



PUBLIC POLICIES OF NUTRITION AND DIABETES: SYSTEMIC INFLECTIONS

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ABSTRACT

The public policies in nutrition and diabetes must be adapted to treatments for (re) education of the Mexican population regarding the disease through preventive means and the construction of spaces that promote healthy lifestyles, autonomous conscious dietary consumption patient. Within these, and as a first contact, food and diet, which are the main determinants of the development of the disease, since they would generate a positive economic impact in the country, reducing health spending on treatments and making available the possibility of a real investment in health rather than disease, that is, investing in the population as generators of practical health directly on promotion and prevention. For the above, it is necessary then, a readjustment of health policies taking into account both quantitative and qualitative scientific evidence not only from the biological, but from the social, contextualization, regionalization, culture, ideology, traditions, uses and customs, positions that adjust the social practice of the disease and determines the attachment or not to treatments. That makes to public policies in health an inclusive social model which goes in a way ascendant.

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INTRODUCTION

Type 2 Diabetes Mellitus [DMT2] is a chronic degenerative disease of high socioeconomic impact, affected by the inefficient use of insulin and the lifestyle of the carrier population, mainly generated by social and genetic determination factors.

Biologically, DMT2 has been characterized as inefficient use of insulin. This type represents the majority of global cases and is largely due to excessive body weight, physical inactivity and mainly the type of diet (WHO, 2018). Socially, it is a disease of high economic impact, which has affected the world population for years, where costs, suffering, forgetting the community and chronicity, are elements that represent for the patient, his family, society and Governments, a great socio-economic and political weight (Guazo, 2016; CONEVAL, 2017).

On the one hand, the prevalence of DMT2 places Mexico in the first place with a percentage of 15.8% of the total population (OECD, 2017). During 2012, nationwide, mortality was reported with 1.5 million people as a direct result of diabetes and high blood glucose levels were the cause of another 2.2 million deaths, in 2014, the incidence was estimated in 8.5% of adults and, by 2016, mortality was estimated at 1.6 million, only in the central and metropolitan area and, declared as a national epidemic (ENSANUT MC, 2016; Guazo, 2016),

thus representing, the disease that generates the greatest biopsychosocial impact in the world, that is, with high repercussions on the well-being of psychological, economic, social health, among others (Lancet, 2016).

On the other hand, DMT2 has been tackled quantitatively in the biological aspects from membrane neutrinos to transplants, however, qualitatively, from the perspective of the collective, that is, from the perspective of social reality, the disease includes scientific oblivion and The disinterest of what the population "wants" to say and that are required for the implementation of appropriate treatments to the patient, for this reason, the political precepts in health that determine the praxis, do not contemplate the approach of the disease in all its spheres, but is limited and the full management of the disease is not widespread.

This situation, reveals the type of care provided to health in Mexico, being that, in previous reports, the largest expense in the history of Mexico has been made in terms of health by the DMT2 (INEGI, 2011). Due to the above, global goals are generated grouped into global objectives of international institutions (WHO, PAHO, IDF, ADA, FAO, OECD, etc.), which in turn are supported within the objectives of the 2030 agenda for sustainable development because of the global challenge that DMT2 represents in various areas.

In a macropolitical way, grouped into global goals, WHO and PAHO (2014), with the Global Plan of Action for the Prevention and Control of Noncommunicable Diseases 2013-2020, generally contemplate "promoting and protecting health through healthy eating, physical activity, reducing preventable

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mortality and morbidity, as well as reducing exposure to risk factors, increasing exposure to protective factors”, through the joint effort of governmental and non-governmental agencies in various areas based on research for better formulation and implementation of policies, which should be directed towards the national goals of each country and specifically developed. In Mexico, about the National Development Plan, as far as health is concerned, being described in the Sectorial Plan in Health and derived in the official Mexican standards and corresponding practice guides.

