



Effectiveness of an awareness Programme on knowledge regarding early recognition of stroke among General Public: Moradabad

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Abstract

Introduction: Stroke is an emergency medical condition which requires immediate attention and definitive care for survival and better outcome. The main task in stroke treatment is the early recognition of stroke symptoms. A study was conducted among the general public in community, Moradabad using a questionnaire regarding the knowledge of signs and symptoms of stroke.

Result: Six studies which is included in this narrative review is published between 2008-2016. One study findings suggest the significant increase in awareness up to 67% to 83% and other study revealed a significant increase in pre test (42%) and post test score (65%) of knowledge. One study revealed a difference in percentage a knowledge regarding recognition of symptoms like facial droop 92% to 95% and arm weakness or numbness i.e. 86% to 97%. And all the rest of the study is showing that there was increased level of knowledge and awareness programme that reduced pre hospitalization delays for stroke and have contributed to the improvement seen among participants.

Conclusion: Awareness programme aimed at the public may raise awareness of stroke symptoms. But in general, level of knowledge about recognizing and preventing stroke were poor.

Keywords: stroke, cva, awareness programme, educational programme, symptoms, warning signs, general public/population

Introduction

Stroke is a significant public health issue ability to recognize early signs had to prompt hospitalization that can decrease the morbidity and mortality. Developing countries like India are facing a dual burden of communicable and non-communicable disease. Stroke is one of the major causes of death and disability in India.

Stroke is one of the most common neurological disorders in clinical practice. Due to lack of awareness people are not able to recognize early symptoms that will lead to delay hospitalization and poor recovery.

In this study, study aim to evaluate the knowledge regarding signs and symptoms of stroke in general public before and after intervention analyzing the effectiveness that would be more benefited by awareness programme.

Need for the study

Stroke is one of the leading cause of adults disability and deaths in India. The prevalence rate of stroke in 84-262 in rural and 334-424 per 100,000 population in urban area. This estimation represents considerable above burden to the community. Early recognition of signs and symptoms can lead to prompt admission to the hospital that can reduce the death and disability among general public in community. Hence the researcher felt to the need to improve awareness regarding early recognition of signs and symptoms of stroke among general public. According to WHO, It is the second commonest cause of death worldwide. It is projected that deaths due to stroke will rise to 6.5 million by 2020.

Aim

The aim of this review is to find the research evidences of the effectiveness of stroke awareness programme among the general public.

Objective

To systematically assess the clinical effectiveness of awareness programme on knowledge regarding early recognition of stroke among general public: Moradabad.

Methodology

Search Methodology

An electronic search of articles published in various journals till 2017 (December) was conducted. Search was restricted to only English language. The database search done was PubMed, EBSCO-host, Microsoft Academics and Elsevier's Science-Direct. Articles containing following key search terms were retrieve.

Search Strategy

stroke"[MeSH Terms] OR Cerebrovascular accident[Text Word]"awareness"[MeSH Terms] AND awareness[Text Word]programme[All Fields]"education"[Subheading] OR "educational status"[MeSH Terms] OR "education"[MeSH Terms] OR education[Text Word] AND general[All Fields]public[All Fields]" population"[MeSH Terms] OR "population groups"[MeSH Terms] OR population[Text Word]" AND review"[Publication Type] OR "review literature as topic"[MeSH Terms] OR "review"[All Fields].

Type of studies

True-Experimental studies, Quantitative, pre-experimental design “Pre-test, posttest with one group”, Quasi-Experimental studies.

Type of participant

General public (Hospital, Community, University) age above 16 years.

Setting: Community- Urban and Rural set up.

Delivery of intervention

All participants who belong to interventional group were received intervention that enhanced their level of knowledge by providing awareness programme through self-instructional module, FAST Campaigns, Multimedia advertisements and other educational strategies.

Outcome

The outcome of this narrative review suggests that there is an effectiveness of awareness programme and it plays an important role in early recognition of sign and symptoms of stroke.

Results

Six studies which is included in this narrative review is published between 2008-2016. One study findings suggest the significant increase in awareness up to 67% to 83% and other study revealed a significant increase in pre test (42%) and post test score (65%) of knowledge. One study revealed a difference in percentage a knowledge regarding recognition of symptoms like facial droop 92% to 95% and arm weakness or numbness i.e 86% to 97%. And all the rest of the study is showing that there was increased level of knowledge and awareness programme that reduced pre hospitalization delays for stroke and have contributed to the improvement seen among participants.

