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ORIGINAL: SPANISH

CAMDI I Workshop: Diabetes Surveillance and Control

ECUADOR, EL SALVADOR, GUATEMALA, HONDURAS & NICARAGUA



(SAN SALVADOR, EL SALVADOR, 8–9 MARCH 2000)

DIVISION OF DISEASE PREVENTION AND CONTROL
PROGRAM ON NON-COMMUNICABLE DISEASES

PAN AMERICAN HEALTH ORGANIZATION /
WORLD HEALTH ORGANIZATION

Introduction

Diabetes is worldwide health problem. It is estimated that the number of people with diabetes will reach the figure of 65 million by 2025.

People with diabetes have a high frequency of presenting chronic complications. Premature mortality risk is higher in people with diabetes than in their non diabetic peers. The Diabetes Control and Complication Trial (DCCT) and the United Kingdom Prospective Diabetes Study (UKPDS) have influenced the objectives of diabetes care, since those studies demonstrated that a tight control of blood glucose and blood pressure can improve the prognosis of diabetes, reducing premature mortality and the frequency of some long-term complications.

Under the auspices of the Program of Noncommunicable Diseases of the Division of Disease Prevention and Control of the Pan American Health Organization (PAHO) a regional workshop on diabetes surveillance and control was held. This workshop took place in the Hotel Camino Real, of San Salvador, El Salvador, 8-9 of March 2000, with the involvement of Honduras, Nicaragua, Guatemala, Ecuador, and El Salvador. This activity is part of the Initiative of Diabetes for the Americas (DAY) of PAHO and is linked to the Declaration of the Americas on Diabetes (DOTA).

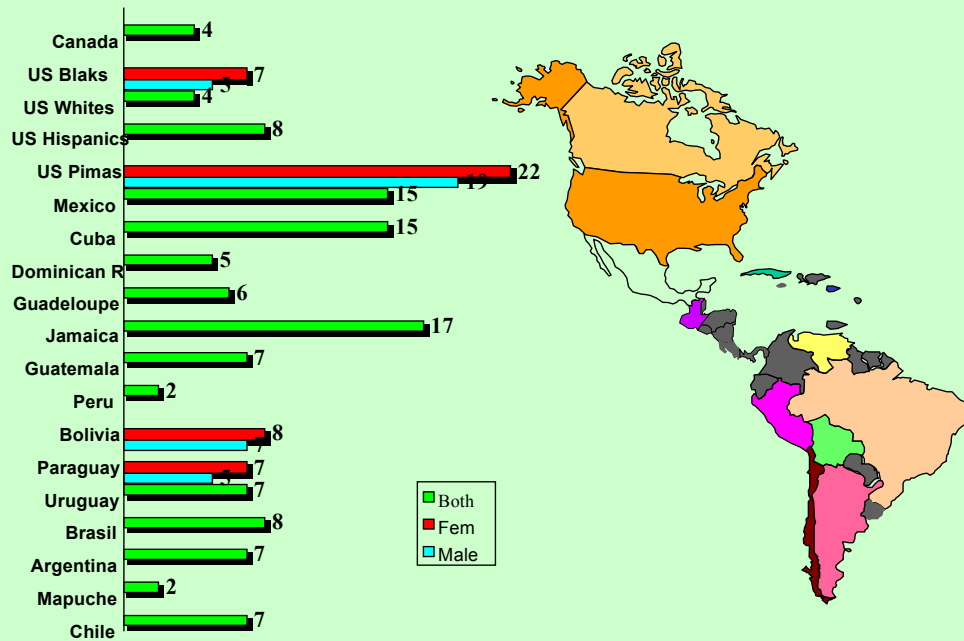
General Objective

Commence and coordinate activities of diabetes epidemiological surveillance and control of diabetes in participating countries.

Specific Objectives

- Determine the feasibility of a survey on diabetes, hypertension, obesity, and its risk factors.
- Study the possibility of compiling data on various aspects of diabetes, including the direct and indirect costs and co-morbidity (as hypertension and other chronic complications of diabetes).
- Evaluate the needs for the implementation of a national diabetes program.
- Strengthen cooperation among countries in the field of surveillance and control of diabetes.