National political view

In the first place, and in a meso-political way, we find the magna Carta of the policies, the Political Constitution of the United Mexican States, which in article 4, third paragraph, states:

“Everyone has the right to nutritious, sufficient and quality food. The State will guarantee it.” (Artículo 4º)

Thus, food health becomes a right to which the population must have access with freedom and autonomy, but that this has been limited and conditioned by commercial and pseudoscientific commercial interests. Such right suggests precepts for national coverage, broken down into various normative documents in health that intertwine and address the issue, as far as this article is concerned, of diabetes in terms of food and, finally, of diet. This right is broken down into a general normative plan that organizes the objectives and strategies for combating DMT2 in a comprehensive manner.

Likewise, this right is broken down in a general manner on the National Development Plan (PND), which is a six-year document that guides the policies and programs of the Government of the Republic based on the General Political Constitution, guaranteeing effective access to rights. of the Mexicans, where it is exposed within the category “An Inclusive Mexico”, the social rights regarding the issue of nutrition, including guaranteeing the effective exercise of social rights in matters of food for the entire population.

The lines of action include ensuring adequate food and nutrition through the fight against food deficiency through coordinated public policies; incorporate social actions and programs to improve income, provide jobs and adapt the legal framework to strengthen food security and the right to food. Compared to social reality, it is observed that the strategies implemented until 2018, have allowed the displacement in the opposite direction of the results that these guidelines / goals propose, as well as their social impact, since the lack of economic resources (such as the minimum wage), unemployment, the programs implemented to sustain more than produce and the lack of accessibility / affordability of food, has led society to opt for poor nutritionally high-priced foods that are not adequate, in this way the population is conditioned to a hypercaloric dietary habit, determined by obesogenic environments, therefore, the quality of life is negatively affected with snowball effects on the health of the Mexican population, specifically in the DMT2 (CNEGSR, 2017; ENSANUT MC, 2017; FAO, 2018; Hermann, 2017; Saldaña, 2018).

The fully developed precepts, based on the PND, are established within the Sectorial Plan in Health (PSS), where the strategies and lines of action that are proposed, recognize that there are significant advances in some issues and that only

strategies are required to consolidate the achievements so far obtained according to the strategies implemented to make government action more effective in aspects whose results of past years have not been as expected and the context requires adaptation, but which, in real matters, are not updated or adapted in a fully contextual framework, leaving aside the social reality that imprints the traits of infamy, ignominy, poverty and socio-political disinterest of the health / disease / care process in this vulnerable group.

At the same time, it is intended that through the promotion of healthy attitudes and behaviors, in this case the included diet, in a personal, family and community way, can be fought against diabetes, implementing each of the items specified in such policy, however, the strategies have been nothing more than marketing through commercials by mass media (television and radio), without the use of health personnel, or the implementation of permanent campaigns related to the subject, with the respective reason of the detection, diagnosis, treatment, monitoring and rehabilitation, leaving far the fulfillment of such objectives set forth in it.

This implies a current connotation in which the results have not been visible to date and that in its application there has been a poor interest and results contrary to those expected, making comparisons with the national nutrition survey 2000-2006 -2012-2016 (ENSANUT, 2012; ENSANUT MC, 2016), whose data reveal that in the year 2000 the percentage of population with diabetes mellitus was 5.7%, in 2006 the population with diabetes mellitus was 7.0%, for 2012 increases to 9.2%, which is a considerable increase, reaching 2016 with much higher figures of 9.4%; This makes it clear that the objectives of such strategies embodied in the Sectorial Health Plan regarding diabetes mellitus have not been achieved, but rather reflect the opposite, it is there where one might think that the strategies in this area have not had the relevance or interest in program supervision, correct implementation, little or no promotion, neglect of scientific reality, etc., and therefore, fail to have a social impact (at least in an educational way on the patient) much less strongly influence .

