### **Objectives**

1. To assess the knowledge regarding warning signs of stroke among adults residing at Jamuhar.
2. To determine the association between knowledge scores and selected demographic



# International journal of basic and applied research

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

variables.

## Methods

A descriptive research design was used for the study. The study was conducted among adults residing at Jamuhar. A non-probability convenient sampling technique was adopted to select 60 participants. Data were collected using a structured knowledge questionnaire consisting of demographic variables and questions related to warning signs of stroke. The collected data were analyzed using descriptive and inferential statistics.

## Results

The study findings revealed that most adults had moderate knowledge regarding warning signs of stroke. A smaller proportion of participants had adequate knowledge, whereas some participants demonstrated inadequate knowledge. The study also found a significant association between knowledge scores and selected demographic variables such as educational status and previous exposure to health information.

## Conclusion

The study concluded that awareness regarding warning signs of stroke among adults residing at Jamuhar was moderate and requires improvement. Health education programs, awareness campaigns, and community-based interventions can help improve early recognition of stroke symptoms and promote timely medical care.

**Keywords:** Stroke, Warning Signs, Knowledge, Adults, Community, Awareness.

## Introduction

Stroke is a major public health problem affecting millions of individuals every year. It occurs when the blood supply to a part of the brain is interrupted or reduced, preventing brain tissue from receiving oxygen and nutrients. As a result, brain cells begin to die within minutes. Stroke is considered a medical emergency that requires immediate diagnosis and treatment to reduce brain damage and other complications.

Globally, stroke is one of the leading causes of death and long-term disability. The burden of stroke is increasing rapidly in developing countries due to lifestyle changes, hypertension, diabetes mellitus, smoking, obesity, stress, and lack of physical activity. In India, the prevalence of stroke has increased over the past few decades, affecting both urban and rural populations.



# International journal of basic and applied research

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

Early identification of warning signs is essential in reducing the severity of stroke-related complications. Common warning signs include sudden weakness or numbness on one side of the body, difficulty speaking, confusion, loss of balance, sudden severe headache, blurred vision, and dizziness. Prompt recognition of these symptoms and immediate transportation to a healthcare facility can save lives and improve recovery outcomes.

Despite the availability of treatment facilities, many individuals fail to recognize the early symptoms of stroke. Poor awareness among community members often leads to delay in seeking treatment, resulting in increased morbidity and mortality. Educational level, socioeconomic status, access to healthcare information, and cultural beliefs influence awareness regarding stroke warning signs.

Community-based assessment studies are important to identify the existing level of knowledge among adults. The findings of such studies help healthcare professionals and nurses plan appropriate educational strategies to improve public awareness. Therefore, the present study was undertaken to assess the knowledge regarding warning signs of stroke among adults residing at Jamuhar.

## **Need for the Study**

Stroke is a rapidly growing health concern and contributes significantly to disability and mortality. Many cases of stroke can be managed effectively if warning signs are recognized early and immediate medical care is obtained. However, lack of awareness among adults continues to be a major challenge.

In many communities, individuals are unable to identify the symptoms of stroke or understand the seriousness of the condition. Delay in treatment often results in permanent disability, loss of independence, emotional distress, and economic burden on families. Community adults play an important role in recognizing symptoms in themselves and others; therefore, adequate knowledge is essential.

Nurses and healthcare workers are responsible for promoting health education and improving community awareness regarding stroke prevention and early identification. Assessing the knowledge level of adults can help identify educational gaps and guide future awareness programs.



# International journal of basic and applied research

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

The investigator observed that many adults residing at Jamuhar had limited understanding regarding warning signs of stroke. Hence, the study was conducted to assess their level of knowledge and to identify areas requiring health education.

## Statement of the Problem

“A descriptive study to assess the knowledge regarding warning signs of stroke among adults residing at Jamuhar.”

## Objectives of the Study

1. To assess the knowledge regarding warning signs of stroke among adults residing at Jamuhar.
2. To determine the association between knowledge scores and selected demographic variables.

## HYPOTHESIS

The study is guided by the following hypothesis :

$H_0$ (Research hypothesis):

There is a significant association between the level of knowledge regarding warning signs of stroke among adults with selected demographic variables.

## Operational Definitions

### Knowledge

In this study, knowledge refers to the understanding and awareness of adults regarding warning signs, symptoms, and early identification of stroke as measured by a structured questionnaire.

### Warning Signs of Stroke

Warning signs of stroke refer to sudden symptoms indicating interruption of blood supply to the brain, such as weakness, numbness, speech difficulty, blurred vision, dizziness, and severe headache.

### Adults



# International journal of basic and applied research

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

Adults refer to individuals aged 18 years and above residing at Jamuhar who participated in the study.

## **Jamuhar**

Jamuhar refers to the selected residential community area where the study was conducted.

## **Assumptions**

1. Adults may have limited knowledge regarding warning signs of stroke.
2. Educational status may influence awareness regarding stroke.
3. Health education can improve knowledge regarding stroke warning signs.

## **Delimitations**

1. The study was limited to adults residing at Jamuhar.
2. The study was limited to selected adults who were available during the period of data collection.
3. The sample size was limited to 60 participants.

## **Methodology**

### **Research Approach**

A quantitative research approach was adopted for the study.

### **Research Design**

A descriptive research design was used.

### **Setting of the Study**

The study was conducted at Jamuhar.