DM PREVALENCE (PERCENT) IN ADULT POPULATIONS OF THE AMERICAS



The knowledge of the diabetes prevalence in Latin America and the Caribbean is limited. There are many countries in the region where diabetes has never been studied. Most of the diabetes surveys conducted in Latin America and the Caribbean were conducted many years ago. Others, like Colombia and Cuba have monitored risk behavior as part of their surveillance systems. Figure 1 shows results of population surveys in the Americas. In Canada, the reported diabetes prevalence was 4% among adults. The highest diabetes prevalence rate has been documented among the Pima Indians of Arizona in the United States. Hispanics, Caucasians and African Americans living in the United States have shown prevalence rates of 8%, 7% and 4% respectively. In Jamaica diabetes prevalence was reported at 17.5 in 1995. Other studies in the Caribbean reported diabetes prevalence rates of 14.5% in Cuba, 6% in the Dominican Republic and 6% in Guadeloupe. A small study in Guatemala showed a prevalence of diabetes of 7% among adults. Studies conducted in Peruvian adult volunteers reported a diabetes prevalence rate of only 2%. Surveys in Argentina, Paraguay, Uruguay, Brazil and Colombia showed diabetes prevalence rates between 7 and 8%. Recent studies conducted in Chile and Bolivia documented diabetes prevalence of 7% and 8% respectively. The lowest prevalence rate of diabetes in the Americas was reported among the Mapuche Indians of Chile in 1985 (0% males and 0.2% females). This ethnic group was studied recently reporting a low prevalence of diabetes (2%).

First Day

During the morning there was a plenary session. The list of the presentations are included on the agenda of the workshop. Copies of the presentation are available in the Program of Noncommunicable Diseases of PAHO, Washington DC.

Group Activity

Subject: Critical needs for diabetes surveillance and control in the subregion.

Objective: Propose activities to carry-out diabetes surveillance and control in the participating countries.

Suggested Subjects

- Definition of the problem.
- Objectives of diabetes surveillance and control.
- Diagnostic criteria.
- Registries of people with diabetes.
- Mortality from diabetes.
- Diabetes care programs.
- Education of the general population.
- Diabetes advocacy.
- Health systems and diabetes.
- Availability of insulin, drugs and other critical supplies.

Facilitators: Dr. Mario Valcarcel, Dr. Christine Karkashian, Dr. Alberto Barceló.

On the first day, three groups were created for the afternoon activities. The first group was formed by the representatives of Guatemala and Ecuador, the second by the representatives of Honduras and Nicaragua and the third group by the participants of El Salvador.

Development

During the afternoon session, each group carried-out three activities:

- The first activity was a Brainstorming Session. For this activity, each group was asked to identify the greatest number of problems related to the current situation of diabetes in each of their respective countries. A special form was created for this purpose in which participants wrote down their ideas (up to 21).
- The second activity consisted of a Multivoting (establishing priorities) Session. This technique aids in the reduction of the quantity of identified problems during the brainstorming session. For this activity, the members of each group were asked to choose the four most important problems of the original list of problems.

- During the third activity of that afternoon, groups were asked to apply a Nominal Group Technique to prioritize the four most important problems of the list. Once each person has given a score (from 1 to 4) to each selected problem a final countdown is down for the over all group , and the list is sorted by level of importance.
- The last activity of the day included a presentation of the list of problems identified and prioritized by each group.

Results of the First day

Result of Group 1 El Salvador

- Diabetes not given priority status at the Ministry-of-Health level.
- Lack of human resources trained for primary, secondary, and tertiary care (multidisciplinary team)
- Lack of health education and promotion at all levels.
- Insufficient budget for the development of a diabetes program.

Results of Group 2 Ecuador and Guatemala

- There is no support from government to establish a health policy on diabetes.
- Lack of application of norms for the prevention, treatment and control of diabetes.
- Lack of information about incidence/ prevalence of diabetes.
- Lack of resource availability for the treatment and control of diabetes at the state-supported health-care level.

Results of Group 3 Nicaragua and Honduras

- Lack of a national medical-care program for people with diabetes.
- Lack of an integrated approach in diabetes management of diabetes at the primary medical-care level.
- Deficient diabetes surveillance system.
- Lack of coverage of health services and medicines.
- The prevalence of diabetes is unknown.

Second Day

Subject: Introduction to a plan of action.

Objective: Development of a proposal for diabetes surveillance and control. Description of the work methodology, as well as the location in time and space of the proposal.

Suggested Topics: Selection of one or more topics on the basis of the results of the first day's work.

Facilitators: Dr. Christine Karkashian, Dr. María del Carmen Daroca, Dr. Alberto Barceló

Development

There was a wrap-up session for the presentations of the day before. Participants were asked to create a plan of action or proposal to address the issues/problems identified by their groups the day before. They were asked to remain in the same groups as the day before.

Table 1: Diabetes, hypertension and obesity by gender (Bolivia, 1999)

Variable	Total Number	Male (%)	Female (%)	Both (%)
Diabetes Mellitus	2533	6.8 (5.2-8.5)	7.6 (6.3-8.9)	7.2 (6.1-8.3)
Hypertension *	2533	21.5 (19.1-24.0)	17.8 (15.6-20.0)	19.6 (18.0-21.3)
Overweight**	2530	56.6 (53.2-59.9)	64.7 (62.3-67.0)	60.7 (58.4-62.9)

*Diastolic blood pressure > 90 mm Hg y
Systolic blood pressure >140 mm Hg
**BMI>24

In Bolivia, a survey of diabetes, hypertension, and obesity was conducted. A total of 2,533 people from four sites (El Alto, La Paz, Santa Cruz and Cochabamba) participated. Prevalence of diabetes was 7.2% (6.1-8.3). The results of this survey have been used to design an intervention program to improve medical care for people with diabetes.

