"A Study To Assess The Knowledge, Attitude And Practice On Prevention Of Cerebrovascular Accident Among Hypertensive Clients At Selected Village, Aragonda."

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ABSTRACT:

OBJECTIVES :

- To assess the knowledge on Prevention of cerebro vascular accident among Hypertensive patients at selected villages, Aragonda.

- To assess the Attitude on Prevention of cerebro vascular accident among Hypertensive patients at selected villages, Aragonda.

- To assess the practice on Prevention of cerebro vascular accident among Hypertensive patients at selected villages, Aragonda.

- To find out the association between knowledge on Prevention of cerebro vascular accident among Hypertensive patients with their selected demographic variables.

- To find out the association between attitude on Prevention of cerebro vascular accident among Hypertensive patients with their selected demographic variables.

- To find out the association between practice on Prevention of cerebro vascular accident among Hypertensive patients with their selected demographic variable.

- To provide informational booklet regarding prevention of stroke.

METHODOLOGY:

Research methodology is the systemic way of doing research to solve a problem. It compromises of problems the objectives of study hypothesis that have been formulated the variable under study the method needs for the data collection and statistical method used for analysing data and used for data collection and logic behind it. And the whole, it gives a general pattern of gathering and processing of research data. The present study aimed at level of knowledge,attitude and practice on prevention of cerebrovascular accident among hypertensive clients .

RESULTS :

The findings of study regarding level of knowledge , attitude and practice on prevention of cerebrovascular accident among hypertensive clients revealed that

- 45.00% of the study population are at the age group between 41-60 years,33.30% are of between 61-80 years.

- 60.00% of the population are female.

- 78.30% are from Hindu religion.

- 58.30% of the population are from nuclear family.

- 41.70% of the study population were illiterate.

- 68.30% of the hypertensive clients are unemployed.

- 36.70% of the family's monthly income were Rs 10001-15000

- 85% of the study population are from rural place

- 75.00% of the hypertensive clients are married

- 78.30% of the study population have heard about stroke and 21.70% have not heard about stroke.

- Among the participants 30%of people having an adequate knowledge,45% of people having moderate knowledge,25% of people were having inadequate knowledge.

- Among the participants18.30% have negative attitude,33.30 have neutral attitude and 48.30% have positive attitude.

- Among the participants 58.30% of people having adequate practice,23.30% have moderate practice and 18.30% have inadequate practice on prevention of cerebrovascular accident.

CONCLUSION:

The study findings concluded that majority of people who had moderate level of knowledge on regarding prevention ofncerebrovascular accident .Hence it emphasized to continue with educational programmes . The health institution involves needs to come up with better strategies to deal with these barriers to improve the awareness regarding prevention of cerebrovascular accident.

KEYWORDS:Assess,Knowledge,Attitude,Practice,Prevention,Cerebrovascular accident,Hypertensive clients.

INTRODUCTION:

Cerebrovascular accident (CVA), or stroke is a condition where the brain is seriously damaged by the interrupted or greatly reduced brain blood supply, that causes the brain to lack of oxygen and not having enough nutrition to feed the cells. There is not enough blood supply, within minutes brain cells will begin to die. One can completely recover from stroke, or it can lead to dead if it is not treated immediately.

The National Institute of Neurological Disorders and Stroke states that stroke is also brain attack – a sudden stoppable blood supply to part of brain. A stroke happens when the clot obstructing the flow of blood to brain or blood vessels rupturing and preventing blood flow to brain. It is a medical emergency when "time is brain", the longer waiting, the more brain cells will die.Stroke has always been an urgent medical problem leaving many sequelae and a burden on the family and society.

According to World Stroke Organization (WSO) there are over 13.7 million stroke cases every year. Globally 25 percent of people over age 25 will have a stroke in their life (in both gender and all age). There are over 80 million people in the world who have experienced a stroke while living and 2.5 million fatalities from stroke annual year. (Lindsay et al. 2020.) The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) states that there were 5.5 million deaths by stroke worldwide in 2016. In 2021, stroke was the second reason causing disability-adjusted life-years worldwide in both the 50-74 years and 75 years and older age groups .

