Stroke awareness among primary healthcare attendants in Abha, southwestern Saudi Arabia

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BACKGROUND

Awareness about stroke warning signs, risk factors and proper response could improve the outcome and minimize the burden of stroke.

OBJECTIVE

To examine the awareness of major stroke symptoms, risk factors and response among the population in Abha , Saudi Arabia.

METHOD

A cross sectional study involved 1472 adult subjects. The sample was stratified by the primary healthcare centers (PHCCs) to represent the composition of Abha City’ PHCCs adult attendants. Consecutive persons attending PHCCs on selected days during the study period were invited to participate. A validated questionnaire was used to evaluate the participant’s awareness about stroke. Multivariable logistic regression was used to assess factors associated with awareness of stroke symptoms, major stroke risk factors and response.

RESULTS

Only 936 (63.6%) and (43.7%) correctly recognized thrombosis and hemorrhage, respectively, as types of stroke. Commonly identified risk factors were hypertension (55.8%) followed by dyslipidemia (45.8%) and smoking (41.8%)(figure 1).

Figure1. Percentage of correctly identified stroke risk factors

- Most frequently recognized stroke symptoms were sudden headache (54.1%), dizziness (51.0%) and difficulty in speaking (44.3%) (figure 2).

Figure2. Percentage of correctly identified stroke Symptoms

- The most frequently reported correct responses were contacting a doctor (73.0%), going to the hospital (67.2%) and calling an ambulance (52.4%). Improper response to stroke (ignoring the condition and/or self-prescribing medications) was mentioned by 18.8% .
- In multivariable logistic regression, females (aOR=1.70, 95%CI: 1.29-2.25), married and older persons were significantly more prone to have insufficient knowledge of proper response (table 1).

Table1. multivariate analysis of potential determinants of insufficient knowledge of proper response to stroke attack

Variables	Knowledge of Proper Response		aOR(95% CI)
	Yes No.(%)	NO No.(%)	
Gender			
Male	831(69.5)	160(57.8)	Ref.
Female	364(30.5)	117(42.2)	1.70 (1.29-2.25)
Education			
<secondary	185(15.5)	58(20.9)	Ref.
≥secondary	1010(84.5)	219(79.1)	0.94(0.64 - 1.38)
Age (years)			
<40	885(74.1)	162(58.5)	Ref.
≥40	310(25.9)	115(41.5)	1.84(1.32-2.55)
Marital status			
Single	537(44.9)	89(32.1)	Ref.
Married	658(55.1)	188(67.9)	1.36 (1.01-1.85)

aOR = Adjusted Odds Ratio for other studied variables, (95% CI) = 95% Confidence Interval. Bold 95% CIs are statistically significant.

CONCLUSION

Worrying deficit of knowledge about stroke warning symptoms, risk factors and proper response is detected. Health education strategies to improve stroke awareness are urgently required and could potentially prevent and improve outcome of stroke.

Acknowledgments: This study was supported by a grant from King Abdel Aziz City for Science and Technology, SaudiArabia