Results of the Second Day

Workshop: Diabetes Surveillance and Control

Group 1

Action Plan Exercise

End (purposes)

- Prevent risk factors and the development of complications of DM.
- Change the attitudes and improve skills of the multidisciplinary personnel regarding the management of DM.

Objective (1)

Promote and dissemination of knowledge on the importance of DM to the overall society, with emphasis on special population groups (children, women, etc).

Objective (2)

Raise the awareness of the authorities on the economic and social costs of diabetes.

Objective (3)

Support the organization and education of the diabetic patients and their families

Objective s(4)

Incorporate into the program of studies of D.M. knowledge on healthy lifestyles.

Objective (5)

- Incorporate in the training curriculum of the health care team (multidisciplinary) the comprehensive management of D.M..
- Training of health care personnel (multidisciplinary) in D.M. and development of continuous education programs.

Table 3: Annual direct cost per person with Type 2 diabetes (Ecuador, 1999)

Rubro	Cost in US \$
Laboratory	32.00
Medicines	265.16
Glucose monitoring test	96.00
Medical care	48.00
Total	441.16

Official statistics showed that in Ecuador, in the last 30 years, a progressive increase in diabetes mortality has occurred, mainly among people older than 45 years. An increasing trend has also been seen in the number of hospitalizations caused by diabetes chronic complications. Diabetes will become the most frequent disabling chronic disorder that affects the Ecuadorian population in the next decades (Ecuadorian Society of Endocrinology).

Target population

1. National and local authorities.
2. Civil society, patient children, and their family.
3. Health teams (multidisciplinary)
4. Industry and private enterprise.

Activities

- (1) Prepare a communications media plan.
- (2): *Prepare and disseminate the situation analysis of the D.M.
* To make forums, seminars, etc., to convey the diabetes situation, involving the communications media.
- (3) Promote and strengthen groups and associations of persons with diabetes and their families.
- (4) Train leaders in the field
- (5) Coordinate with the Ministry of Education the incorporation in the curriculum, information on healthy lifestyles.
- (6) Incorporate within the framework of "Healthy Schools" (Escuelas Sanas) the introduction of contents on diabetes risk factors and prevention.
- (7) Coordinate and provide technical support for the universities regarding the inclusion of contents on prevention and integrated management of D.M.
- (8) Prepare and set up programs for continuous education for health care workers in D.M.
- (9) Train and motivate educators in DM.
- (10) Involve the private business and industry in the management and control of D.M.
- (11) Supervise and evaluate the processes and measure the impact of the educational programs.

Normoglycemia	IFG or IGT	DM*
FPG <110mg/dl 2hPG** <140mg/dl	FPG ≥126mg/dl and <126mg/dl (IFG) 2hPG ≥140mg/dl and <200mg/dl (IGT)	FPG ≥126mg/dl and 2hPG ≥200mg/dl Symptoms of DM and random plasma glucose concentration ≥200mg/dl
*A diagnosis of diabetes must be confirmed, on a subsequent day, by measurement of FPG, 2-h PG or random plasma glucose (if symptoms are present). The FPG test is greatly preferred because of ease administration, convenience, acceptability to patients and lower cost. Fasting is defined as no caloric intake for at least 8h. **This test requires the use of a glucose load containing the equivalent of 75g anhydrous glucose dissolved in water. DM, diabetes mellitus; 2-h PG, 2-h postload glucose.		

These criteria were published by the World Health Organization (WHO) and the American Diabetes Association (ADA).

Workshop: Diabetes Surveillance and Control
Group 2
Exercise of Plan of Action

General Objective

Establish in every country a Diabetes Management National Program

Specific Objectives

1. Define the policies and strategies of inter-institutional coordination, implementation, evaluation and monitoring systems.
2. Establish the standards for primary, secondary, and tertiary prevention
3. Promote a comprehensive approach for the management of persons with Diabetes Mellitus

Plan of Action

1. Create an inter-institutional group, responsible for preparing the proposal of a national program on diabetes. This group should be composed of representatives of a variety of sectors involved in the management and control of diabetes
2. Establish mechanisms of coordination among the inter-institutional groups of the countries of the region in order to standardize the diabetes management and control programs in each country/region.
3. Identify sources of technical support and financing and promote its cooperation for the implementation of the National Diabetes Program
4. Achieve effective functioning of the management of the National Diabetes Program (focal point) within the Ministries of Health of each countries
5. Obtain a compromise from the participants in each group regarding the development and sustainability of the proposed actions in this workshop and their continuous involvement in the process