NEED FOR THE STUDY:

Globally, stroke is the second leading cause of death. About 70% of strokes were occurring in low- and middle-income countries, and high blood pressure is the main risk factor of stroke due to its poor recognition of stroke prevention methods. Therefore, the study aimed to assess knowledge on stroke prevention and its associated factors among hypertensive patients.

Despite global age-standardized mortality rates of stroke had shown a sharp decline from 1990 to 2016, its prevalence rate and burden have been still high.1 Reports showed that 80·1 million prevalent cases, 5.5 million deaths, and 116·4 million DALYs of stroke in the world were recorded at the end of 2016. Its burden in developing countries especially Sub-Saharan Africans (SSA) is still high.2,3 Although

stroke is considered as multifactorial- it is majorly attributed to the contributing risk factors like uncontrolled hypertension (HTN), diabetes mellitus (DM), dyslipidemia, heart disease, and other modifiable risk . The highest contributor is HTN which accounts for up to 75% of stroke cases.4–8 Moreover DM contributes up to 30% incidence to stroke events.

- In 2021, 1 in 6 deaths from cardiovascular disease was due to stroke.
- The death rate for stroke increased from 38.8 per 100,000 in 2020 to 41.1 per 100,000 in 2021.
- Every 40 seconds, someone in the United States has a stroke
- Every 3 minutes and 14 seconds, someone dies of stroke.
- Every year, more than 795,000 people in the United States have a stroke.
- About 610,000 of these are first or new strokes.
- About 185,000 strokes—nearly 1 in 4—are in people who have had a previous stroke.

PROBLEM STATEMENT:

   A STUDY TO ASSESS THE KNOWLEDGE, ATTITUDE AND PRACTICE ON PREVENTION OF CEREBROVASCULAR ACCIDENT AMONG HYPERTENSIVE CLIENTS AT SELECTED VILLAGES, ARAGONDA.

OBJECTIVES OF THE STUDY

- To assess the knowledge on Prevention of cerebro vascular accident among Hypertensive patients at selected villages, Aragonda.
- To assess the Attitude on Prevention of cerebro vascular accident among Hypertensive patients at selected villages, Aragonda.
- To assess the practice on Prevention of cerebro vascular accident among Hypertensive patients at selected villages, Aragonda.
- To find out the association between knowledge on Prevention of cerebro vascular accident among Hypertensive patients with their selected demographic variables.
- To find out the association between attitude on Prevention of cerebro vascular accident among Hypertensive patients with their selected demographic variables.
- To find out the association between practice on Prevention of cerebro vascular accident among Hypertensive patients with their selected demographic variable.
- To provide informational booklet regarding prevention of stroke.

ASSUMPTIONS

- Hypertensive clients residing at Paimagham, Aragonda may have inadequate knowledge attitude and practice regarding prevention of cerebrovascular accident

- Information booklet will provide an opportunity to acquire knowledge, attitude and practices on prevention of cerebrovascular accident.

OPERATIONAL DEFINITIONS

Assess :- Assess refers to determining the knowledge on Prevention of cerebrovascular accident among Hypertensive patients

Knowledge:- Knowledge refers to accurate answers to the knowledge questions about Prevention of cerebrovascular accident

Attitude:- An attitude refers to a set of emotions, beliefs, and behaviours towards Prevention of cerebrovascular accident

Practice:- The actual application or use of an idea, belief, or method for Prevention of cerebrovascular accident.

Prevention: It is the action of stopping Cerebro vascular accident from hypertension.

Cerebrovascular accident:- According to WHO, stroke (cerebrovascular accident), CVA rapidly developing clinical signs of focal or global disturbance of cerebral function, with symptoms lasting 24 hours or longer, or leading to death, with no apparent cause other than vascular origin.

