

Use of Antihypertensive Drugs in the Primary Care Level

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The article by Dr. Bernstein and Dr. Drake published in this issue of the *Revista* (1) is a valuable description of the reality of antihypertensive drug prescription in a group of patients with poor access to health care services in the primary care level (PCL), in which access to data is usually not possible. The opportunity to use an administrative database, such as that of the Programa Remediador (a national program that ensures the access to essential drugs for individuals whose health care system is exclusively public), may provide valuable data. The authors find a rate of arterial hypertension between 5.5% in the province of Jujuy, and 18.5% in the city of Buenos Aires. The rate of antihypertensive drug use found in this group of patients shows variability and a gradient per province.

All the primary information that reveals what the situation is in this population segment is a health priority, and it is welcome. The population receiving PCL is vulnerable because of poverty and other social determiners of diseases. The evidence on populations under this situation concludes that such factors determine gradients in the interest indicators. (2)

This is an example of advances –and inevitable limitations– of cardiovascular epidemiology in Argentina. (3) As any ecological correlation study, this one has biases. Among the challenges, it should be pointed out that these biases are maximized in those studies dealing with epidemiologic research, health care services, with quality, confidence, or effective data simultaneously, and in research on the database.

To make it simpler, gradients are explained in part by the population variables and their burden of risk, and they estimate the preventable fraction of the burden of disease. Argentine populations have differences in their burden of risk, with higher prevalence of cardiovascular risk factors in sectors with lower educational level, lower income, and more unsatisfied basic needs. (4, 5) General “hard” health indicators, such as life expectancy and mortality, or specific indicators of cardiovascular diseases, like estimations of years of life lost due to cardiovascular disease, (6) or epidemiological and demographic transition markers in the country, suggest regional gradients –in this case, among Argentine provinces.

Given a certain burden of disease, it is difficult to study and adjust the access to services and the determinants of service use. These variables, assessed through research of health services for many years (7) demonstrate that patients stratify in their use of the services. More recently, research on social health determinants has emphasized the importance of ef-

fective accessibility, (8) pointing out the continuum of situations to reduce health disparities.

It is expected to find variability of the use of services in an analysis based on the Programa Remediador. The variability is related to the determinants considered before. But it introduces the topic of medical behavior and patient determinants, and their determinants, in this particular case, prescriptive medical behavior. Prescriptive behavior is imbued by outpatient medical consultation. (9) The analyses on variability determine conditions that are sensible to the supply, and conditions that are sensible to the demand, as well as to the patients’ preferences. (10) It is at this point that a program like Remediador introduces interesting assessment peculiarities: by definition, it is a program that subsidizes and operates the drug supply. It is open to questions. For example, what factors determine that supply in the point of service? How does the Programa Remediador interact with other public subsidies? How much is demanded in pharmacies as substitute of health care? How do patients have access to the Programa Remediador? But this program is also applied to a population whose supply determinants have organizational, cultural, and geographical constraints that can affect supply and effective adherence to prescribed medication. For instance, there are patients who join Programa Remediador in search of drugs prescribed in the local reference hospital, others give up the service, etc. (11) For instance, in this study, the prevalence of hypertension by age is lower than the expected one in groups of older adults. This is a typical finding that requires bias in the dynamics of services used by the elderly in Remediador. The combination of causes for this phenomenon is complex. (12)

Finally, we must pay attention to health service and administrative databases. Being Remediador a program that promotes access to drugs in the primary care level through records and logistics in free drug provision at the point of service, it is –strictly speaking– a vertical subprogram in the PCL site, and therefore a sub-database. This is a peculiar situation from the organizational point of view; it was an opportunity to achieve generalization and outreach in this study, but it was difficult to manage in the research design. The situation is similar to that of the pharmacy database of a comprehensive health care system. In this case, the diagnostic record sheet acts as a link to the medication and the patient. Databases for medications of this kind have a number of biases, some of them salvable by database design. For exam-

ple, diagnostic underdetection bias, problems with secondary diagnoses, incomplete records, transaction errors, loss of patients during follow-up, etc. The situation varies whether electronic clinical record is used or not. (13) Some of them are discussed in this article.

The impact may have two meanings: impact on health and impact on program. It is usually recommended that the impact on the population health be measured with hard data about morbidity, mortality, and/or intermediary biological measures. For certain situations –and arterial hypertension is one of them–, the evidence on effectiveness and efficacy is so powerful that a definite impact can be predicted. If the impact –not on health but on service indicators– of certain program is emphasized, it is advisable to carry out some analyses, typically pre/post, or with control groups. It is important to highlight that access to effective and cost-effective drugs will surely impact on health, whether by reduction of intermediary or final end points. Through the present study, we can deduct, but we cannot prove.

To sum up, this study is a valuable contribution to understanding and improving secondary prevention in PCL in our country.

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