In addition, comprehensive preventive clinical models are completely incompetent, since the policies cover a great deal of weight in guidelines that lack impact on the DMT2 context in Mexico. If studies on promotion in relation to diabetes, are developed through social communication marketing, as well mentioned in the PSS, then it is not possible to have a scope of such objectives, since most of the population with diabetes it lacks elements that allow it to reach knowledge through mass media in general, especially in populations with extreme poverty (who are the most vulnerable population to DMT2), and wanting to influence disease, strengthening and the promotion of timely detection, are pillars that have collapsed since before executing their planning.

Referring a little towards food, the objectives set with the lines of action around healthy eating practices and lifestyles are inefficient, since the minimum wage keeps the working population in a constant state of work in order to obtain food, healthy or not, but that within the margin there would also be no time to ensure healthy dietary practice, that is, within the framework of health at a preventive level, leaving even greater vulnerability each year with a considerable and increasing incidence .

National regulations on praxis around DMT2 and Nutrition

Based on the precepts presented above, the practice in health is governed methodologically by criteria derived from such national plans, therefore the norms from these plans are developed in health policies, logarithmically and based on biological scientific evidence, in which, The approach to the disease is devoid of updating and multidisciplinary approach, leaving such policies as vile copies reproduced year after year. In first order of importance, the basic norm is *NOM-015-SSA2-2010 (formerly NOM-015-SSA2-1994)*, "for the prevention, treatment and control of diabetes", which defines the procedures and actions for the prevention, detection, diagnosis and treatment of diabetes, and the types of treatments and systematization of them are highlighted, including pharmacological and nutritional aspects, in addition to mentioning as support for health education to *NOM-008-SSA3-2010 (formerly NOM-174-SSA1-1998)* "For the comprehensive management of obesity", as well as *NOM-043-SSA2-2012 (formerly NOM-043-SSA2-2005)* "Basic health services. Promotion and education for health in alimentary matters. Criteria for providing guidance", since they are the pillars of health and that are directly related to the disease itself.

However, it does not contemplate any instrument that collects information from the patient in delimitation of what the disease represents for him, nor any type of information about the approach from the social perception that allows to adapt a personalized treatment taking into account the minimum spheres for care of biopsychosocial health and well-being. Associated to the fact that nutrition is referred to as a non-pharmacological treatment, instead of being presented as a nutritional treatment, coupled with the lack of delegation by nutrition, education, etc., a professional in charge of such actions, which It delimits all multidisciplinary activity, thus leaving the approach unrelated to the correct implementation of the same national and international norms and goals.

Situation that generates reality gaps in the attention of the DMT2. On the other hand, nutrition, mentioned as a non-pharmacological treatment, contains extremely restrictive indications and without recommendations of dietary and dietary options, omitting the true value of nutritional treatment (Casas, 2017). For which, these norms are supported by others, trying to treat factors that generate the development and appearance of the disease.

It is worth mentioning that the *Mexican Official Standard Project PROY-NOM-015-SSA2-2018, for the prevention, detection, diagnosis, treatment and control of diabetes mellitus*, in the same way as the basic norm of the treatment for diabetes mellitus, defines the procedures and actions for the prevention, detection, diagnosis and treatment of diabetes, now in this standard, it is the first to detail and specify the nutritional care with the corresponding instruments to be used. In this way, this standard is better complemented, since it addresses aspects of medicine, nutrition, food, care and care, education in diabetes and lifestyles (pharmacological and food), physical education, but the multidisciplinary team, care is still missing Psychological and the development of algorithms for the reference of the patient to the appropriate areas according to the evolution of the pathological state. However, this norm of recent elaboration and implementation

still remains in expectation of the result that this precept can generate.

Similarly, *NOM-037-SSA2-2012*, for the comprehensive management of obesity, and *NOM-037-SSA2-2002*, for the prevention, treatment and control of dyslipidemias, in order to protect the population from This important risk factor for cardiovascular and / or cerebrovascular disease establishes the sanitary guidelines to regulate the integral management of obesity in public, social and private sector establishments that have and offer services for the care of obesity, the control and reduction of weight, in the anticipated terms of these.

