BASIC CURRICULUM for Health Professionals on Diabetes Therapeutic Education

Within the framework of the STEP (Spreading Therapeutic Education Program)

Report of a DESG Working Group

2001
FOREWORD

A STEP in the right direction:
the Servier-DESG Spreading Therapeutic Education Program

The Diabetes Education Study Group (DESG), a working group of the European Association for the Study of Diabetes, was created in 1979. An ongoing Servier-DESG partnership exists, based on interactive workshops emphasizing the importance of Therapeutic Patient Education (TPE) to Health Care Providers (HCPs) worldwide. This cooperation continues to develop, both in scale and in content, the new STEP program, coordinated by DESG president Professor A. Maldonato, being a recent successful introduction.

The STEP program began with a multinational inquiry into the educational needs of HCPs, termed STEP 1. These results were subsequently reviewed by international experts in TPE during a working meeting named STEP 2, at which a brand new Basic Curriculum for Health Professionals on Diabetes Therapeutic Education was conceived and developed. This new curriculum defines content and standards for a series of meetings worldwide, duly baptized STEP 3. STEP 3 meetings will be conducted by DESG-acknowledged experts in TPE, and the core curriculum messages adapted to different geographic needs following the STEP 1 analysis. The target audience for the STEP 3 meetings are local HCPs, particularly primary care physicians, whose participation promises to benefit their diabetic patients in the longer term.

Servier wishes you an excellent workshop and ensures you of its permanent commitment to continuous improvement of the treatment of type 2 diabetes.
The Diabetes Education Study Group (DESG), a section of the European Association for the Study of Diabetes, was founded in 1979 upon the initiative of Jean-Philippe Assal, Geneva.

According to its Constitution, the aim of the DESG is “to improve the quality of life of the diabetic patient through the development and evaluation of educational programmes designed to foster independence for the patient, to improve the quality of metabolic control, to emphasise the importance of prevention and early recognition of the disease and to encourage relevant research.” In the pursuit of these goals, the DESG has organized many workshops and congresses, and has published more than twenty Teaching Letters to update Healthcare Providers on specific educational topics. It has also published two series of basic handouts for people with diabetes, the 5-Minute Education Kit and the Patient Education Basics, to summarize selected topics in a few minutes according to given guidelines.

These activities have been continued at the national level throughout Europe by organizations that have flourished in both Western and Eastern countries. These organizations, although not official sections of the DESG, refer in their name and/or in their constitution to the parent body as a source of continuing inspiration. The documents produced by the DESG have been translated into more than twenty languages and distributed all over the world. Most recently, the DESG has published a comprehensive Web site on the Internet (www.desg.org) where all DESG publications can be freely downloaded.

The DESG is chaired by a President and an Executive Committee composed of six members including at least two nonphysician health professionals. The decision-making body is the General Committee, composed of two representatives per European country. The current number of DESG members amounts to 703 doctors, nurses, dieticians, psychologists, and other health professionals, from 71 European and non-European countries.

NOTICE
All DESG productions can be consulted and freely downloaded on the DESG Web site at www.desg.org
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INTRODUCTION

Many people with diabetes, as well as many people with other chronic diseases, do not follow medical advice and do not achieve optimal control of their illness. This has created an ever-increasing gap between the progress of medical science and the way this progress is translated into positive outcomes for patients with chronic diseases.

To treat themselves appropriately, people with diabetes need to acquire some theoretical knowledge, several skills, and above all the will to change, i.e., the motivation to translate the new knowledge and skills into new behaviors and coping strategies. Even a simple act like weighing oneself once per week may imply a profound change in one’s attitude towards health, and for many it is a tremendously difficult achievement.

To help them progress in this direction, health care providers need to change many time-honored attitudes, to acquire competencies and skills which have not traditionally been taught in professional or medical schools, and to organize differently their professional time and space with respect to the way it is usually utilised.

Therapeutic patient education (TPE) has been demonstrated to be effective in preventing the acute complications of diabetes, in delaying or reducing the consequences of late complications, and in improving the patients’ quality of life.

