

# Status of national diabetes programmes in the Americas

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Reported are the responses in the latter half of 1997 of all ministries of health in the Region of the Americas to the Declaration of the Americas on Diabetes, which was adopted by the Directing Council of the Pan American Health Organization (PAHO) in 1996 as a basis for national programme development in diabetes. The short-term targets were the designation of national focal points, the preparation of national estimates of the disease burden, and the development and implementation of national strategies and plans to deal with diabetes. The survey found that most countries recognized diabetes as a significant public health problem. In terms of global relevance, a number of lessons have been learned from this exercise: the role of broadly based participation in gaining recognition at the national health policy level; the wide acceptance of an integrated programme model; the relevance of process-related targets to achieve short-term success; and the critical role of having a designated focal point within the managerial approach.

**Keywords:** Americas; diabetes mellitus, prevention and control; health plan implementation; programme evaluation.

*Voir page 985 le résumé en français. En la página 986 figura un resumen en español.*

## Introduction

Diabetes is a chronic disease characterized by the body's reduced capacity to use glucose. There are two main types: insulin-dependent diabetes mellitus (type 1 DM), which always needs insulin for treatment, and non-insulin-dependent diabetes mellitus (type 2 DM). Both result in similar health- and life-threatening complications such as acute hypoglycaemic and hyperglycaemic states, infections, complications in pregnancy, and chronic conditions (e.g. atherosclerosis, ischaemic heart disease, retinopathy, nephropathy, neuropathy, and foot ulceration and need for amputation), as well as social impacts such as job discrimination in some settings.

The incidence of type 2 DM is strongly influenced by the prevalence of two major risk factors — physical inactivity and obesity — which are related to lifestyle and inappropriate food intake and reflect the underlying dynamics of energy balance. There is increasing evidence that the prevalence of the disease can be reduced by devoting attention to these factors, although there is need for further replication of this

evidence to determine just how much impact can be achieved in different sociocultural settings (1, 2). The importance of good metabolic control is well established for both forms of the disease (3–5). Complications of diabetes can be reduced by paying sufficient attention to other risk factors (e.g. smoking, high blood pressure, and poor foot care) as well as improved metabolic control (6, 7).

Globally, diabetes (mostly type 2) has emerged in the twentieth century as a public health problem of pandemic proportions. In the Americas, the estimated annual incidence of type 1 DM varies widely (8), from 0.7 cases per 100 000 in Peru to 27 per 100 000 among males on Prince Edward Island, Canada. The prevalence of type 2 DM in Latin America and the Caribbean is thought to range from 1.4% among the Mapuche Indians in Chile to 17.9% among adult Jamaicans (8, 9). The highest prevalence and incidence of type 2 DM occur among the Pima Indians of Arizona, among whom the majority of the adults have the disease (10). Examination of the differences in the estimated incidences and prevalences of both types of diabetes among various populations could lead to the development of intervention programmes (11).

Diabetes is now considered to be a pandemic disease, with well over 100 million cases worldwide, a number that is projected to increase for at least the next few decades. The Americas are estimated to account for over 25% of the world's total, with 15 million people affected in the USA and Canada combined and 13 million in Latin America and the Caribbean. These figures are expected to increase by

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around 45% over the next 10–15 years, with the numbers in Latin America and the Caribbean exceeding those in the USA and Canada by 2000, and leading to a combined total of about 40 million by 2010 (12). These projections were used as a basis for including diabetes as a priority condition in the Noncommunicable Disease Program when it was established by the Pan American Health Organization (PAHO) in 1995, and were later supported by estimates published jointly by WHO, the Prudential Center for Health Care Research, and the University of Michigan (13).

