PARAGUAY

Paraguay has a diabetes education program that is structured and funded. It has been evaluated and is the responsibility of the Ministry of Health of Paraguay. Initially PEDNID-LA was used in the country, but this method was later discontinued and Paraguay maintains its own national program. Other education programs also exist, run by, for example, the Support Groups, the Diabetes Foundation of Paraguay (FUPADI), the Red Cross, and the Lions Club. However, these are not structured programs and have not been evaluated.

Introduction

In Paraguay, the prevalence of diabetes already exceeds 6.5% of the adult population. In light of direct costs such as hospital and outpatient care (for prevention, diagnosis, treatment, research) as well as indirect costs including loss of productivity, labor absenteeism, and early retirements, there is an evident need to develop specific programs to improve the care of people with diabetes. These should be comprehensive programs that include all aspects of diabetes treatment.

Aware that education is the basis for managing the disease, the National Diabetes Program has as one of its priorities improving the education of people with diabetes, their family members, and, if possible, the population in general, with regard to diabetes prevention, management, and proper care and prevention of acute and chronic complications. This effort seeks to improve the quality of life of people with diabetes and to reduce morbidity and mortality in this group.

Institutions responsible

National Diabetes Program of the Ministry of Public Health and Social Welfare (Educational Area Committee).

Working Teams of the Diabetes Care Units of the different Health Regions of the country

General objectives

1. Raise awareness of the situation among patients and family members
2. Enable patients to become self-sufficient in diabetes care
3. Achieve a better quality of life for people with diabetes
4. Achieve greater adherence to treatment
5. Reduce the incidence of acute complications
6. Reduce the emergence of chronic complications.

Population and context

The program is aimed at all people with diabetes in the Insulin Project of the National Diabetes Program at the national level (Asunción, approximately 1,800 people) as well as those who visit the offices of the Diabetes Care Units of the 18 Health Regions (approximately 1,000 people per Region).

The population includes people with type 1 and type 2 diabetes as well as family members.

Composition of the team

The education team at all levels is made up of the following:
- Medical coordinator
- Nurse and/or health educator

Development of the program

The group program consists of three classes a week throughout the year.
The individual program is held from Monday to Friday in the mornings throughout the year.

Content

The program offers instruction in the following areas:
1. General information about diabetes
2. Risk factors for diabetes and cardiovascular disease
3. Diabetes prevention measures
4. Role of diabetes education
5. Psychosocial factors and family participation
6. Physical activity
7. General and specialized nutrition
8. Pharmacologic treatment of diabetes mellitus (oral anti-diabetics, insulin)
9. Treatment of related factors (hypertension, dyslipidemia, obesity)
10. Self-control for people with diabetes
11. Specific care: dental, skin, feet
12. Acute complications of diabetes: hyperglycemia, hypoglycemia
13. Chronic complications of diabetes: neuropathy, nephropathy, and retinopathy
14. Pregnancy and gestational diabetes
15. Infection and diabetes

Applied methodology

Individual: This is structured to meet the specific needs of each patient, making modifications as necessary. The patient's health status and level of knowledge about diabetes are evaluated. The physician defines the goal for metabolic control, barriers to learning are identified, and habits and socioeconomic factors are taken into account.

Group: Working groups, educational talks.

- **Working groups:** Identify individuals who, by merit of their individual capacity and educational level, are able to advance specific activities of the education program.
- **Educational talks:** Form groups that are as homogeneous as possible, taking into account the following:
  - Age
  - Type of diabetes
  - **Social and cultural level**
  - Barriers to learning

Materials

- Education manuals
- Slides, videocassettes
- Charts, posters, illustrations
- Cards with questions
- Chalkboard
- Pamphlets
- Journals
- Evaluation questionnaire
- Other educational materials

Evaluation

The evaluation committee reviews the results of the education program annually, both for the program as a whole, and for the patients.

Evaluation of the program
The following aspects are reviewed (twice a year):
- Objectives of the program
- Methodology
- Composition of the team
- Attendance at and completion of activities
- Accessibility
- Resources
- Effectiveness of the program

Evaluation of the patients
The following indicators are evaluated:
- Body weight
- Blood pressure
- Symptoms
- Frequency of hospitalizations
- Hypoglycemia episodesChanges in medication (twice a year)
- Blood glucose levels
- HbA1c
- Lipid profile (twice a year)
- Adherence to the dietary plan
- Physical activity and treatment (twice a year)
- Levels of knowledge (three times a year)

For more information, contact:

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