While it is true that, dyslipidemias, are a point of occurrence of complications in DMT2, so that prevention actions, in the general population, should have a primarily sanitary approach, such as the promotion of healthy lifestyles, which reduces the absolute risk, but it does not treat it contextualized or regionally because of the social information it lacks. In that sense, the standard should be applied in order to prevent by recommending an adequate diet and adequate physical activity. It is necessary to point out that, invariably, the scientific and ethical principles that guide medical practice; They only pay attention to the epidemiological and biological scientific principles, so it is based on one side of the coin, leaving behind the qualitative scientific evidence, having an even greater detachment towards the inclusion of social reality.

While, on the part of nutrition, *NOM-043-SSA2-2005, Basic health services. Promotion and education for health in alimentary matters. Criteria for providing guidance* and *NOM-169-SSA1-1998, for social food assistance to risk groups*, establish the general criteria that unify and congruence the Food Guidance that should be provided to the population at all stages of the life, the operation of social welfare programs aimed at risk groups and vulnerable groups; In the social context even when there are health educators, these are not considered for the direction of said norms in promotion, education, as well as opportunities for nutritionists and dietitians.

Based on the above, contents related to nutrition and food throughout life are included, lacking specific and contextual information on regional food and risk groups, with certain educational limitations associated with government disinterest in economic investment in health team dedicated to that goal. In a timely manner, the *Guide to clinical practice in Prediabetes and Diabetes mellitus type 2*, is a resource depleted in information composed of an updated compendium of information, which, indicates to the first level care staff the recommendations based on available evidence with Intention to standardize procedures but that in relation to information provided from macro to micro levels there is a disparity between techniques and procedures in addition to goals, and it is in fact that international goals perfectly describe not standardizing procedures in DMT2 care, since it would not be approached correctly and would be completely generalized, causing, what is now known as, an extension of the DMT2.

National system of health

The National Health System has different programs supported by various institutions nationwide to cover and achieve all the proposed goals to achieve the fight against Diabetes Mellitus. Next, those that have had the greatest impact at the national level are mentioned.

The Popular Insurance (Seguro popular) is a public policy of health financial protection that is responsible for providing health services to all people who are enrolled in the social protection system in health and, where, the diagnosis and pharmacological treatment of Diabetes Type 2 mellitus are completely covered, so it does not cost the patient. For the analysis of such a policy it is necessary to address its state policies, thus covering a micropolitical level.

State / Institutional Level

According to the Mexican health system, and at the level of micropolitics used to correct DMT2 at the national level, nutrition plays a decisive role in the development of the disease as a primary treatment and which, referring to care regulations, is completely The role of nutrition in any treatment is non-existent.

The Health Institute of the State of Mexico, through the State Council, proposes the Law for the Prevention, Treatment and Combat of Overweight, Obesity and Eating Disorders of the State of Mexico and its Municipalities, which, referring to the legal frameworks created, does not They allow to develop the mechanisms and tools necessary to prevent, treat and combat DMT2 because of its design, execution and lack of objective evaluation in biosociocultural issues of both administrative mechanisms and their programs.

From then on, and in a contextual way, the Diabetic Care Centers (CAD) of the State of Mexico are created, which are medical units specialized in the detection and treatment of patients with type 2 diabetes, hypertension and metabolic syndrome with a medical service integral, where it is assumed that supply is guaranteed in both pharmacological and non-pharmacological treatments. Unfortunately, all public institutions in Mexico lack supply of medicines, multidisciplinary services for care (psychology, nutrition, diabetes educator, etc.), care tools, etc., justifying the goals and use of the material by sending the supplies that they are ready to expire on an "urgent use" basis, so that attention is further skewed.