In 1989, public health action against diabetes was supported by a World Health Assembly resolution on the prevention and control of diabetes,<sup>a</sup> followed by the Saint Vincent Declaration action programme in the WHO European Region (14). In August 1996, the International Diabetes Federation (IDF) and PAHO/WHO cosponsored a conference in Puerto Rico, supported by industry and with the participation of the health sector in countries throughout the Americas, which resulted in the Declaration of the Americas on Diabetes (DOTA). In September 1996 the Directing Council of PAHO passed a resolution (CE120.R11) recognizing diabetes as a disease of regional health importance, and calling for the Declaration to be used as a guide for national programme development (15–17).

The Declaration owes its origin to the following: the growing burden of diabetes throughout the region; the availability of effective strategies for prevention and control as well as sound principles for programme development; the importance of participation by all stakeholders; and the mobilization of existing resources including training, research and information dissemination. IDF, PAHO/WHO, and industry are fostering the implementation of DOTA, paying particular attention to systematic programme planning principles (17). The present survey is a response, in part, to the first stage of programme planning, which is a situation analysis.

## Methods

### Aims and objectives

In view of the marked socioeconomic diversity that exists throughout the Americas, a series of minimum essential national targets were developed and communicated to all countries in the region. Three short-term targets (1–2 years), concerned with programme management and baseline regional assessment, were reflected in the following tasks for 1997:

- to determine whether national focal points, organizational partners, and a planning group for diabetes had been appointed and were active;
- to determine the availability of national estimates of the disease burden of diabetes, based on data on mortality and health service utilization;

- to ascertain whether national strategies and plans for diabetes had been developed, adopted, and started.

### Survey design and implementation

In order to assess the initial state of readiness in these areas, a questionnaire was designed in May 1997 and distributed to all PAHO Member States. All results were self-reported by each ministry of health. The object of this article, in presenting the results of the survey, is twofold:

- to provide a descriptive profile of the current status of national responses to diabetes in the Americas;
- to determine the predictors for adopting, within a country, a national strategy for the prevention and control of diabetes.

The survey was conducted from May to November 1997. All geopolitical entities in the region participated, with the exception of three French Overseas Departments (Guadeloupe, Martinique, and French Guiana) and two Dutch dependencies (Aruba and the Netherlands Antilles). Puerto Rico, an Associate Member of PAHO, was considered separately from the USA. Questionnaires were administered by the PAHO Representative in each country and completed by the relevant person(s) within the ministry of health. In the event of non-response, up to five follow-up communications were initiated.

### Statistical analysis

The SAS package of statistical programs was used for analysis. All tests of inference were one-tailed, under the alternative hypothesis that presence of the independent variable(s) produced a greater likelihood of having a programme strategy (primary outcome variable) versus the null hypothesis that a programme strategy was not associated with the independent variable(s). Two-by-two comparisons of strategy (presence or absence) versus programme characteristics (a designated focal point, organizational partners, a formal consultative group, a budget) was carried out using Fisher's exact test and applied Bonferonni corrections ( $\alpha = 0.01$ ). A single comparison between focal point versus budget was also made using Fisher's exact test ( $\alpha = 0.05$ ). A stepwise logistic regression was conducted to determine significant predictors of having a programme strategy ( $\alpha = 0.05$ ).

## Results

The overall response rate by countries was very high: 95% (40/42), with the only non-responders being two British territories in the Caribbean.

Based on national mortality data, diabetes accounted for 1.1–12.0% (median, 3.6%) of deaths from all causes, and ranked 2nd to 10th (median, 6th) among the top 10 causes of death. Most countries

<sup>a</sup> WHA42.36. See: *Handbook of resolutions and decisions of the World Health Assembly and Executive Board*, Vol. III, 3rd ed. (1985–1992). Geneva, World Health Organization, 1993.

(68%) had data on health service utilization, but relatively few had specific data relating to diabetes morbidity: amputations (35% of countries), blindness (28%), and end-stage renal disease (25%). With regard to the status of countries' diabetes programmes, 55% were integrated within a noncommunicable disease programme, 40% had not yet been decided, and 5% were free standing.