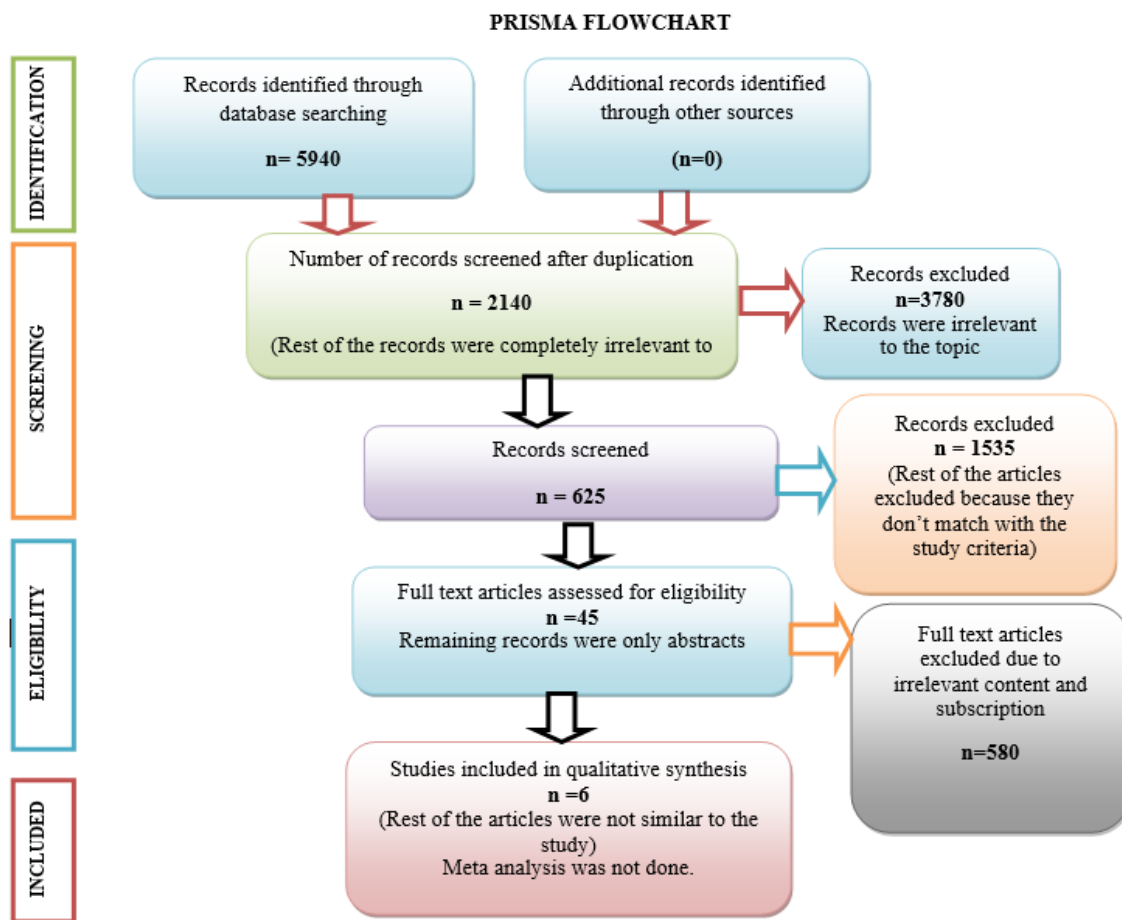


Fig 1

Table 1

Sl No. & Author	Source & title	Country	Variables	Instruments	Sample & sampling Technique	Design	Findings	Conclusion
1).Crystelle C. Fogle, et .al.,2008	Public Education Strategies to Increase Awareness of Stroke Warning Signs and the Need to Call 911.	Missoula County	Educational Strategies	Questionnaire	3477, sequential random-digit-dial telephone surveys.	True Experimental study	The finding of this study suggested Significant increase in awareness of two or more warning signs for stroke from baseline to follow-up (67% to 83%). Awareness increased considerably to 80%, P < .001) and among both men and	There was a statistically significant increase within the proportion of respondents who recalled seeing or hearing television advertisements regarding stroke (35% to 80%, P < .001) and radio advertisements

