Country: Mexico

Titel of the project: Evidence prior to public policies of early detection of AF and prevention of CVD in Mexico

Project details

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Award amount: €100,000

Evidence about the impact of AF and CVD will be generated and integrated in the health sector and in the general population to promote its inclusion among the national priorities. Moreover, a strategy of low-cost early detection in the first level of care will be evaluated for the implementation of preventive public policies

The most cost-effective strategy in order to reduce mortality and disability associated with Cerebrovascular Disease (CVD) is the implementation of a public policy whose aim is the detection and early treatment of Atrial Fibrillation (AF) in the first level of care. For this reason, decision makers must be aware of the impact of AF and of the evidence about the effectiveness of a detection strategy, which is evidently lacking in our country.Our proposal intends to cover these aspects by integrating the following 4 sub-projects: 1.Mortality from CVD in Mexico 1979-2009: Based on the information about mortality (death certificates) at the national level, an analysis of the impact of CVD and AF will be evaluated in relation to mortality in adults over the age of 30. 2. Estimation of the Total Prevalence of AF (clinical and subclinical). This component is crucial given that a proportion of patients with AF start off as asymptomatic and the clinical records underestimate the actual magnitude. Electrocardiograms (ECG) will be evaluated that, by protocol, are taken during all admissions at referral hospitals in the city of Mexico that receive patients with a huge variety of pathologies. This will enable an estimation of the prevalence in the general population. 1500 patients (outpatients and hospitalized patients) over 65 years of age admitted to the hospital during 2009-2010 will be selected at random and, after standardized reading of the ECG and review of the files, the prevalence of AF will be estimated and the associated risk factors evaluated. 3. Incidence Estimation. This is a key element in estimating the actual impact of a disease and in making future projections; data will be analyzed from a prospective study that was initiated by our group in 1989 on 2200 adults over 35 years of age and successful follow-ups over more than 20 years (over 80%) with evaluations in 1993, 1996 and 2008. In all the evaluations, an ECG was taken and compared with socio-demographic, clinical and laboratory information to estimate the incidences and evaluate the applicability of the Framingham risk score for AF in our population. Interpretation of the ECGs is pending. 4. Validation of low-cost AF diagnosis algorithm in the first level of care. In studies performed in the United Kingdom, it has been concluded that the identification of an irregular pulse has a sensitivity of 90% and a specificity of 70% for the diagnosis of AF. That considered, we will perform a study in order to evaluate the validity and associated costs of an algorithm for the early detection of AF for risk groups in the first level of care. 5 clinics will be selected and the nursing staff will be standardized in the identification of irregular pulses and the medical staff will be standardized in the interpretation of ECGs. At least 1000 older adults will be included, taking advantage of the influenza vaccination campaign during the 2011-2012 winter season. The sensitivity, specificity and predictive values of the strategy will be evaluated. These 4 components will be broadly disclosed and presented to the decision makers for the implementation of public health prevention policies.

Audience

Type

- AF Patients
- Healthcare professionals
- Stakeholders

Location

Mexico, North America