

## Published evidence and transformations in the management of diabetes

### La evidencia publicada y las transformaciones en el abordaje de la diabetes

Linari, María Amelia<sup>1</sup>

<sup>1</sup>Physician. Specialist in Nutrition. Master's Degree in Diabetes. Member of the Executive Committee of the Sociedad Argentina de Diabetes, Argentina. marimelina@yahoo.com

The purpose of these words is to reflect upon the article "Transformations in the management of diabetes: an analysis of the scientific evidence published by two scientific societies (1980–2010)" (1) published by *Salud Colectiva* in late 2013.

Without a doubt a growing process of medicalization can be observed, one that may lead to a dependence associated with scientific knowledge. When studying the chronic disease pandemic, this type of disease is usually included within the framework of risk epidemiology, which seeks to establish measures of individual risk within populations. Although it has been the dominant theory since the 1980s, an exclusive synonymy between chronic disease and risk epidemiology should not be established. If risk were incorporated into a critical and sociocultural epidemiology – in which health is looked at from a counter-hegemonic perspective – concrete scenarios would be created that could verify this situation in a broader way within a critical and reflexive format. Along with the history of disease, the history of epidemiological approaches has unfolded; the interpretation of the study of the history of disease in a dynamic and unfixed way is fundamental. Repeatedly, the practice of medicine across all levels of care is an art in which medical expertise plays a key role, and where sometimes the application of advanced technology to treat patients is required. This is the reason that it becomes crucial to understand in depth the factors that can be beneficial or harmful to health. Consolidating this knowledge, establishing its validity in everyday medical practice, is part of our professional role, given that science,

teaching and medical practice are three essential elements in constituting a united and harmonic system within our public health system. I agree that the articulation of different types of methodology raises different problems when it comes to understanding their implications for practice. I also consider that a great amount of scientific evidence is part of the biomedical reductionism, which is why the inclusion of a critical sociocultural epidemiology in our approach to health problems is pertinent to developing a more complete and complex vision about health phenomena.

I am currently a member of the Argentine Diabetes Society (SAD) [*Sociedad Argentina de Diabetes*], an organization undergoing continuous growth, training and development in which obstacles and challenges are not lacking. I was also a member of the team of authors that wrote some of the guidelines and recommendations published by SAD. I participated in some internal discussions, which are also part of scientific development and promote active participation as a social actor. It is not my intention to enter into concepts specifically related to diabetes, as Dr. Perner's (1) article, which has inspired this text, refers to evidence and aspects conducive to a broader, even phylo-anthropological reflection.

It is my desire to clarify that the scientific justifications in writing recommendations, guidelines and consensuses are taken not only from randomized clinical trials, but also from long-standing observational epidemiological studies as well as experts' knowledge and experience when it comes to their application and adaptation to regions of our country that present diverse cultural characteristics. These references and justifications have marked and continue to mark changes in the history of diabetes, in its definition and its therapeutic application. Through basic and clinical investigation, other types of diabetes have been discovered, for example: Latent Autoimmune Diabetes in Adult (LADA), Maturity Onset Diabetes of Young (MODY), and so on, in addition to the most frequent types known as DM1 (Diabetes Mellitus, type 1), DM2 (Diabetes Mellitus, type 2) or gestational diabetes. Knowledge of their existence becomes crucial, for example, when it comes to establishing the laboratory markers to be

investigated and the type of therapy that is contraindicated. Lack of knowledge of their existence and use could cause an earlier exhaustion of the pancreatic function in certain patients or expose them to acute collapse. In short, over time, the modification of the definition of diabetes is closely related not only to the type of etiology, but also to the type of therapeutic action that must be taken. It is important to highlight that in diabetes therapeutic conduct is not a synonym for pharmacological application, because depending on the type of disease or diabetes and on the period of time elapsed, many times it may only signal hygienic-dietary and education measures.

It is true that in Latin America and Argentina, the existing studies and references are too few to produce local indicators. It is for this very reason – and because Argentine technology is still immersed in a changeable and inexact framework of safety standards – that SAD does not allow the use of glycosylated hemoglobin as a diagnostic test (2) of the disease for any type of diabetes, age group or biological period, as is done in other countries. It is not a matter of ignoring the strength of the knowledge available about the risk or the importance of new techniques or groups of practices to prevent disease, but rather a matter of cautioning against exaggerations in their application and of highlighting their relationship with aspects of personal or non-medical benefit.

Although many colleagues and referential figures of chronic disease frequently use the term *pre-diabetes* for patients that manifest glycemia out of the range considered normal and out of the range considered diabetes (to many a way of making terminology more easily understood), SAD insists on using the terms *impaired glucose tolerance* or *impaired fasting blood glucose* according to the type of dysglycemia the patients manifest (2). It is not about lack of agreement, but about a specific point of view, an analysis and a reflection on the basis provided by other associations and the risk of stigmatizing patients with a condition that may not manifest itself, a condition considered treatable but not curable and that generates (unfortunately) differences and limitations in the patient's social environment. In 2012, (outside of the publication dates of the articles analyzed by Dr. Perner) the American Diabetes Association (ADA) and the European Association for the Study

