AWARD FOR SHARED HIGHEST SCORE DURING THE ABSTRACT REVISION PROCESS FOR ORIGINAL RESEARCH, 3RD PLACE:

05. **THE STROKE RISKOMETER APP AS AN EDUCATIONAL CAMPAIGN IN OUTPATIENT CLINICS AND ITS ASSOCIATION WITH KNOWLEDGE OF STROKE WARNING SIGNS**

Diego Alejandro Ortega-Moreno[1], Fernando Tienda-López[2], David Loaiza-Pérez[2], Fernando Chávez-Ríos[1], Samantha Salinas-Rodríguez[3], Egla Samantha Sánchez-Peralta[1], Ana Laura de León-Pérez[1], Diego Oyervides-Recio[2], Arely Rodríguez-Salazar[3], Emmanuel Navarrete Juárez[4], Fernando Góngora-Rivera[5].

[1] Sixth-year Medical Student. Universidad Autónoma de Nuevo León, Monterrey, México.

[2] Fourth-year Medical Student. Universidad Autónoma de Nuevo León, Monterrey, México.

[3] Third-year Medical Student. Universidad Autónoma de Nuevo León, Monterrey, México.

[4] Fifth-year Medical Student. Universidad Autónoma de Nuevo León, Monterrey, México.

[5] Neurologist, professor and level 2 researcher of the national system of researchers in Mexico. "Dr. José Eleuterio González" University Hospital, Universidad Autónoma de Nuevo León, Monterrey, México.

https://www.youtube.com/watch?v=vIsNiqV1-28&t=23318s

BACKGROUND: Stroke is highly prevalent worldwide; however, the associated symptoms and risk factors are commonly unknown among the general population. No study has been carried out in the Mexican population about the risk of stroke and knowledge of warning signs. **AIM**: Describe the knowledge of early signs of stroke and their association with the risk of cerebral infarction at 5 and 10 years using the American Stroke Association validated application "Stroke Riskometer." **METHODS**: Observational, descriptive, cross-sectional study including adult outpatients from the Neurology department at "Dr. José Eleuterio González" University Hospital. Anthropometric measurements and vital signs were taken, and the "Stroke Riskometer" was used to calculate the stroke risk at 5 and 10 years. Early signs of stroke were assessed, with emphasis on the acronym "CAMALEON", a mnemonic that includes the three main early signs of Stroke in Spanish. Descriptive statistics were performed. For inferential statistics, Chi-Square test for categorical variables, Mann-Whitney U and Kruskal-Wallis for numerical variables, Spearman correlation for numerical and ordinal variables were conducted, considering significance at $p<0.05$, using SPSSv25 for statistical analysis. **RESULTS**: Total of 200 individuals were included; 142 (71%) were women; with an average age of 54.72 ($\pm$14.63) years. The most prevalent stroke risk factors were sedentary lifestyle (54%), high blood pressure (41%), and diabetes mellitus (32%). 72.5% were unaware of any early signs of stroke, 10.5% knew 1 sign, 6% knew 2 signs, and 11% knew 3 signs. "Facial Weakness" was the most recognized sign (19.5%), followed by "Arm Weakness" (16%) and "Speech Disturbance" (15.5%). A weak correlation was found between knowledge of early signs and 5 or 10-year risk ($r=0.14$, $p=0.048$; $r=0.138$, $p=0.051$, respectively). There is a significant difference between knowledge of early signs and educational level ($p=0.004$), with higher knowledge in higher education. A difference was observed between male and female genders and 5 and 10-year risk (Median 5.3 vs 3.6, $p=0.007$ and Median 11 vs 5.4, $p=<0.001$, respectively). Additionally, a significant difference was found between current occupation and 5 and 10-year stroke risk ($p=<0.001$). Post-hoc analysis and percentage risk analysis found significant differences between students and other occupations. There is an increase in stroke risk as an individual's life decade advances. **CONCLUSION**: Awareness of stroke warning signs is low, remaining an unfinished goal despite educational campaigns in Mexico. A national, massive, and ongoing campaign for the population is necessary.

Table. Population characteristics.

Characteristics	N= 200
Female gender (%)	142 (71)
Age (SD)	54.73 ($\pm$14.63)
Height in cm (SD)	160.9 ($\pm$8.5)
Weight in kg (SD)	77 ($\pm$16.46)
BMI (SD)	29.66 ($\pm$6.06)
WHR (SD)	0.95 ($\pm$0.12)
Stroke Risk Factors	
Alcohol intake (%)	48 (24)
Smoking (%)	30 (15)
High Blood Pressure (%)	82 (41)
Sedentary lifestyle (%)	108 (54)
Diabetes Mellitus (%)	64 (32)
Traumatic brain injury (%)	62 (31)
Antecedent of parents with Stroke or Acute Miocardial Infarction (%)	50 (25)
Stroke history (%)	16 (8)
CAMALEON knowledge	
Facial weakness (%)	39 (19.5)
Arm weakness (%)	32 (16)
Speech disturbance (%)	31 (15.5)
Knowledge of another sign (%)	9 (4.5)

Key words: Stroke; Primary Prevention; Mobile Applications; Risk Factors (Source: MeSH-NLM).