							women and younger and older respondents. Study findings recommend that high-intensity public education campaign will increase community awareness of the warning signs for stroke and therefore the must decision to call 911.	(14% to 28%). statistically significant increase within the mean number of correctly identified warning signs for stroke among respondents from baseline to follow-up
2). Hilary K. Wall et.al.,2008	Addressing Stroke Signs and Symptoms Through Public Education: The Stroke Heroes Act FAST Campaign	Massachusetts	The Stroke Heroes Act FAST Campaign	A closed - administered questionnaire	75, Convenient sampling technique	Quasi-Experimental study	The findings of this study showed education concerning signs and symptoms of stroke and took the pretests and posttests to assess knowledge change instantly after the education session. significant increases were seen in the percentage of participants who recognized that facial droop (92% vs 99%, P = .02) and arm weakness or numbness (86% vs 97%, P = .004) were symptoms of stroke.	The Stroke Heroes Act FAST kit could also be a useful tool for improving knowledge of stroke signs and symptoms among adults.
3). Mindy Bell et. al., 2009	Improved Recognition of Heart Attack and Stroke Symptoms After a Community Based Intervention for Older Adults, Georgia.	Georgia	Community Based Education intervention	Self -designed questionnaire	693, Convenient sampling technique	Quasi Experimental study	The study findings revealed that recognition of all five symptoms of stroke increased from 42% at the pretest to 65% at the posttest (for both conditions, P < .001). In linear regression analyses, independent positive predictors of change in knowledge were younger age and higher education.	The results of this evaluation provide an evidence base for the effectiveness of this intervention in improving knowledge about heart attack and stroke symptoms, which may translate to greater preparedness in these older adults for response to cardiovascular events.
4). Lih-Lian Hwang et.al.,2010	Changes in Stroke Awareness among Undergraduate Students after an Educational Intervention.	Taiwan	Educational Intervention	Closed-ended Questionnaire	140, Convenient sampling technique	Quasi Experimental study	The findings of this study showed that after the intervention, the mean scores of first post-test and second post-test were all significant higher than that of pretest in both groups (P < 0.01). This data recommend that education intervention was effective even after twelve weeks later.	The intervention improved awareness among participants' knowledge towards stroke, even twelve weeks later. Participants obtained higher scores with a close-ended questionnaire than those with an open-ended questionnaire. However, the intervention effects faded with time.
5). Janet E. Bray et. al.,2013	Australian public awareness of stroke warning signs improves after National multimedia campaigns.	Australia	National multimedia campaigns Advertisements	Questionnaire	12439, randomly selected	True Experimental study	The findings of this study comparable with international population based study reporting awareness of stroke warning signs and demographic factors associated with lower awareness of warning signs. Awareness of stroke advertising increased 31%-50% between 2004 and 2010 as did the unprompted recall of most common signs of stroke.	These campaigns were reduced pre hospitalization delays for stroke and were contributed to the improvement seen in Australian thrombosis rates in recent years.
6) Disha Thakur,2016	A Study to Assess Effectiveness of	India	Self-Instructional	Structured Questionnaire	50, Convenient sampling	Quasi Experimental	Analysis data shows that post -test	Based on the statistical findings it is evident

	Self-Instructional Module on Knowledge Regarding Prevention of Stroke among School Teachers in Selected Schools of Vapi.		Module		technique	study (Quantitative, pre-experimental design "Pre-test, posttest with one group")	knowledge score is significantly higher than the pretest knowledge score at p < 0.05 level of significance i.e., mean difference is 13.18. There is a significant improvement in knowledge of adults regarding prevention of stroke (tvalue-1.8). In study knowledge and association of demographic variable is only with the education and subjects taught by the teacher has significant.	that provision of such kind of self instructional module will motivate to school teachers and help them to acquire knowledge
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Summary of findings

Research studies supported that stroke awareness programme is helpful in early recognition and prevention of stroke that increase awareness among general public that reduces delay in treatment. Early recognition of sign and symptoms of stroke is key to maximizing the potential for medical intervention and more favorable stroke outcomes- the "time is brain" imperative.

Six studies which are included in this narrative review is published between 2008 - 2016. One study findings suggested the significant increase in awareness up to 67% to 83%. And other study revealed a significant increase in pre test (42%) and post test score (65%) of knowledge. One study revealed a difference in percentage of knowledge regarding recognition of symptoms like facial droop 92%-95% and arm weakness or numbness i.e. 86% to 97%. And all the rest of the studies are showing that there was increased level of knowledge that reduced pre hospitalization delays for stroke and have contributed to the improvement seen among participants.

Importance in Education

Incidences of stroke values were higher than of high income countries. Studies on stroke and better preventive measures against stroke and better rehabilitation measures for stroke related disabilities in the country. Stroke awareness is important for prevention and decrease the amount of incidents. Awareness regarding FAST (Face drooping, Arm weakness, Speech difficulty, Time to call 108). If anyone experiences any of the symptoms listed above, it is recommended they call 108 immediately. Many times people are not familiar to these signs and ignore the symptoms, further it will cause permanent impairments leading to disabilities.

Future Significance

- Stroke awareness program will promote early recognition and prompt action.
- Stroke awareness program will help to prevent stroke.
- Greater awareness of signs and symptoms need to improve survival and quality of life after stroke.
- Helps to minimize the burden of community.
- It will help in prevention from stroke and its complications too.

Limitations

- Computerized data bases were limited.

Strength

- Article search was carried out on a significant problem.
- Reviews emphasized the effectiveness of stroke awareness programme among general public.

Weakness

- Article mainly focuses on only knowledge regarding stroke awareness.
- Only 6 quantitative articles were included for data synthesis due to limitations.

Conclusion

In conclusion, studies had shown increases in symptom awareness and awareness of need for emergency response. Early recognition of signs and symptoms of stroke is key to maximizing the potential; for medical intervention and more favorable stroke outcomes the "time is brain" imperative. People belongs to lower educational level had insufficient knowledge about stroke warning signs and Knowledge was significantly greater in younger participants and a high level of education.

The overall awareness of the study population regarding stroke was shown to be inadequate by these studies.

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- Hilary k. Wall *et. al.*
- Mindly Bell *et.al.*
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- Janet E. Bray *et. al.*
- Disha Thakur.

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