Hypertensive clients:- It is defined as a client who have elevated blood pressure of systolic blood y greater than or equal to 140 mm of hg /or diastolic blood pressure greater than or equal to 90mmhg and/ or receiving treatment for high blood pressure.

LIMITATIONS

- The study is limited to paimagham village ,Aragonda.

METHODOLOGY

RESEARCH APPROACH:

Research approach tells the researcher from whom the data to be collected, how to collect, and how to analyse them. It suggests possible conclusion and helps the researcher in answering questions in the most accurate and efficient manner.

The research approach adopted was Descriptive research approach to achieve the objective of the study, which is felt to be most appropriate in the field of education for its practicability in real life situations. It has the advantage of practicability, feasibility and to a certain extent for generalization

RESEARCH DESIGN:

A research design is the overall plan, structure and strategy of investigations of answering the questions. It is the blue print that the researcher selects to carry out the study. The research design selected for the present study is descriptive survey design.

VARIABLES OF THE STUDY:

The variables of the study were dependent variable and extraneous variable.

Dependent variable: The hypertensive clients who are willing to participate in study in selected villages, Aragonda.

Independent variable: knowledge, attitude and practice on Cerebro Vascuar Accident.

Extreneous variable: Socio demographic variables such as age, sex, religion, type of family, educational status, occupation, income of the family per month, place of residence, marital status, heard of stroke, if yes, source of information.

SETTING :

The setting of the study is Paimagham Village, Aragonda ,Thavanampalli Mandal, Chittor. The Paimagham is a rural area which is in Chittor district, Andhra Pradesh. The setting was chosen on the basis of the investigators feasibility in terms of availability of required sample. The study was conducted during the month of September 2024 .

POPULATION:

The population in this study includes all the Hypertensive patients living in selected villages, Aragonda.

Target Population :

The target population of the present study includes the hypertensive clients who are residing in Paimagham Village, Aragonda **.**

SAMPLE:

The sample includes the Hypertensive patients who are living in selected villages, Aragonda, falling under inclusive criteria.

SAMPLE SIZE :

The formula for samle size (SS) :

n = SS /$[1 + \{(SS - 1)/POp\}]$

i.e,

SS = Sample size

Z =Given Zvalue

P =Percentage of population

C =Confidence level

Pop =Population

SAMPLE TECHNIQUE:

As the selection of sample depends on availability of hypertensive clients, non probability convenient sampling technique was adopted based on inclusion criteria .

CRITERIA FOR SAMPLE SELECTION:

Inclusion criteria:

- The Hypertensive Patients who are living in selected villages, Aragonda

- .The hypertensive patients who are willing to participate in the study.

- Those who are present at the time of study.

Exclusive criteria:

- Those who are absent during data collection.

- Patients who were taken for pilot study

- The Hypertensive patients who are not willing to participate in the study.

DEVELOPMENT AND DESCRIPTION OF THE TOOL:

Data collection tools are procedures or instruments used by the researcher to observer measure the key variables in research problem.

Tool was developed, based on the review of relevant literature from textbooks, journals, websites, under the guidance of experts, to assess the knowledge, attitude and practice on prevention of cerebrovascular accidents among hypertensive clients at selected villages, Aragonda.

It comprises of two section:

Section-I:

It includes socio demographic variables like age, sex, religion, type of family, educational status, occupation, income of the family per month, place of residence, marital status, hear of sroke, if yes, source of information.

Section- II

A) It includes self - structured checklist to assess the knowledge regarding prevention stroke among hypertensive patients.

B) It includes 5- points likert scale to assess the attitude regarding prevention stroke among hypertensive patients.

C) It includes structured checklist to assess the practice regarding prevention stroke among hypertensive patients.

Scoring key:

Scoring key prepare for

Section-I: By coding the demographic variable.

Section-II:

A) Consist of self - structured checklist to assess the knowledge regarding prevention of stroke among hypertensive patients.