Another program dedicated to patient care and education is carried out by the Institute of Social Security and Services of State Workers (ISSSTE) through the Program of Comprehensive Management of Diabetes by Stages (MIDE). The MIDE has a model of empowerment centered on the patient and tries to give a multidisciplinary approach in the first level of care, with which it tries to break the paradigm of specialized care with a convinced team that recognizes the patient, considering sessions with the Multidisciplinary team and patient training.

In this way it is intended to create a doctor and a patient aware of the disease and avoid bad information that is generated by communicative social networks and that result in incorrect practices around both pharmacological and nutritional treatments and care. Such a program has revealed true results and disease control, the only problem in this program is that it can only be taken by patients enrolled in ISSSTE.

On the other hand, the Mexican Social Security Institute (IMSS), derives a care center called Diabet IMSS by which care is given to the patient with Diabetes mellitus through the multidisciplinary health team, emphasizing the educational process to achieve a change in healthy habits and lifestyles, especially in food and physical activity.

Despite having a care model very similar to MIDE, Diabet IMSS has the necessary technological equipment for care and supplies, the problem is that there is no staff for the operation of such centers because the institute does not allocate budget for the opening of such programs in terms of personnel or public servants, with the exception of second level institutions.

Finally, the government together with the IMSS promotes a campaign called "Check yourself, measure yourself and move" that promotes a healthy lifestyle and its individual, family and social benefits, through the promotion and promotion of physical activation and food Since this program is a permanent campaign, it is necessary that it be applied to the communities, outside the institutions, since such a campaign is only managed and executed within the same IMSS centers, taking into account that any individual You can access the campaign whether or not you are a beneficiary of such social health insurance, but the population, noting that it is within the same institution, does not seem accessible to them and most of the group does not know it.

DISCUSSION

According to the above, DMT2 is a disease that is preventable and treatable with healthy lifestyles, among those with the greatest impact, diet. The global precepts, in common agreement with national health policies, are intended to generate a development of the *macropolytic system* of *unidirectional* treatment in DMT2, having a specific development for the fulfillment of the proposed objectives that are applied from a micropolitical level but that, for such an action, both the actions and goals and the micro and macro level objectives need to be linked in a *multidisciplinary* way throughout, that is, in a *multidirectional* way.

It is then, in this way that the political precepts in diabetes and nutrition are limited, bounded, incomplete and decontextualized, of what both concepts mean and represent both illness and treatment in the Mexican population within the development of processes. health / disease / attention. Still having guidance and guidance tools in attention with support in others and, which finally revolve around the same care model.

Although, the genomics of DMT2 is undeniably incurable so far, its epidemiological nature is reversible over the years, that is, through the adaptation of health policies in quantitative and qualitative matters from scientific and scientific perspectives and social reality, the treatments described in health policies, must be addressed primarily in attention to the social determinants of health that generate disease status and condition the population's ways of living and dying.

In this way, the diet represents a solid and important structure for the treatment of DMT2 in terms of scientific evidence, but it is disjointed in health policies as a social praxis entity, since the diet is a foodly social practice that is reconstructed through time and culture and, not only, an element of biological-clinical care of permanent treatment in the disease.

Thus, the political precepts in health, in this case diabetes and nutrition, must be adapted to treatments for (re) education of the population regarding the disease through preventive means and the construction of spaces that promote healthy lifestyles, autonomous conscious dietary consumption patientd. Within these, and as a first contact, food and diet, which are the main

determinants of the development of the disease, since they would generate a positive economic impact in the country, reducing health spending on treatments and making available the possibility of a real investment in health rather than disease, that is, investing in the population as generators of practical health directly on promotion and prevention. For the above, it is necessary then, a readjustment of health policies taking into account both quantitative and qualitative scientific evidence not only from the biological, but from the social, contextualization, regionalization, culture, ideology, traditions, uses and customs, positions that adjust the social practice of the disease and determines the attachment or not to treatments.