For the Region of the Americas as a whole, several countries (45%) had adopted a strategy for diabetes prevention and control, while 55% had identified a national focal point within the ministry of health with responsibility for diabetes programme development, and 40% had formed a national consultative group to coordinate diabetes programme planning and management. Most countries (63%) had identified organizational partners (e.g. with diabetes associations or professional bodies) at the national level. Less than one-third (30%) had allocated a part of the national health budget specifically for diabetes. The results, classified by subregion, are shown in Table 1. Using a scoring system based on a simple summation of component percentages for each of the management factors, North America was the most developed and the English-speaking Caribbean the least developed subregion in terms of having programme components in place for diabetes.

The most frequently selected organizational partner was a diabetes association (22 countries), followed by endocrine associations (9 countries) and heart and/or renal associations (7 countries). Six countries selected partners from three categories (industry, university and/or research organizations, medical and/or nursing organizations), while 12 also included other types of organization.

### Associations with programme strategy

In view of the wide range in population sizes in countries in the region (from >200 million to <100 000), further analyses were limited to those with populations of  $\geq 1$  million, so as not to distort this part of the analysis through inclusion of a large number of very small populations (18). This excluded 15 countries from the English-speaking Caribbean (but included Jamaica and Trinidad and Tobago).

Separate two-by-two analyses revealed that identifying a focal point was most strongly associated with the following: adopting a national programme strategy for diabetes, forming a national consultative group, and identifying organizational partners ( $P < 0.01$ ) (Table 2). Among the independent variables, only the association between identifying a focal point and allocating a budget specifically for diabetes was considered to be relevant, and was also statistically significant ( $P < 0.05$ ).

To determine statistically significant predictors for adopting a programme strategy, we carried out a stepwise logistic regression using presence of a focal point, consultative group, organizational partners, and budget as independent variables. To account for

Table 1. Overall and subregional national responses to the study of national diabetes programmes in the Americas

	No. overall <i>n</i> = 40	No. in subregions <sup>a</sup>					
		AND <i>n</i> = 5	CA <i>n</i> = 6	EC <i>n</i> = 17	LC <i>n</i> = 4	NA <i>n</i> = 3	SC <i>n</i> = 5
<b>National strategy</b>	18 (45) <sup>b</sup>	4 (80)	3 (50)	3 (18)	2 (50)	2 (67)	4 (80)
<b>National focal point</b>	22 (55)	5 (100)	2 (33)	6 (35)	3 (75)	2 (67)	4 (80)
<b>National consultative group</b>	16 (40)	3 (60)	2 (33)	3 (18)	2 (50)	3 (100)	3 (60)
<b>Organizational partners</b>	25 (63)	4 (80)	2 (33)	10 (59)	3 (75)	3 (100)	3 (60)
<b>Specific budget</b>	12 (30)	3 (60)	1 (17)	1 (6)	3 (75)	2 (67)	2 (40)
<b>Composite score</b>		380	166	136	325	401	320

<sup>a</sup> AND = Andean (Bolivia, Colombia, Ecuador, Peru and Venezuela); CA = Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama); EC = English-speaking Caribbean and other (includes Belize, Bermuda and Surinam); LC = Latin Caribbean (Cuba, Dominican Republic, Haiti and Puerto Rico); NA = North America (Canada, Mexico and USA); SC = Southern Cone and Brazil (Argentina, Brazil, Chile, Paraguay and Uruguay).

<sup>b</sup> Figures in parentheses are percentages.

Table 2. Bivariate and logistic regression analyses: association between variables in national diabetes programmes in the Americas (countries with populations of  $\geq 1$  million)

Bivariate analysis	Fisher's exact test <i>P</i> -value	Relative risk	<i>n</i>
Programme strategy vs			
focal point	0.0005 <sup>a</sup>	4.2 (1.2, 14.5) <sup>b</sup>	25
consultative group	0.001 <sup>a</sup>	7.3 (1.1, 47.6)	25
organizational partners	0.002 <sup>a</sup>	3.9 (1.1, 13.5) <sup>b</sup>	25
specific budget	0.122	2.4 (0.67, 8.5) <sup>b</sup>	23
Focal point vs specific budget	0.045 <sup>c</sup>	4.4 (2.7, 7.1) <sup>b</sup>	
<b>Logistic regression analysis</b>			
<b>focal point</b>	<b><i>P</i> = 0.0055<sup>c</sup>, OR<sup>d</sup> = 39.0 (2.9, 518.9), <i>n</i> = 22</b>		

<sup>a</sup> Statistically significant at alpha = 0.01.