B) Total 15 checklist self - structured questions each question carries '1' mark, wrong answer carries '0' mark. The total score is 15.

The scoring are categorized as follows:

Adequate knowledge >75%

Moderate knowledge 51- 75%

InAdequate knowledge <50%

C) Consist of 5- point likert scale 10 questionnaire to assess the attitude regarding the prevention of stroke among hypertensive patients.

- 5- Strongly Agree

- 4- Agree

- 3- Neutral

- 2- Disagree

- 1- Strongly Disagree

- The scoring are categorized as follows:

- Positive attitude >75%

- Neutral attitude 51- 75%

- Negative attitude <50%

The score is

D) Consist of checklist 10 questionnaire to assess the practice of prevention of stroke among hypertensive patients.

Adequate practices >75%

Moderate practices 51- 75%

InAdequate practices <50%

Total 10 checklist self - structured questions each question carries '1' mark, wrong answer carries '0' mark. The total score is 10 .
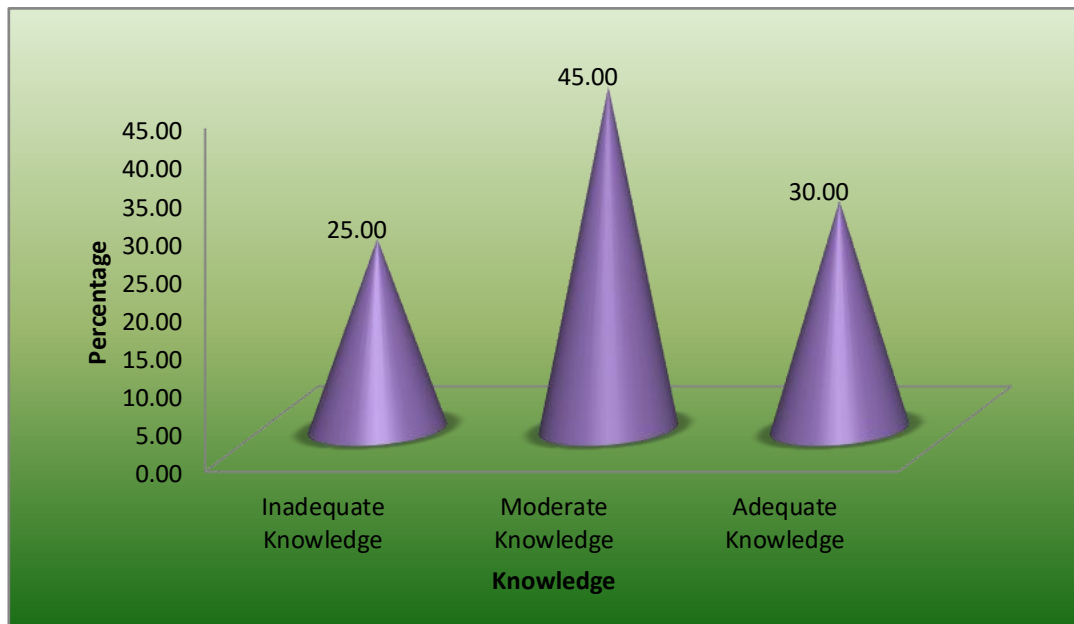
OBJECTIVE-1

- To assess the knowledge on Prevention of cerebro vascular accident among Hypertensive patients at selected villages, Aragonda.