The prevalence of both types of diabetes, despite growing hopes of its future prevention and cure, is increasing in the world, particularly in developing countries, where it is expected to explode in the next 20 years. Health care providers must be prepared to face this challenge, adding to their pharmacological arsenal the weapons of necessary pedagogic, psychological, communication, social – in one word – educational skills.

This document was drafted by a multidisciplinary group of DESG experts during a 5-day workshop held in Orvieto, Italy, from 22-28 March 2000, and edited by the Executive Committee during a 2-day meeting in Rome on 19 and 20 January 2001. Its aim is to propose a model of basic systematic training of health care providers in TPE, namely those involved in the primary care of people with diabetes.

This document has been inspired by, and is largely based on the 1998 WHO Report on Continuing education programmes for Health Care Providers on therapeutic patient education in the field of chronic diseases, whose authors are in part also members of the present working group.¹
THE DESG APPROACH

Up until the 1970s, the education of diabetic patients had been practised by isolated pioneers, and when the DESG was founded in 1979 it had just recently been accepted as a powerful therapeutic tool in the United States, thanks to the demonstration of its efficiency. However, facing the widespread failure to translate optimal diabetes care into daily practice, the prevailing attitude of doctors and other health care providers (HCPs) was still to consider the diabetic patient, albeit not responsible for his or her care, guilty nevertheless for its failure.

From the beginning, the DESG approach has been based on a few assumptions that have guided its activity throughout the years. People with diabetes do not necessarily cheat or lie more than anybody else. If they do not accept our advice, they either do not know why or how, they perceive the cost/benefit ratio as too high, or they have not yet come to terms with this particular life-long disease.

As a consequence, the responsibility of HCPs caring for people with diabetes extends far beyond the traditional tasks of diagnosis and medication. It includes informing patients, training them to acquire the necessary skills, and using all means possible to improve motivation for treatment and monitoring. This implies understanding each one’s personality, health beliefs, degree of acceptance of the disease, and the influence of the family and social environment.

To be effective for the largest possible number of patients, HCPs must acquire numerous skills that are not traditionally included in professional curricula, and that belong to the domain of the human sciences: pedagogy, psychology, sociology, communication science, anthropology, and bioethics.
In addition, a profound change is required in the attitude of doctors, nurses, and dieticians interacting with the majority of people with diabetes. A shift must be made from the traditional, authoritarian, paternalistic attitude, to an attitude of full acceptance, empathy, and encouragement to share the responsibility of treatment choice and its day-to-day implementation.

Despite the many difficulties to be faced in acquiring new professional skills and in changing roles and attitudes, the effort is worth making because it is the only way to improve our effectiveness in the treatment of chronic diseases.

Given the therapeutic role of patient education, doctors must be involved in the entire process, as the members of the multidisciplinary team who carry the responsibility for the planning and implementation of the educational process.

In accordance with these assumptions, the DESG has concentrated on:
- increasing the awareness of doctors, nurses, dieticians, and other HCP caring for people with diabetes about the difficulties they encounter in educating their patients;
- encouraging HCPs to find ways to overcome these difficulties by improving their skills, attitudes, and certain aspects of the structure where they work;
- applying existing models, or developing new ones, to better understand what influences the motivation of different individuals with diabetes to learn and properly treat themselves;
- fostering research in the field of TPE, and developing and evaluating educational programs for patients, based on current educational trends.

Following an increasing demand for formal training in TPE for health professionals involved in diabetes care at the primary level, the DESG has set forth to propose a curriculum, based on the same educational principles and recommendations that have guided the WHO-Euro Report, but flexible enough - thanks to its modular structure - to be implemented in different ways in different settings, according to local needs and possibilities.
**PREREQUISITE: MOTIVATION OF HCPs**

Motivation to change is a necessary requirement for learning, and it is usually the consequence of dissatisfaction or discomfort. This is also valid for HCPs involved in diabetes care. In some cases it may happen that for a variety of reasons they do not feel a strong desire to change their working situation, even though it may appear unsatisfactory from the outside.