<sup>b</sup> Figures in parentheses are 95% confidence intervals.

<sup>c</sup> Statistically significant at alpha = 0.05.

<sup>d</sup> OR = odds ratio.

differences between countries, we included as continuous variables the square root of population size (1997) and national health expenditure as a percentage of gross domestic product (1994) (19). Identification of a focal point was the only significant predictor for developing a national strategy.

## Discussion

The stated goal of DOTA is to provide "better health for people affected by or at risk from diabetes in the Americas by the year 2000 and beyond". This vision was articulated by 200 people drawn from various parts of North, South, and Central America and the Caribbean (17). While some inspiration was taken

from the earlier Saint Vincent Declaration (14), DOTA was an indigenous movement within the Americas and a response to a burgeoning diabetes pandemic in the region. From the outset DOTA focused on process development, combining advocacy from PAHO to the governments of its Member States with the organizational development efforts of national diabetes associations (affiliated with the International Diabetes Federation) and support from industry. Operationally, in view of the enormous socioeconomic diversity of the Member States involved, "minimal essential" short-term targets were selected that were felt to be within the capacity of all states to respond to, focusing on basic data and the development of national plans. The present survey was conducted early in this process, and constitutes a baseline analysis against which ongoing and future findings may be assessed.

The survey's very high response rate (95%) was partly due to effective follow-up, but it also suggests that Member States recognize the importance of responding to the regional diabetes pandemic. The relatively high proportion of states already reporting an identified focal point and organizational partners suggests that most of them are taking the situation seriously, and plan to develop a national strategy. Indeed, this is reflected in the relatively large number of Member States with a national strategy already in place and with a consultative group and an assigned budget for diabetes. It is clear that the most important of these responses is the designation of a focal point for diabetes, or appointing someone with this responsibility within the ministry of health to take up the challenge.

Nonetheless, it is also clear that there is still a long way to go in putting these elements in place in many Member States, especially in Central America and the English-speaking Caribbean. This is surprising because, in the latter group, diabetes appears to account for a higher percentage of mortality and is ranked relatively high among the causes of death. Moreover, most of the countries in the English-speaking Caribbean are highly literate (adult literacy levels of 85–99%) and relatively advanced in terms of the epidemiological transition, with noncommunicable diseases clearly dominating the morbidity and mortality spectrum (20). The apparently lower level of programme development to date may be related to the small size of most of these countries, where health service managers often perform multiple roles, which causes difficulty in focusing on new areas of programme development, while still having to maintain a focus on communicable disease control programmes. Larger countries may have a distinct advantage in this respect, in that more managerial support may be available to address new priorities. However, the Member States in Central America are

the least developed in the region, with very low levels of adult literacy (55–95%) and a health burden that is still largely dominated by infectious diseases (20–22). Priorities in the health field and the pace of new programme development, particularly in the public sector, inevitably reflect these realities.

Also important is that the overwhelming majority of Member States appear to prefer an integrated approach at the national level, placing diabetes within their noncommunicable disease programmes instead of developing a free-standing programme for this purpose. This is a critical point for those who are advocating national diabetes programmes per se; although it is clear that there is widespread support for such programmes, the matter has to be seen in a broader context. DOTA is open to both approaches, as long as there is a national commitment to a strategy for diabetes (16). The principles of sound planning and implementation enunciated by WHO in 1995 still apply (23). However, in recognition of potential management efficiencies in many settings, the WHO Executive Board passed a resolution outlining the logistic advantages of an integrated approach (EB101.R9).<sup>b</sup>

This is particularly so for prevention measures aimed at lowering the prevalence of smoking and high blood pressure and in promoting dietary and physical activity changes, which are important not only for diabetics but also for the public at large in order to reduce the burden of conditions such as cardiovascular disease and cancer (1, 2).