In Guatemala, the Instituto del Seguro Social (a government institution) conducted a cross-sectional study to determine the prevalence of type 2 diabetes mellitus in a sample of 400 inhabitants of an indigenous population living in Sololá. Participation in the study was in a volunteer basis among people aged 35 years and older. Blood samples were taken to a random sample of participants. Diagnosis of diabetes was based on the WHO diagnostic criteria. A total of 28 cases of diabetes were identified, that represented a prevalence of 7%. Only 37% reported to have previous knowledge of being diabetics. Diabetes was more prevalent among men of 45-49 years of age and among women of 35-39 years of age. Even though the sample was small and that participation was voluntary (and not a random sample), this study is an indication that diabetes could be a health problem in Guatemala.

Workshop: Diabetes Surveillance and Control
Group 3
Exercise of Plan of Action

Proposal of a diabetes prevalence study of diabetes mellitus and development of policies for its prevention, control, and management

PROBLEM 1

- Lack of knowledge/information on the prevalence of diabetes
- Deficient epidemiological surveillance system

Objective

Establish the prevalence of diabetes mellitus and its risk factors in each country of the region.

Methodology

Study Design: The study will be conducted including persons of 18 years and older, in urban and rural areas of each country, taking into account the existing regional differences. The sample will be selected using cluster sampling and will be stratified in accordance with sex, age, and socioeconomic level. Pregnant women will be excluded from the study.

Methods

- Survey on diabetes and its risk factors, including dietary habits and level of physical activity.
- Test of glucose oral tolerance, using 75 g of anhydrous glucose. Blood glucose will be measured in fasting and two post-prandial hours using the "micromethod". The levels of glucose that will be used to make the diagnosis are those established by WHO.
- Anthropometry: measurement of weight and height to calculate Body Mass Index, and measurement of the abdominal circumference.
- Measurement of antecubital blood pressure (left arm) utilizing digital manometers. For the hypertension diagnosis the criteria established by WHO will be used.
- Lipids profile: the concentration of total cholesterol, `triglycerides`, and HDL will be measured using the "micromethod". The subjects should have 14 hours of fast prior to taking the sample.

PROBLEM 2

The creation of health policies in diabetes is not a priority for the government and the Health Ministries

Objective

Propose to the governments of the region to define as priority the development of policies aimed at the prevention, control, and management of diabetes mellitus.

Indicators

- Number of governments that have defined policies
- Economic resources allocated to these policies
- Cost/benefit of the development of these policies

Hypothesis

Sensitization of the authorities and related institutions by policy adoption

Analysis of Interested Parties

The participants were grouped in order to carry-out an analysis of interested parties. Each group analyzed the plan of action that had been previously prepared. They were asked to identify a list of stakeholders and to designate a value regarding the level of importance in this process and their "perceived attitude" (against/in favor) of the proposed plan of activities. In the following section the results per group are summarized.

Group 1

Problems: *Lack of promotion and education on diabetes in every level.
Lack of human resources trained for primary care.*

	Groups	Power	Value	Effect
A	Government	5	+1	+5
B	Ministry of Health	4	+2	+8
C	Communications Media	5	+1	+5
D	Association of Persons with Diabetes	3	+3	+9
F	Universities	4	0	0
G	Pharmaceutical Industry	4	+1	+4
H	International Organizations	5	+2	+10
I	Service Club	2	+2	+4
J	Scientific Societies	2	+3	+6
K	Diabetes health care staff team	2	+3	+5

Group 2

Problems: *1. The prevalence of diabetes is unknown.
2. The governments do not give priority to diabetes.*

	Groups	Power	Value	Effect
A	Ministry of Health	5	+3	+15
B	Association of Persons with Diabetes	3	+1	+3
C	Medical Associations or Societies	3	+2	+6
D	Pharmaceutical Industry	4	+2	+8
E	Population to Study	4	+3	12
F	Food Industry	2	+1	2
G	NGOs	5	+2	+10

Group 3

Problem: No National Program for the Management and Control of diabetes in place.

	Groups	Power	Value	Effect
A	Ministry of Health	5	+1	+5
B	Universities	2	-1	-2
C	Pharmaceutical Industry	1	+1	+1
D	Medical Associations	1	-1	-1
F	Patient Associations	2	+1	+2
G	Communications Media	5	+1	+5
H	Social Security Institutions	2	+1	+2
I	NGOs	2	+2	+4
J	International Organizations	5	+2	+10

Conclusions

During the two days in which the workshop was developed, the participants discussed several aspects related to diabetes surveillance and control. The representatives of the participating countries illustrated with their presentations the importance of this issue in the different national contexts. Important talks/lectures on a variety of topics were offered including: the importance of education in the management of diabetes and the inclusion of gender in the management of the disease.