TABLE -4.2

Level of Knowledge	frequency	percentage
Inadequate	15	25
Moderate	27	45
Adequate	18	30

It clearly states that among 60 samples 25 percentage population having inadequate knowledge and 45 percentage having moderate knowledge and 30 percentage having adequate knowledge.
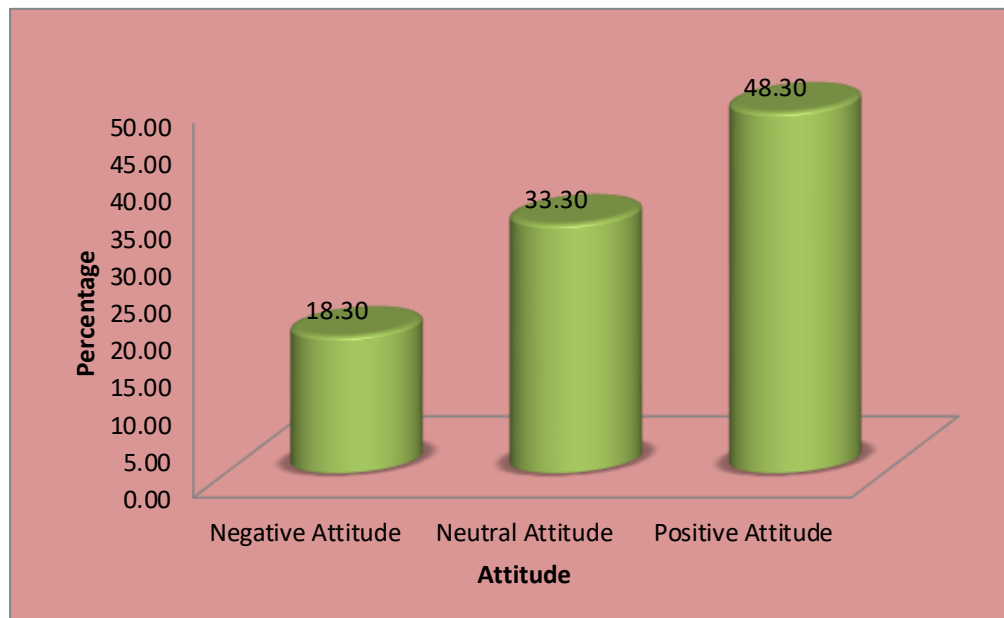
In spite of government programmes and mass media giving awareness still 25 percentage of hypertensive clients are having inadequate knowledge regarding CVA prevention. This clearly states that necessary steps should be taken to improve the knowledge regarding prevention of CVA among hypertensive clients.

OBJECTIVE -2

- To assess the Attitude on Prevention of cerebrovascular accident among Hypertensive patients at selected villages, Aragonda.

TABLE- 4.3

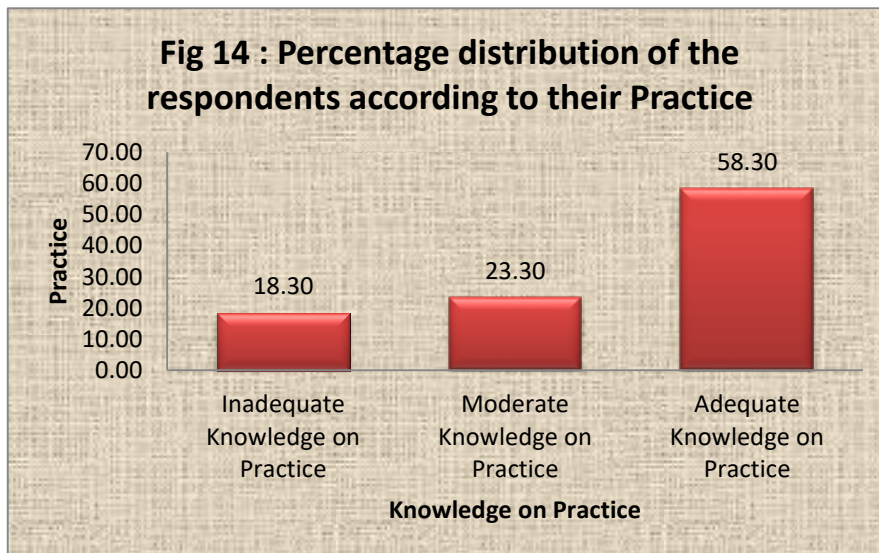| Level of Attitude	Frequency	Percentage
Negative Attitude	11	18.30
Neutral Attitude	20	33.30
Positive Attitude	29	48.30

It clearly states that among 60 samples 18.30 percentage population having negative attitude and 33.30 percentage neutral attitude and 48.30 percentage having positive attitude. Hence there is a need to conduct organizational programmes to improve their attitude levels on cerebro vascular accident among hypertensive clients at selected villages.