The present study has identified a number of advantages and limitations. The advantages derive from the administrative capacity of PAHO, which has offices in every country in Latin America and the larger countries of the Caribbean, and a close working relationship with ministries of health. Our questionnaires were thus directly presented by the PAHO Representative to the relevant persons in the ministries of health, with personal follow-up in the event of nonresponse. This process was relatively inexpensive and efficient. On the other hand, the study was subject to the limitations of the health information systems in each of the countries, and often relied on self-reporting of data. It is apparent from the responses that the majority of countries lack the means to obtain specific data, e.g. in monitoring important complications of diabetes, such as foot amputations, blindness, and end-stage renal disease. Such data are essential if countries want to address the fundamental issue of quality of care. It has been estimated that up to half the burden of these complications of diabetes could be prevented through improved quality of care (3, 4). PAHO is working closely with Member States to monitor and upgrade the quality of data collection and information management.

New interventions and approaches are needed, with an emphasis on education of patients, so that persons with diabetes can have more personal control and responsibility for their own health, supported by a multidisciplinary health care team. Projects in

<sup>b</sup> Executive Board, 101st session, Geneva, 19–27 January 1998: resolutions and decisions, annexes. Geneva, World Health Organization, 1998 (document EB101/1998/REC/1).

Argentina, Chile, Colombia, Costa Rica, Puerto Rico, and other countries are demonstrating the value and feasibility of this approach in Latin America. The challenge of improving the quality of care in resource-limited settings, however, raises all too familiar problems of access and equity which can be found throughout the Americas. Therefore, efforts are under way in some countries (e.g. Argentina, Chile) to assess the economic cost of diabetes and of diabetic care, including the economics of patient education (24, 25). Most Member States in the region are, however, still far from being able to conduct such studies, since they lack the basic data required; for these reasons the Latin American Diabetes Epidemiology group was formed (26).

As a rapidly expanding public health problem, diabetes requires a collective response which must include giving attention to primary and secondary prevention and, no less critically, improving the availability and effectiveness of care for persons with the disease. This calls for an integrated approach, recognizing that what is good for the individual with diabetes is good for the family and for the community. Consistent with underlying epidemiological concepts (27), primary prevention of diabetes is aimed at reducing the incidence of the disease by promoting and preserving good nutritional status and physical fitness; secondary prevention involves early detection with prompt and effective intervention; and tertiary prevention consists of those measures designed to reduce or eliminate long-term impairments or disabilities, to minimize suffering due to departures from good health, and to promote the patient's adjustment to irremediable conditions. Having a well-trained health care team, and educating both patients and the public are the keys to achieving these improvements.

DOTA is an ongoing step-by-step process. Its conception and recognition were acts of public health enlightenment. Its long-term success depends on

steady effort by the whole community: persons with diabetes, their families and their doctors; the scientific and technical community; health care managers and others who must be trained in greater numbers; and industry, whose enlightened self-interest is an essential ingredient for success.

In terms of the study's global relevance, the following lessons have been learned: the role of broadly based participation in gaining recognition of national health policy; the unifying value of having a cohesive identity around which an initiative can gather support from local and national up to regional and international levels; and the willingness of industry to support a process that is in the wider public interest. Equally significant for health planners is the apparently wide acceptance of an integrated programme model, the relevance of process-related targets to short-term success, and the critical role of having a designated focal point within a managerial approach. The present findings serve as a baseline against which ongoing and future assessments will be compared. ■