of Diabetes (EASD) (3) published a new recommendation and position in their treatment guides. SAD shares and implements that position, in that the objectives of treatment and the conduct to be followed should not be focused on the glycemic objective but rather also the characteristics, conditions and history of each diabetes patient. This refers to the importance of a personalized medical conduct, which implies knowledge of the patient as a whole, where his/her social, economic and cultural situation is also taken into account. It is based on current scientific research, recommendations and consensus that our justifications for promoting changes to a provision set forth in 1989 and practically obsolete could be accepted (Act 23753 was replaced by Act 26914, which is still not regulated, which is why this act is not in force) (4,5). It is based on the guidelines and recommendations that we physicians who provide care can justify our claims regarding health care provision, whenever our requests for medical supplies are denied for patients with severe chronic conditions who do not have other therapeutic options and for whom certain treatments not recognized by the compulsory healthcare plan are contraindicated. Therefore, it is based on these recommendations that, when faced with extreme situations in which patients must take legal action and we are summoned to appear at hearings as witnesses, we can make use of tools that serve to set legal precedents.

I agree that the tendency towards medicalization and the influence of the pharmaceutical industry lead to many information sources and expert reports that exercise influence on the opinion, incorporation and application of therapies by other colleagues and promote dependence on new drugs or the permanent use of medicines that do not even present significant or sufficient results regarding the use and safety standards of such drugs. It is clear that this issue entails complex ethical-philosophical approaches that are beyond the scope of this reflection. Indeed, this is the reason why we must educate ourselves and others on the basis of honest and responsible scientific knowledge and its application, on the idea of not always treating patients pharmacologically and the importance of hygienic-dietary changes and education. It is the reason why it is important to educate ourselves and others in the reading and analysis of published scientific works, to search

for new publications other than those increasingly influenced by the pharmaceutical industry, and above all, to create spaces for independent research and publications.

## REFERENCES

1. Perner MS. Transformaciones en el abordaje de la diabetes: análisis de las evidencias científicas publicadas por dos sociedades científicas (1980-2010). *Salud Colectiva*. 2013;9(3):373-389.
2. Sociedad Argentina de Diabetes. Convergencias, divergencias, variabilidad, puntos de corte e indicación de la glucemia de ayuno, la hemoglobina glucosilada e insulinemia [Internet]. Jornadas Rioplatenses; 24-25 abr 2010; Colonia, República Oriental del Uruguay [cited 21 Jan 2014]. Available from: [http://www.diabetes.org.ar/docs/jornadas\\_rioplatenses\\_trabajo\\_final.pdf](http://www.diabetes.org.ar/docs/jornadas_rioplatenses_trabajo_final.pdf).

3. Inzucchi SE, Bergenstal RM, Buse JB, Diamant M, Ferrannini E, Nauck M, Peters AL, Tsapas A, Wender R, Matthews DR. Management of hyperglycemia in type 2 diabetes: a patient-centered approach: position statement of the American Diabetes Association (ADA) and the European Association for the Study of Diabetes (EASD). *Diabetes Care*. 2012;35(6):1364-1379.

4. Ministerio de Salud de la Nación. Ley 23753 [Internet]. 1989 [cited 21 Jan 2014]. Available from: <http://www.msal.gov.ar/ent/images/stories/insitucional/pdf/ley-nacional-de-diabetes-23753.pdf>.

5. Ministerio de Salud de la Nación. Ley 26914 [Internet]. 2013 [cited 21 Jan 2014]. Available from: <http://www.infoleg.gov.ar/infolegInternet/anexos/220000-224999/224327/norma.htm>.

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## Response to “Published evidence and transformations in the management of diabetes”

### Respuesta a la carta “La evidencia publicada y las transformaciones en el abordaje de la diabetes”

**Perner, Mónica Serena**<sup>1</sup>

<sup>1</sup>Physician. Specialist in Epidemiology. Researcher and professor, Universidad Nacional del Comahue, Consejo Nacional de Investigaciones Científicas y Técnicas, Argentina. [serenaperner@gmail.com](mailto:serenaperner@gmail.com)

Firstly, I would like to thank María Amelia Linari for her letter (1) as a member of the Executive Committee of the Argentine Diabetes Society (SAD) [*Sociedad Argentina de Diabetes*], one of the institutions referred to in the article of my authorship published in *Salud Colectiva* (2). This scientific association was selected as an indispensable actor in the construction of the knowledge required to manage such a complex issue as diabetes, given both its history and its

potential influence in health professionals involved in diabetes management. Therefore, I believe that it is of great priority to engage in conversations that can further the discussion.

In this sense, Emma Dominguez Alonso states:

Diabetes mellitus, particularly type 2, is a disease whose development and evolution are directly related to social factors. Unhealthy lifestyles, lack of indispensable knowledge for the prevention and adequate control of the disease, the inaccessibility of high-quality health care services, among others, favor the development of the disease and, at the same time, have a negative influence on the prognosis. The social origin of all of these conditioning factors classify diabetes mellitus, with ever increasing evidence, as a social disease. (3 p.305)

Different studies have analyzed the social determinants, showing, for instance, the impact that differences in body weight (as marker of the socioeconomic differences) have in the incidence of (4) and mortality due to type 2 diabetes (5).