OBJECTIVE -3

- To assess the practice on Prevention of cerebrovascular accident among Hypertensive patients at selected villages, Aragonda.

TABLE- 4.4

Level of Practice	Frequency	Percentage
Adequate Practice	35	58.30
Moderate Practice	14	23.30
Inadequate Practice	11	18.30

Fig 14 : Percentage distribution of the respondents according to their Practice

It clearly states that among 60 samples 58.30 percentage population adequate practice and 23.30 percentage moderate practices and 18.30 percentage having inadequate practices. And there is a need create awareness on cerebro vascular accident among hypertensive clients at selected villages.

OBJECTIVE -4

- To find out the association between knowledge on Prevention of cerebrovascular accident among Hypertensive patients with their selected demographic variables.

TABLE- 4.5

The study revealed that age, sex, educational status and income per month are highly significant at $p<0.01$ level and Religion, type of family, occupation, place of residence, marital status, Do you heard about stroke and if yes, source of information were Not found to be statistically significant association with level of knowledge.

OBJECTIVE -5

- To find out the association between attitude on Prevention of cerebrovascular accident among Hypertensive patients with their selected demographic variables.

TABLE- 4.6

The study revealed that age, educational status and income per month are highly significant at $p<0.01$, place of residence are statistically significant and other variables like sex, religion, type of family, occupation, marital status, do you heard about stroke and if yes, source of information were Not found to be statistically significant association with level of attitude

OBJECTIVE -6

- To find out the association between practice on Prevention of cerebrovascular accident among Hypertensive patients with their selected demographic variable

TABLE- 4.7

The study revealed that age is highly significant at $p<0.01$ Level. Sex and Income per month are statistically significant at $p<0.05$ Level and other variables such as religion, type of family, occupation , educational status, place of residence, marital status, Do you heard about stroke, If yes, source of information were Not found to be statistically significant association with level of practices.

CONCLUSION

The study findings concluded that majority of people who had moderate level of knowledge on regarding prevention of cerebrovascular accident .Hence it emphasized to continue with educational programmes . The health institution involves needs to come up with better strategies to deal with these barriers to improve the awareness regarding prevention of cerebrovascular accident.

IMPLICATIONS : The implications drawn for the present study are vital concern to health care team , including nursing practice , nursing education , nursing research .

NURSING PRACTICE : The present health care delivery system gives emphasis on comprehensive health care ,which includes preventive, curative and rehabilitative care .

NURSING EDUCATION

- The nursing curriculum can be strengthened by adding proper education on awareness regarding prevention of cerebrovascular accident.
- Give an awareness programme to promote the uptake of prevention of cerebrovascular accident.

NURSING ADMINISTRATION

- Efforts should be directed towards establishing national community - based programmes which comprises educational components that focus on elevating the level of awareness among hypertensive clients .

NURSING RESEARCH

- Future research should focus on exploring experiences with follow up care and treatment as well as perspectives from health authorities and professionals about barriers in the early detection and treatment process .
- Research studies can be conducted on each area of prevention of cerebrovascular accident.to identify the knowledge , attitude and practices in that aspect .

- The nurses should focus on exploring experiences with follow up and treatment associated as well as perspectives from health authorities and professionals about barriers in the early detection and treatment.

LIMITATIONS

- The study is limited to paimagham village ,Aragonda

RECOMMENDATIONS

On the basis of findings the following recommendations have been made for further study .

