

LETTER TO THE EDITOR

OUR STATISTICS: "WHAT THE WIND LEFT US!"**NUESTRAS ESTADÍSTICAS: "¡LO QUE EL VIENTO NOS DEJÓ!"**

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To the Editor:

We read with particular interest the response of Morales Salinas et al.¹ and we see fit to write a new reflection.

The comment made by the authors on the crucial point of our previous letter called greatly our attention: the treatment of the age variable as an inclusion criterion for the study, which was selected in that way and not in any other, so that it would allow the realization of future publications that facilitate international comparison through a population registry². Then, one would have to wonder if international recognition is more important than the knowledge of our own statis-

tics. This "sacrifice" of not including more than 40% of the universe of patients with acute myocardial infarction in the study sample, introduces an unnecessary bias that will prevent us from fully knowing the treatment of acute myocardial infarction (AMI) in our environment and will keep us from obtaining, through consistent statistics, solid arguments that allow us, for example, to convince the appropriate government institutions to include another fibrinolytic agent in the therapeutic arsenal of this lethal disease^{1,2}.

The geographical features of Cuba - a long and narrow island- and the fact that it is densely populated, allow the existence of short distances from the place where the AMI occurs and hospitals, which is a motivation to enhance fibrinolytic therapy as a treatment option, precisely because it does not require a strictly cardiology staff for its implementation. Curiously, Villa Clara is one of the provinces where this geographic detail

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offers even better prospects^{3,4}. At the same time, our province is recognized as one of the best in the organization of care services for this disease, as it has a primary care level strengthened through four Cardiology Diploma courses that have been taught, an experienced secondary level, with hospitals that already have a verticalization of cardiological care for critical patients and Intensive Coronary Care Units. An outstanding example of this is "Arnaldo Milian Castro" Hospital which yearly admits two-thirds of all patients with AMI in the province, and a luxury tertiary care: Cardiocentro "Ernesto Che Guevara" which features the best surgical results of the country –statistics again– and an excellent hemodynamics service with a well-trained staff that is eager to make more each day. All this is coupled with the demographic detail of an aging population (Villa Clara is the province with the oldest population of the country) that was mentioned in the initial letter^{1,2,5}.

These reasons prompted Doctor Eliberto Torrado, principal investigator of ARIAM (for its acronym in Spanish, which stands for Analysis of Delays of Acute Myocardial Infarction) Registry in Spain, to tell us during his last visit to Villa Clara, in 2000, his interest to compare our province to Malaga, due to geographic and demographic similarities between the two territories, but unfortunately, his early and unexpected death deprived us of the initiation of this project.

The paradox of having highly qualified personnel for the treatment of AMI, in contrast to the known limitations imposed on us every day by the U.S. blockade, obliges us to work and research "against the wind" and often, we underestimate our own statistics, but they are: what the wind left us!

Today, we would like to recognize the courage and tenacity of those Cuban researchers that despite these adversities could describe our native Cuban hereditary ataxia, with figures of incidence and prevalence in the province of Holguín considered as the highest in the world,⁶ gather an unusually high casuistics of Brugada syndrome for the American continent,⁷ or simply place a modest medicine obtained from sugar cane, policosanol, at the same height in effectiveness to conventional lipid-lowering drugs to prevent coronary stent restenosis in patients undergoing percutaneous transluminal coronary angioplasty.⁸ In none of these cases they resigned to the truth of their statistics in order to facilitate international comparison. Their example for the Cuban medicine is worthy of emulation and thankfulness. "Don't keep forever on the public road

going only where others have gone".

Alexander Graham Bell.

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THE AUTHOR REPLY

To the Editor:

We consider necessary to make some reflections about the new letter of Rodríguez León et al.

I agree, and it was stated in my previous letter¹, that excluding approximately 40% of patients with acute myocardial infarction (AMI) treated in hospitals in Santa Clara limits the external validity of our modest hospital registry². This percentage seems to be unacceptable, but other studies have also had this limitation. For example, researchers of the prestigious ADHERE registry (Acute decompensated Heart Failure National Registry) excluded 30% of their cases in one of their works, as they did not have enough data³. This work, by the way, was published in the American Heart Journal, one of the cardiology journals with higher impact factor⁴.

One strength of our study is to have included 100% of Santa Clara patients diagnosed with AMI and treated at hospitals in this city, which allows a first approach to the conduct to be followed with AMI cases in these units².

I recognize that our study leaves many questions in the excluded age subgroups (<45 and > 74 years), which may be a reference point for the design of new research. However, we do not agree that "the treatment of the age variable" in this or in any other registry, is an argument "to convince the appropriate government institutions to include another fibrinolytic agent in the therapeutic arsenal of this lethal disease.

I also mentioned² that the hospital study is part of the first population-based AMI registry that is performed in Cuba, using the WHO MONICA methodology (Monitoring Trends and Determinants in Cardiovascular Disease Project), but in a partial form⁵.

AMI population-based registries are very complex and expensive studies, which is why almost all of them share the limitation of excluding the population over 74 years^{6,7}.

The limitations of my work² bring to mind the following phrase of two of REGICOR's principal investigators:

"... When the question arises: Is it better to have «any registry» obtained on a smaller scale ... than to refrain from performing any study, in case that the «ideal» described registry cannot be obtained?, the answer has to be another question: Does anyone have anything better? In the absence of an affirmative answer there is no other choice than to use the available information with appropriate reservations in terms of generalization ..."⁸

Finally, I appreciate the interest that Rodríguez León et al. –my ex-professors– have shown in our modest work and I encourage them to continue with the professional criticisms, making an emphasis in the residency period, as the population registry was precisely, the termination work of my cardiology specialty (2006-2009) in "Dr. Celestino Hernández Robau" Hospital.

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