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## Résumé

### Situation des programmes nationaux de lutte contre le diabète dans les Amériques

La Déclaration des Amériques sur le diabète, établie sous les auspices conjoints de l'Organisation panaméricaine de la Santé (OPS) et de la Fédération internationale du Diabète à l'issue de nombreuses consultations sur la charge de plus en plus lourde que représente la pandémie de diabète, a été adoptée en 1996 par tous les gouvernements de la Région pour servir de stratégie régionale et guider la mise en œuvre des programmes nationaux de lutte contre le diabète. Cette déclaration soulignait la nécessité d'appliquer des stratégies efficaces de prévention et de lutte, de définir des principes pour l'élaboration des programmes, d'obtenir la participation des instances concernées et la mobilisation des ressources nécessaires ainsi que d'assurer des activités de formation, de recherche et de diffusion de l'information.

Les objectifs à atteindre à court terme pour combattre la pandémie de diabète ont été définis comme

suit : mise en place d'agents de liaison pour l'élaboration de plans nationaux selon une approche participative, établissement d'estimations nationales de la charge du diabète comportant des mesures de la mortalité et de l'utilisation des services de santé, enfin, élaboration et mise en œuvre de plans stratégiques de lutte. Des enquêtes sur les mesures prises à la suite de la déclaration ont été conduites en 1997 (de mai à novembre) dans les Etats Membres de l'OPS/OMS. Toutes les entités géopolitiques de la Région y ont participé, à l'exception de trois départements français d'outre-mer (Guadeloupe, Guyane et Martinique) et de deux dépendances néerlandaises (Antilles néerlandaises et Aruba). Porto Rico, Membre associé de l'OPS, a été étudié séparément des Etats-Unis d'Amérique. Les questionnaires ont été administrés dans chaque pays par le représentant de l'OPS et remplis par la (les)

personne(s) concernée(s) au ministère de la santé. En cas de non-réponse, jusqu'à cinq rappels ont été envoyés. Le taux de réponses a été de 95% (40 pays sur 42).

Il est apparu que le diabète représentait moins de 5% (intervalle de variation 1,1–12%; médiane 3,6%) du taux de mortalité dans la plupart des pays et qu'il était la sixième des principales causes de mortalité. La plupart des pays ont des données sur l'utilisation des services antidiabétiques (70%) mais non sur les cas d'amputations (>60%), de cécité (>70%) et de maladies du rein (>70%) liés au diabète. Beaucoup ont un agent national de liaison sur le diabète (55%) et des organisations partenaires (63%) mais moins s'étaient dotés d'une stratégie (45%), d'un groupe consultatif (40%) et/ou d'un budget spécifique (30%) contre le diabète. La majorité des pays (55%) avaient intégré le diabète à leurs programmes de lutte contre les maladies non transmissibles. Deux programmes contre le diabète (5%) étaient exécutés séparément cependant que le statut des autres n'avait pas été fixé (40%). La plupart des pays ( $p < 0,01$ ) qui avaient adopté une stratégie avaient également un budget, un groupe consultatif et des

organisations partenaires, de même que ceux qui avaient désigné un agent de liaison avaient également un budget distinct ( $p < 0,05$ ). L'indicateur prédictif le plus significatif ( $p < 0,05$ ) pour l'adoption d'une stratégie nationale est la nomination d'un agent de liaison (chargé d'organiser une action nationale de lutte).

Plusieurs enseignements d'intérêt mondial ont été tirés de ces enquêtes: l'idée d'une large participation fait son chemin dans les politiques nationales de santé, l'existence d'une force d'unification et de cohésion permet à une initiative d'obtenir un soutien d'abord local et national puis régional et international et, enfin, l'industrie se montre prête à soutenir une action d'intérêt public. Également significatifs pour les responsables de la planification sanitaire, la faveur manifeste donnée à des programmes intégrés, l'utilité d'objectifs à court terme axés sur les modalités d'exécution et l'importance décisive d'un agent de liaison dans le cadre d'une approche gestionnaire. Les résultats de cette enquête serviront aussi de référence pour les évaluations en cours et futures.