- Similar study can be done among nurses and students
- A structured teaching programme can be conducted on the same sample on a large sample that helps to draw more defInite conclusion and make generalization
- A comparative study can be conducted to assess the knowledge , attitude and practices on prevention of cerebrovascular accident.
- Conducting health educational campaigns to implement feasible and cost -effective programmes

REFERENCES:

- Alhowaymel, F. M., Abdelmalik, M. A., Mohammed, A. M., Mohamaed, M. O., & Alenezi, A. (2023). Knowledge, Attitudes, and Practices of Hypertensive Patients Towards Stroke Prevention Among Rural Population in Saudi Arabia: A Cross-Sectional Study. SAGE open nursing.
- Melak, A. D., Wondimsigegn, D., & Kifle, Z. D. (2021). A Systematic Review-Knowledge, Prevention ,Practice and Associated Factors of Stroke Among Hypertensive and Diabetic Patients . Risk management and healthcare policy.
- Arisegi, S. A., Awosan, M. O., Sabir, A. A., & Ibrahim, M. T. (2018). Knowledge and practices related to stroke prevention among Hypertensive and Diabetic patients arriving Specialist Hospital,Nigeria. The Pan African medical journal, 29, 63.
- Nepal, G. M., , Chand, P., , Poudel, K., , & Acharya, S. R., 2022. Knowledge of Stroke among Hypertensive Patients in Dhulikhel. Kathmandu University medical journal
- Tibebu, N.., Tiruneh, C. M., Nigat, A. B., Abate, M. W., & Demelash, A. T. (2021). Knowledge on Prevention of Stroke and Its Associated Factors Among Hypertensive Patients at Tabor General Hospital: it is an Institution-Based Cross-Sectional Study. Risk management and healthcare policy,
- Woldetsadik, T. Bilchut, W. H., Kibret, A. K., Guadie, Y. G., & Eriku, G. A. (2022). Stroke Related Knowledge,Prevention Practices and Associated Factors Among Hypertensive Patients at University of Gondar Comprehensive Specialized Hospital, Northwest Ethiopia. Frontiers in neurology,.

- .Fang, X. H., Kronmal, R. A, Li, S. C, Longstreth, W. T., Jr, Cheng, X. M., Wang, W. Z., Wu, S., Du, X. L., & Siscovick, D. (1999). Prevention of stroke in urban China: a community-based intervention trial. Stroke, 30(3), 495–501.

- Setyopranoto, I., Upoyo,. S., Isworo., Sari, Y., & Vidyanti, A. N. 2022. Awareness of Being at Risk of Stroke and Its Determinant Factors among Hypertensive Patients in Banyumas, Indonesia. Stroke research and treatment, 2022, 4891134

- Ralapanawa, U., Bopeththa, K., Wickramasurendra, N., & Tennakoon, S.2020. Hypertension Knowledge, Attitude, and Practice in Adult Hypertensive Patients at a Tertiary Care Hospital in Sri Lanka. International journal of hypertension, 2020,

- Dar, N. Z., Khan, S. A., Ahmad, A., & Maqsood, S. 2019. Awareness of Stroke and Health-seeking Practices among Hypertensive Patients in a Tertiary Care Hospital: A Cross-sectional Survey. Cureus, 11

- Hypertensive Patients Knowledge on Risk Factors and Warning Signs of Stroke at Felege Referral Hospital, Northwest Ethiopia: A Cross-Sectional Study. Neurology research international, 2019,

- Thapa, L., Sharma, N., Poudel, R. S., Bhandari, T. R., Bhagat, R., Shrestha, A., Shrestha, S., Khatiwada, D., & Caplan, L. R. (2016). Knowledge, attitude, and practice of stroke among high school students in Nepal. Journal of neurosciences in rural practice

- Yang, J., Zhang, J., Ou,., Wang, N., & Wang, J. (2015). Knowledge of Community General Practitioners and Nurses on Pre-Hospital Stroke Prevention and Treatment in Chongqing, China. Plo one,