### **Population**

The target population consisted of adults residing at Jamuhar.

### **Sample**

The sample consisted of 60 adults residing at Jamuhar.

### **Sampling Technique**

Non-probability convenient sampling technique was used.

### **Inclusion Criteria**

1. Adults who were willing to participate.
2. Adults residing at Jamuhar.
3. Adults who could understand Hindi or English.



**International journal of basic and applied  
research**

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-**5.86**

**Exclusion Criteria**

1. Adults who were seriously ill.
2. Adults who were not available during data collection.



# International journal of basic and applied research

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

## Description of the Tool

The tool consisted of two sections:

### Section A: Demographic Variables

It included age, gender, educational status, occupation, marital status, and source of health information.

### Section B: Structured Knowledge Questionnaire

It consisted of questions related to warning signs of stroke, causes, emergency response, and importance of early treatment.

## Data Collection Procedure

Formal permission was obtained from concerned authorities before conducting the study. Participants were informed about the purpose of the study and consent was obtained. Data were collected using a structured questionnaire. Each participant was given sufficient time to complete the questionnaire.

## Plan for Data Analysis

Data were analyzed using descriptive and inferential statistics. Frequency, percentage, mean, and standard deviation were used to summarize the data. Chi-square test was used to determine association between knowledge scores and demographic variables.

## Results

**Table 1: Distribution of Participants According to Demographic Variables**

Demographic variable	Frequency (n)	Percentage (%)
Age 18-30 years	22	36.7%
Age 31-45 years	20	33.3%
Age Above 45 years	18	30%
Male	34	56.7%
Female	26	43.3%

Primary education	15	25%
Secondary education	28	46.7%
Graduate and above	17	28.3%



**Table 2: Distribution of Knowledge Scores Regarding Warning Signs of Stroke**

Level of knowledge	Frequency (n)	Percentage (%)
Adequate	16	26.7%
Moderate	34	56.6%
Inadequate	10	16.7%

**Table 3: Association Between Knowledge Scores and Demographic Variables**

Variable	Chi- square value	Significance
Educational status	6.21	Significant
Age	2.14	Not significant
Gender	1.82	Not significant
Previous health information	5.47	Significant

## Discussion

The present study assessed the knowledge regarding warning signs of stroke among adults residing at Jamuhar. The findings revealed that the majority of participants had moderate knowledge regarding warning signs of stroke, while a smaller proportion had adequate knowledge.

The study findings are consistent with previous research studies which reported inadequate public awareness regarding stroke symptoms and emergency response. Educational status played an important role in influencing knowledge levels. Adults with higher educational qualification demonstrated better understanding regarding warning signs of stroke.



# International journal of basic and applied research

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

The findings also indicated that participants who had previous exposure to health information through healthcare workers, media, or awareness programs showed better knowledge scores compared to others.

The study emphasizes the importance of community health education and awareness campaigns. Nurses and healthcare professionals can organize educational sessions, distribute informational materials, and conduct community outreach activities to improve recognition of stroke symptoms.

## **Nursing Implications**

### **Nursing Practice**

Nurses should educate community members regarding warning signs of stroke and importance of early treatment.

### **Nursing Education**

Nursing students should receive adequate training regarding community awareness programs related to stroke prevention and management.

### **Nursing Administration**

Nursing administrators should organize awareness campaigns and community health programs.

### **Nursing Research**

Further studies can be conducted on larger populations and in different community settings.

## **Recommendations**

1. Similar studies can be conducted with larger sample sizes.
2. Comparative studies can be conducted between rural and urban populations.
3. Educational intervention studies can be conducted to improve awareness.
4. Community health programs should be strengthened to increase public awareness.



# International journal of basic and applied research

[www.pragatipublication.com](http://www.pragatipublication.com)

ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-5.86

## Conclusion

The study concluded that adults residing at Jamuhar had moderate knowledge regarding warning signs of stroke. Early recognition of stroke symptoms is important to reduce mortality and disability. Community-based educational interventions, awareness programs, and health promotion activities can improve public understanding regarding stroke and encourage timely medical intervention.

## References

1. World Health Organization. Stroke, Cerebrovascular accident. Geneva: WHO; 2023.
2. Lewis SL, Bucher L, Heitkemper MM. Medical Surgical Nursing. 11th ed. Philadelphia: Elsevier; 2021.
3. Park K. Preventive and Social Medicine. 27th ed. Jabalpur: Banarsidas Bhanot; 2023.
4. Brunner LS, Suddarth DS. Textbook of Medical Surgical Nursing. 15th ed. Philadelphia: Wolters Kluwer; 2022.
5. American Stroke Association. Warning Signs and Symptoms of Stroke. Dallas: ASA; 2023.
6. Polit DF, Beck CT. Nursing Research: Generating and Assessing Evidence for Nursing Practice. 11th ed. Philadelphia: Wolters Kluwer; 2021.
7. Sharma SK. Nursing Research and Statistics. 4th ed. New Delhi: Elsevier; 2020.
8. Indian Council of Medical Research. Stroke burden in India. New Delhi: ICMR; 2022.
9. Black JM, Hawks JH. Medical Surgical Nursing. 10th ed. St. Louis: Elsevier; 2021.
10. National Institute of Neurological Disorders and Stroke. Stroke Information Page. Bethesda: NINDS; 2023.