In addition, several problems related to diabetes were identified. These were ranked and at the end, the following regional priorities were chosen:

- 1. Studies of Prevalence of Diabetes**
- 2. National Diabetes Programs**

The participants participated in discussions and other individual and group activities in order to continue with the plan of action defined in the workshop of San Salvador.

Coordinators for the Diabetes Projects

A coordinator or contact person for each country was selected who will be responsible to offer updates of the development of the plan of action created by each group. The following list includes the names of those responsible for each country and the organization to which they are affiliated:

El Salvador	Dr. Nery Eduardo Ruiz Pimentel, Hospital Rosales, Phone: 288-3092
Nicaragua	Dr. Martha Pastora, Ministry of Health, Facsimile 289-4202
Guatemala	Dr. Mael Ramírez, INCAP and Dr. Patricia Orellana, ministry of Health
Honduras	Dr. Gustavo Zúñiga, Ministry of Health, FEDIABETES
Ecuador	Dr. Byron Cifuentes
PAHO	Dr. Alberto Barceló, Washington DC

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Annex 1: Participatory Techniques Summary

- **Brainstorming Technique**
- **Multivoting Technique**
- **Nominal Group Technique**

The session includes three main activities:

1. Brainstorming Session
2. Multivoting Session
3. Nominal Group Technique

I. Brainstorming Session

This type of technique is used to achieve a spontaneous, abundant, and creative generation of ideas or solutions to a subject/problem presented to a working group. It is fundamental that four main rules be observed at all times during the session. Furthermore, these same principles should be observed during the multivoting and nominal technique sessions.

Rules of Participation

The success of the session depends on the observation and maintenance of these four rules of participation throughout the of teamwork process.

1. Suspend all types of criticism or judgmental remarks: This rule requires that every participant (including the leader of the group) refrains from voicing any criticisms or judgmental remarks about what other people say during the brainstorming session. No criticisms (or self-criticism) is permitted among the participants of the session. Any person that criticizes someone else's ideas (example "that idea seems a little silly") he or she will be explicitly requested to suspend this type of behavior.

2. Free thinking: This rule suggests that all the barriers or "inhibitions" are left behind during this session. The participants should allow themselves to be spontaneous and creative, offering all sorts of ideas even those that may not seem to make a lot of sense. All the ideas are permitted and duly noted.

3. Quantity over quality: In this type of exercise what is important is to achieve the greatest number of ideas without taking into account their quality. Any idea is important regardless of its quality. The participants should feel comfortable and motivated to say any idea that comes to mind without feeling restrained by the lack of merit of these ideas.

4. Cross-fertilization of ideas: This rule suggests that the participants can create their own ideas based on the ideas of other participants. In other type of sessions this type of behavior may not be considered appropriate or polite ("to steal somebody else's ideas"). However, for this type of session it is accepted and even encouraged in order to generate the greatest number of ideas possible. If the idea of a participant stimulates the idea of another participant both ideas should be

written down. It is important to strengthen this rule among the participants of the session in order to avoid competition or rivalry between of the members of the group. The cross-fertilization of ideas makes possible the exchange and enrichment of different ideas among the participants of the group, in an environment of collaboration and total acceptance.

These rules should be written and explained to the participants of the group. A written copy of the rules should be available at all times during the session. Any participant who does not follow the rules, should be warned by the leader (or another participant) and will be informed as to which rule of participation he/she is not following. It is fundamental that the implementation and strict adherence to this rules takes place because the integrity and the effectiveness of the session depends on them.

Instructions for the Brainstorming Session

Every participant should have the following information in advance:

1. The problem/topic selected for the session
2. Relevant information related to the discussion topic
3. Copy of the participation rules
4. The exact hour and place where the session will take place.

Each group should consist of approximately five to seven people and a group leader.

At the beginning of the exercise the topic of discussion should be presented again to the group participants, also review the rules of participation, and re-define the topic of discussion if necessary. A practice session is encouraged (5 minutes of brainstorming session on a simple, non-controversial topic of discussion). For example, different forms in which a stew can be prepared, or different ways you can build a birdhouse, etc.

Written Brainstorming Session: The exercise requires that each participant works in silence and that no discussion or comments of any of the ideas take place during this phase of the session. Each person should work individually. Practical jokes, observations, etc. in this phase of teamwork should not be permitted.

METHOD

1. Every participant gets a form, a table with three column and 7 lines, in which they will write down identified problems.
2. Each member should write as quickly as possible 3 problems/ideas in the first row of the table.
3. When all the participants have finished writing their ideas, the ideas are placed in a box (which will be placed on top of the working table), and every participant should take out at random from the box (or container) a new sheet. If a participant finishes before the other people in the group, he/she should wait in silence.
Option: pass the sheet of paper to the person sitting to the right hand side of him/herself (The leader must decide which option will be used).

