



## EDITORIAL COMMENT

# Information and knowledge

# Informação e conhecimento

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This issue of the *Journal* sees the publication of a study by Rodrigues et al.<sup>1</sup> that aims to quantify the prevalence, awareness, treatment and control of hypertension and associated sociodemographic disparities in Portugal. The study is of considerable importance for the quantitative knowledge of this condition, an important risk factor in the etiology of cardiovascular and cerebrovascular disease.

Without adequate quantitative knowledge of the actual situation regarding a particular condition, it is very difficult to establish preventive strategies, whether primary, secondary or tertiary. But without subsequent monitoring and assessment, the effectiveness of these preventive strategies cannot be measured, which hinders informed decisions on whether they should be maintained, modified or discontinued.

At the same time, such studies should be carefully designed, implemented, and assessed using subgroups in order to analyze smaller elements of the overall population, focusing on those with higher or lower prevalence and/or risk.

Studies designed in this way enable comparisons to be drawn between regions, by taking into account the inevitable differences in structural and process indicators and thereby avoiding bias in the definition of outcome indicators. But the high non-response rate that is usually found

in population surveys must be taken into account and analyzed, preferably quantitatively, since this may be a major source of bias by introducing random systematic variability, due to self-selection in population response. The selection of criteria of positivity for the condition under study will also have an important effect.

Finally, it is becoming increasingly clear to both the general population and to the medical community that a vertical approach to the natural history of disease (risk factors leading to disease) is inadequate, and that causality is better seen as horizontal, with multiple factors and multiple comorbidities increasingly being integrated into health programs aimed at different levels of prevention. Future research should take this concept into account and longitudinal cohort studies, although more difficult to implement, should be the preferred approach. This will be a step forward in observational research into the natural history of disease.

## Conflicts of interest

The author has no conflicts of interest to declare.

## Reference

1. Rodrigues AP, Gaio V, Kislaya I, et al. Sociodemographic disparities in hypertension prevalence: results from the first Portuguese National Health Examination Survey. *Rev Port Cardiol.* 2019;38:547–55.

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