Comparative table of political precepts in health (Mexico)

National system of health			
Name	Type	Year	Objective(s)
Seguro popular	Universal Health Services Catalog (CAUSES, in Spanish)	2002	Grant health care to the population without Social Security To date, the number of medications available to users in the health service has increased from 78 interventions contained in the Catalog of Medical Benefits (CASBEM) to 287 interventions of the current CAUSES.
Centro de Atención al Diabético	Law for the Prevention, Treatment and Combat of Overweight, Obesity and Eating Disorders of the State of Mexico and its Municipalities	2013	Provide specialized and interdisciplinary comprehensive medical care, aimed at the metabolic control of patients with Type 2 Diabetes and their comorbidities, within the scope of the first level of care, through the establishment of general policies that define the activities and functions in the province of the service. Help limit the medium and long-term impact of Type 2 Diabetes and its comorbidities, as well as contribute to the control of chronic non-communicable diseases.
Official Mexican Policies			
1) Norma Oficial Mexicana NOM-015-SSA2-1994, para la prevención, tratamiento y control de la diabetes 2) PROY-NOM-015-SSA2-2018, para la prevención, detección, diagnóstico, tratamiento y control de la diabetes mellitus	Base Policy	1) 1994 2) 2018	Ensure adequate and quality care for the sick and protect the public from the risks arising from misconduct in the prevention and control of this condition. Reduction of mortality and complications that this condition generates, but, above all, increase the quality of life of patients.
Norma Oficial Mexicana NOM-037-SSA2-2002, para la prevención, tratamiento y control de la diabetes	Support Policy	2002	Establish the procedures and measures necessary for the prevention, treatment and control of dyslipidemias, in order to protect the population from this important risk factor for cardiac and/or cerebrovascular disease, in addition to providing patients with adequate medical care. Reduce the incidence of dyslipidemias among the general population, and achieve adequate prevention, detection and control of those who suffer from these disorders or those who present the risk of developing them
NOM-030-SSA2-1999, para la Prevención, Tratamiento y Control de la Hipertensión Arterial	Support Policy	1999	Establish procedures for the prevention, treatment and control of hypertension. It will help reduce the high incidence of the disease, avoid or delay its complications, as well as reduce the mortality associated with this cause.
NOM-174-SSA2-1998, para el Manejo Integral de la Obesidad	Support Policy	1998	It establishes the sanitary guidelines to regulate the integral management of obesity. It seeks the protection of the user according to the circumstances in which each case is presented.
Norma Oficial Mexicana NOM-643-SSA2-2005, Servicios básicos de salud. Promoción y educación para la salud en materia alimentaria. Criterios para brindar orientación	Base Policy	2005	It establishes the criteria that must be followed to guide the population in the matter of feeding. Compulsory observance for individuals or legal entities that carry out activities in the area of food orientation, in the public, social and private sectors.
Norma Oficial Mexicana NOM-169-SSA2-1996, para la asistencia social alimentaria a grupos de riesgo	Support Policy	1996	It establishes the criteria for the operation of food social assistance programs aimed at risk groups and vulnerable groups. Optimize available resources, while promoting community participation, aimed at improving welfare and social development conditions.
Clinical practice guides			
Guía de práctica clínica en Prediabetes y Diabetes mellitus tipo 2	Standardized procedures guide for first level of care	2012	Establish a national reference to guide clinical decision making based on recommendations based on the best possible evidence. Improve the effectiveness, safety and quality of medical care, contributing to the well-being of people and communities, which is the central objective and rationale of health services.
Strategic programs			
DiabetIMSS	Diabetic Patient Care Program	2008	Improve the effectiveness and comprehensive care of diabetes in the IMSS. Control in patients with type 2 diabetes mellitus in 60% of the population attending the ISSSTE
Programa de Manejo Integral de Diabetes por Equipos (MEIDE)	Program implemented by ISSSTE	2011	Promote self-care behaviors in the patients of the MEIDE Modules, to achieve optimal metabolic control, thus avoiding the development of complications

Own source

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