4. On the next round, each person will pick at random a new sheet, and write 3 more problems. Participant may use the ideas written before on the sheet by a different person, to come up with new ideas (cross-fertilization principle)
5. This process goes on until the seven lines of the form are completed.
(This exercise lasts for approximately 30 minutes)

Break for 10 minutes.

6. When the participants return, each participant takes a sheet of paper. First, each person will take turns reading ideas identified in the form, and cross-out those that are redundant. Each new idea should be written in a flipchart and will be hung on the wall so that all the participants may see it.

(This exercise lasts for approximately 20 minutes)

II. Multivoting Session

This technique is used to reduce the number of ideas generated at the brainstorming session.

During this session, a selection of the most important identified ideas/problems will be done. This technique will help to reduce the number of ideas generated during the session to a more manageable number of approximately 4 to 5 ideas/problems chosen by the group.

Method

1. A list with the all problems identified during the brainstorming session is taped on the wall.
2. Each participant votes in silence for those ideas/problems that he/she considers more important. Every participant can vote for as many problems/ideas he/she wants.
5. *After voting*, the group facilitator calls out loud each idea in the list (one by one). At this point, participants are asked to raise their hand when an idea they have selected/voted is being called. A total score is obtained for each problem/idea.
6. Only the ideas/problems with more number of votes are selected for a second round of voting, and written down on a new sheet of paper (You can also draw a circle around the selected problem from the original sheet of paper in the flip chart)
7. A second voting round takes place with only the problems with more number of votes. During this second round of voting, each participant can vote for a maximum, that cannot exceed half of the total of the ideas pre-selected in the previous round. For example, if in the previous round 20 ideas were chosen, every participant cannot vote/select more than 10 ideas in this second round, and not more than five in the third round, etc.
8. Repeat exercise until 4 or 5 final ideas are obtained. These four or five final ideas are the ideas/solutions selected by the group.

(time available for this exercise 40 minutes)

Break for 10 minutes

III. Nominal Ordering Technique

During the third group activity ideas are arranged in order of importance.

Method

1. Write the 4 or 5 ideas selected during the previous session in a piece of paper and make a copy for each member of the group.
2. The form should be presented in the following way:
 - A. Idea _____
 - B. Idea _____
 - C. Idea _____
 - D. Idea _____
3. Each participant will be asked to write a number from 1 to 4 next to each problem in the list, that will indicate his/her perceived degree of importance of the problem. Note that the higher the number (e.g., 4) the more important the idea. Example: Number 4 indicates the most important problem, 3 the most important second, 2 the following most important and 1 the least important.

Example

- A. Idea _____ 3
- B. Ideas _____ 4 *** more important
- C. Ideas _____ 2
- D. Ideas _____ 1*** less important

4. The voting sheets are given to the group leader and a total score is computed for each problem with the votes of each member.

Example

- A. 2, 3, 2, 4, 1 = 12
- B. 1, 4, 2, 3, 1 = 11
- C. 3, 1, 3, 3, 4 = 14
- D. 4, 2, 4, 1, 2 = 13

5. The group re-organizes the list of problems in order of importance
 - A. More important third
 - B. More important room
 - C. More important
 - D. More important second

Once the most important ideas/problems have been identified and arranged in order of importance, the team and leader (is) of the group (s) can use this information for the development of a strategic plan or for a cause - effect diagram.

The usefulness of these types of techniques is that they allow for the creation of an enormous quantity of information by the work group, in a very creative and spontaneous fashion. In addition, they allow to select and give priority to those ideas that the participants considered to be more important for their countries/regions. If a plan is developed from the ideas selected using these techniques, these activities are more likely to be supported by the participants in the group, since they were part of the process.