## Resumen

### Situación de los programas nacionales contra la diabetes en las Américas

Tras las amplias consultas realizadas sobre la carga creciente de la pandemia de diabetes, la Declaración de las Américas sobre la Diabetes (DOTA), copatrocinada por la Organización Panamericana de la Salud (OPS) y la Federación Internacional de la Diabetes, fue refrendada en 1996 por todos los gobiernos de la región como estrategia y guía regional para la elaboración de programas nacionales relacionados con esa enfermedad. La Declaración reconocía que se necesitan estrategias eficaces de prevención y control; principios para la elaboración de programas; la participación de los interesados directos y la movilización de recursos, así como adiestramiento, investigaciones y difusión de información.

Los objetivos a corto plazo para combatir la pandemia de diabetes eran la estimulación de la creación de puntos focales para una planificación nacional basada en un modelo participativo, el desarrollo de estimaciones nacionales de la carga de morbilidad, incluidas medidas de la mortalidad y de la utilización de los servicios de salud nacionales, y la formulación y ejecución de planes estratégicos contra la diabetes. En 1997 (de mayo a noviembre) se realizó un estudio entre los Estados Miembros de la OPS/OMS para recopilar datos sobre la situación al principio de la ejecución. Participaron todas las entidades geopolíticas, con excepción de los tres Departamentos Franceses de Ultramar (Guadalupe, Martinica y Guyana) y de dos dependencias holandesas (Aruba y las Antillas Holandesas). Puerto Rico, Miembro Asociado de la OPS, no se incluyó en los Estados Unidos. Los cuestionarios fueron administrados por el Representante de la OPS en cada país y rellenados por la(s) persona(s) pertinente(s) en el Ministerio de Salud. Si no se recibía respuesta, se enviaban hasta cinco recordatorios. Se logró así una tasa de respuesta del 95% (40/42 países).

Según la información recibida, la diabetes representaba menos del 5% (intervalo: 1,1%–12%; mediana: 3,6%) de las defunciones en la mayoría de los países, y en general ocupaba el sexto lugar entre las causas principales de muerte. La mayoría de los países disponen de datos sobre la utilización de los servicios de diabetes (70%), pero faltan datos sobre las amputaciones (> 60%), la ceguera (> 70%) y la nefropatía (> 70%) asociadas a la enfermedad. En muchos hay un punto focal nacional para la diabetes (55%) y asociados organizacionales (63%), pero son menos los que disponen de una estrategia (45%), un grupo consultivo (40%), y/o un presupuesto específico (30%) para la enfermedad. La mayoría (55%) había integrado la diabetes en sus programas contra enfermedades no transmisibles; dos programas (5%) eran autónomos, y otros estaban pendientes de decisión (45%). Se observó una relación ( $P < 0,01$ ) entre la existencia de una estrategia y la disponibilidad de un presupuesto, de un grupo consultivo y de asociados organizacionales. La existencia de un punto focal también se asoció a la disponibilidad de un presupuesto ( $P < 0,05$ ). La variable predictiva significativa ( $P < 0,05$ ) de la existencia de una estrategia nacional fue el hecho de disponer de un punto focal (persona responsable de la respuesta nacional).

En cuanto a la repercusión mundial, se han aprendido varias lecciones: la necesidad de una participación de base amplia para ser reconocidos por los responsables de la política nacional de salud, el valor unificador de una identidad coherente en torno a la cual pueda obtenerse apoyo para una iniciativa tanto en el ámbito local y nacional como a nivel regional e internacional, y la voluntad de la industria de respaldar un proceso en interés del público en general. Igualmente importante para los planificadores de la salud es la

aparentemente extendida aceptación de un modelo de programa integrado, la pertinencia de las metas relacionadas con el proceso para el éxito a corto plazo y la necesidad crucial de disponer de un punto focal

designado al efecto con criterios de gestión. Los resultados de este estudio servirán además como punto de referencia para establecer comparaciones con los aportados por otras evaluaciones presentes y futuras.

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