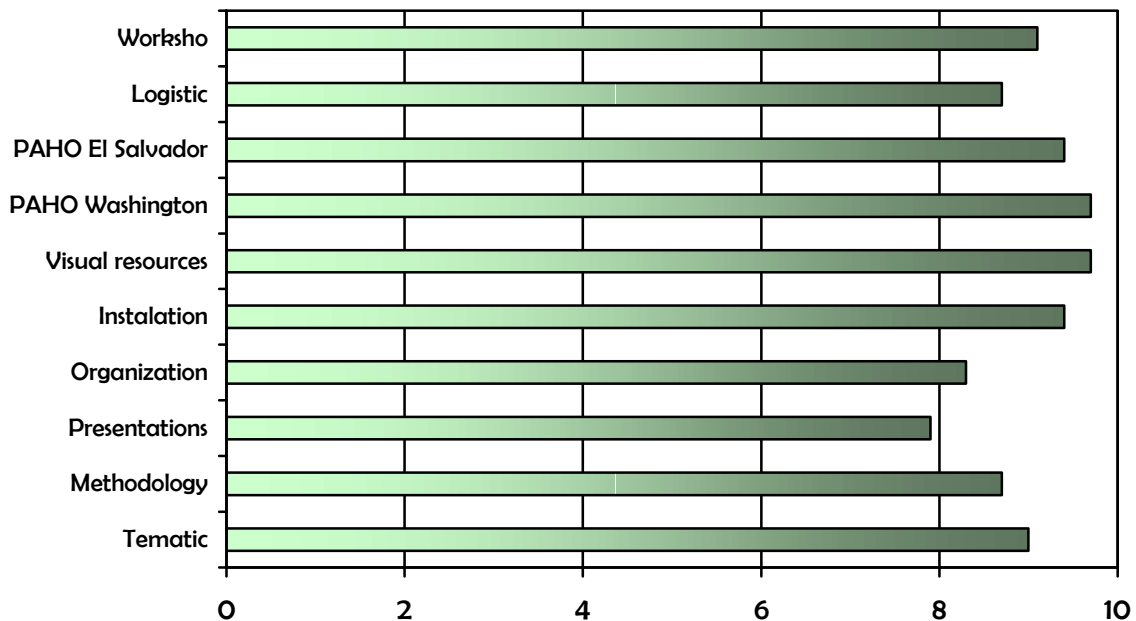
Annex 2: Final Evaluation of the Workshop

In general, the participants were very excited about the workshop and worked with a great deal of enthusiasm.

The following graph shows the scores given by the participants in the workshop evaluation. A 10 point scales was used (10 excellent, 0 deficient).

These are some of the opinions obtained as responses to the open-ended questions of the evaluation. These were as follows:

1. Very important because it is going to allow us to develop concrete programs in each of our countries.
2. Excellent event, especially if there is a continued effort by the countries representatives to develop the proposed plans of action.
3. Dynamic and effective work group techniques that made it possible to maintain the interest through the different working sessions. This will allow for the continuity of the project and to conduct the survey of prevalence of DM in the participating countries.
4. The logical framework was probably handled without the necessary rigor, due to the limited time.
5. Greater definition of follow-up strategies.
6. The methodology was new for almost all the participants. That brought difficulties. The results could have been expressed more concretely for each country.



Annex 3: List of Participants

No.	Name	Institution	Telephone/e-mail
1	Lucy Villagra Gutiérrez	HALF, Managua, Nicaragua	villagra@nicarao.org.ni
2	Martha Shepherd	PAHO/WHO CIN	2894202
3	Roberto Sempertegui O.	PAHO/ECU	rsempert@opsecu.org.ec
4	Alejandro Mayer	Diabetic Asoc. de ELS	260-5682
5	Miguel Ernesto Elas	MSPAS (ELS)	miguelas@yupimail.com
6	Gustavo Zuniga	MS – TEGUCIGALPA	237-3160
7	Ruben Palm	Fund.Diab. Honduras	239-9373
8	José Rolando Hernández	MSPAS (ELS)	221-1618/222-3324
9	Byron Cifuentes	FEDIABETES-ECU	
10	Manuel Ramírez	INCAP-(GUT)	mramirez@incap.org.gt
11	María Isabel Jule de Hernández	ASOC.DIAB. (ELS)	260-5682
12	Enrique Aguilar	MPH (ECU)	593-2-566197
13	Ruth Vega of Apple-tree	PAHO/WHO/ELS	rmanzano@op.org.sv
14	Patricia Orellana	MSPAS(GUT)	orellanapp@pronet.net.gt
15	Rolando Hernández	Asoc.Salv.Diab. (ELS)	260-5682
16	Gladys Ana of Cortéz	Asoc.Salv-Diab. (ELS)	agal@saltel.net
17	Miguel Machuca	PAHO/WHO (HOND)	
18	Rosario of Takes out	(HOSP.ROSALES)ELS MSPAS	jlsaca@insatelsa.com
19	Nery Edgardo Ruíz	MSPAS(HOSP.ROSALES)ELS	222-5866
20	Navy Antonio Panameño	Asoc.Salv.Diab. (ELS)	260-5682
21	Romero Mauricio	PAHO/WHO/ELS	mromero@els.ops-oms.org
22	Mario Valcárcel Novo	PAHO/WHO EL SALVADOR	mvalcarcel@ops.org.sv
23	Raúl Armando Palomo	MSPAS, El Salvador	221-0978
24	Julio Garay Ramos	MSPAS, El Salvador	julioels@hotmail.com / 221-0978
25	Marta Dinora A. De Maza	MSPAS, ASADI,El Salvador	223-9947
26	María Elena de Castelar	MSPAS, ASADI, El Salvador	mecastelar@cit.net
27	María of the Carmen Daroca	PAHO/WHO-Bolivia	mdaroca@bol.ops.org
28	Rafael Baltrons Orellana	MSPAS (ELS)	295-1357
29	Dinorah of Mace	Asoc. Salv. Endocrino.	225-3377
30	Laura Branches	MSPAS (ELS)	221-0978
31	María Mercedes de Padilla	MSPAS (ELS)	221-0966
32	Alberto Barceló	PAHO/WHO-Washington DC	barceloa@paho.org
33	Christine Karkashian	PAHO/WHO-Washington DC	karkashc@paho.org

Annex 4: Agenda

Wednesday, 8 March 2000

- 8:30-8:40 Opening by Mr. Gladys de Cortez, Subdelegate for Central America, Region SACA/IDF.
- 8:40-8:50 Welcome by Mr. Alejandro Meyer, President of ASADI.
- 8:50-9:00 Allusive words to the event by Dr. Horacio Toro, PAHO/WHO representative, El Salvador.
- 9:00-9:10 Official inauguration by Dr. José Francisco López Beltrán, Minister of Health.
- 9:10-9:20 Brief personal presentation of the representatives of each country
- 9:20 **Plenary Session:**
President: Dr. Mario Valcarcel, PAHO, El Salvador
Facilitator: Dr. Miguel Machuca, PAHO, Honduras
Subject: Current situation of diabetes in the Americas.
Objective: Describe the principal problems that affect surveillance and control of diabetes in the Americas.
- 9:20-09:40 **Presentation:** Diabetes in Latin America and the Caribbean (Dr. Alberto Barceló)
- 9:40-10:00 **Presentation:** The example of Bolivia. Survey of Diabetes, Obesity, and Hypertension in Bolivia (Dr. María del Carmen Daroca)
- 10:00-10:20 *Coffee and pupusas*
- 10:20-11:20 **Round table:** Current situation of diabetes
Moderator: Dr. Mario Valcarcel, PAHO, El Salvador
a) El Salvador, Dr. Roberto Cerrito, ASADI
b) Nicaragua, Dr. Lucy Villagra, Ministry of Health
c) Guatemala, Dr. Patricia Orellana, national authority of Noncommunicable
d) Honduras, Dr. Ruben Palma, president of the Federation of Prevention of Diabetes in Honduras.
e) Ecuador, Dr. Byron Cifuentes Alvear, president of Ecuadorian Diabetes Federation
f)
- 11:30-12:30 Teamwork
Subject: Critical needs for surveillance and control of diabetes in the subregion.
Objective: Propose activities to carry out for diabetes surveillance and control in the participating countries.
Suggested Subjects: Definition of the problem. Objectives of surveillance and control of diabetes. Diagnostic criteria. The registries of people with diabetes. Mortality from diabetes. The programs for attention in diabetes. The education of the general population. Advocacy in diabetes. The systems of health and diabetes. Availability of insulin, drugs and other critical supplies.
Facilitators: Dr. Mario Valcarcel, Dr. Christine Karkashian, Dr. Alberto Barceló, Dr. María of the Carmen Daroca
- 12:30-14:00 *Luncheon*
- 14:00-16:00 Continuation of the teamwork
- 16:00-17:00 **Plenary Session**
Presentations of results of the teamwork
President: Dr. Miguel Machuca, PAHO, Honduras
Facilitator: Dr. Patricia Ruiz, PAHO, Guatemala

Thursday, 9 March 2000

- 9:00 **Plenary Session**
President: Dr. María of the Carmen Daroca, PAHO, Bolivia
Facilitator: Dr. Roberto Sempertegui, PAHO, Ecuador
Subject: Current situation of the education in diabetes in El Salvador.
Objective: Describe the programs for education in diabetes of the Salvadorian Association of Diabetes.
- 9:00-9:20 **Presentation:** Education in Diabetes (Mr. Ana Gladys A. de Cortez)
- 9:30-9:50 **Round table:** The Gender in the Health Care of Diabetes: Nicaragua and El Salvador.
Moderator: Dr. Christine Karkashian, PAHO, Washington
Nicaragua, Gilma Tinoco, PAHO
El Salvador, Mr. Laura Ramos, Ministry of Health
- 10:00-10:30 Teamwork
Subject: Introduction to a plan of action.
Objective: Development of a proposal for diabetes surveillance and control of diabetes.
Description of the method of work, as well as the location in time and space of the proposal.
Suggested Subjects: Selection of one or more subjects on the basis of the results of the teamwork of the first day.
Facilitators: Dr. Mario Valcarcel, Dr. Christine Karkashian, Dr. Alberto Barceló, Dr. María of the Carmen Daroca
- 10:30-10-50 *Coffee and pupusas*
- 11:00-12:30 Continuation of the teamwork
- 12:30-14:00 Luncheon
- 14:00-17:30 Plenary Session
President: Dr. Miguel Machuca, PAHO, Honduras
Facilitator: Dr. Manuel Ramírez, INCAP, Guatemala
Teamwork presentation
- 17:30-18:00 Closing remarks