Certain steps prior to the course may therefore be advisable in order to increase the motivation of HCPs to participate. A few possibilities include:
- a preliminary meeting focused on the difficulties in the long-term follow-up of people with diabetes and on the analysis of possible solutions
- the addition of a half-day or a full-day biomedical updating, eg, on new therapies, to the core educational training
- a reward of any kind, given during the course, or back at one’s place of work
- course certification, especially in those countries with a system of compulsory continuous education for HCPs.

**CURRICULUM OVERVIEW**

The curriculum presented in this document should by no means be taken as a prescription, but rather as one possible example of the systematic approach to basic training in diabetes TPE.

Its objective is to introduce HCPs caring for people with diabetes to the basic skills for effective TPE. In fact, many of these skills would require much more than one day to be fully acquired, and in some cases full courses focus on just one of the competencies addressed by this curriculum, eg, defining educational objectives, verbal and nonverbal communication, active listening, interactive learning methods, teamwork, etc.

The size of the present curriculum has been chosen to meet the need of completeness at a basic level of competencies.

The curriculum is based on eight one-day modules (for a total of 64 hours), and allows for different formats of implementation, according to local needs. There could be a residential course lasting 8 consecutive days, or a course given 1 day or 2 consecutive days every n weeks or months.

Long enough intervals during the course, or a follow-up meeting after 6 to 12 months, may be used to plan tasks with the participants to be performed at home and then verified. This would increase the number of learning hours,
with positive effects on the effectiveness of the course and on the credits it may offer.

Both the order and the grouping of modules are optional and can be established according to local needs. The possible exceptions are modules 1 and 8, which have been conceived as initial and final. In addition, the size of the course might be reduced to seven or six modules, if really necessary, by cutting or pasting one or two of modules 2 to 7.

The total number of participants should allow group work in two to three groups of 10 to 15, with the possibility of splitting into smaller groups of 4 to 5 for some activities. In general, the number of participants should therefore not exceed 30 to 35.

Each one-day module has been subdivided into four 2-hour sessions. Each session, usually dedicated to attaining a specific educational objective, should consist mainly of interactive activities involving the participants.

If a formal lecture is given, it should not last more than 20 to 30 minutes. In this way the proportion of 25/75% of time devoted to passive and interactive activities would be respected. The lecturer can be one of the organizers or a local expert of the addressed discipline, e.g., psychology, pedagogy, communication science, management. Usually such an external expert is not an HCP, and his or her introduction to the special needs of diabetes TPE may require a fair investment of time. Therefore, when trained organizer(s) feel confident enough to play the expert and facilitate group work in a particular field, the advantages of doing it by themselves will probably exceed the risks.

The lecturer has the task of presenting the essential elements of a given topic/problem which will be necessary for the group work. Since the aim is to let participants find their own solutions, the lecturer should resist the temptation of saying too much.

Another possibility is to start with group-work and give the lecture afterwards, as a summary and comment. Modern educational trends suggest avoiding lectures at all, and in this case the expert would only be available for consultation by participants. In both cases the organizers should provide
participants with enough documentation on the subject, and it would be the participants’ responsibility to read it before the workshop.

In any case, the lecturer - be he or she a member of the organizing team or an external expert - should share the responsibility of organizing the whole session, and be present for the whole day.

For organizational details the reader is invited to refer to Guilbert’s Educational Handbook,3 Section 5: “How to organize an educational workshop”, and in particular to pages 5.05 to 5.08.
MODULE 1 - SETTING THE SCENE

GETTING STARTED

• Introduction of participants and exchange of each one’s experience in TPE.
• Personal objectives and expectations.
• Formative evaluation (pretest of knowledge).
• Overview of the Curriculum.

KEY CONCEPTS

• Different approaches to health care: acute vs chronic care; bio-medical v. bio-psycho-social approach.
• Learning by doing: the role of interactive learning methods.

OBJECTIVES

At the end of the module, participants will be able to:
• Compare their experience/needs in TPE with that of the other participants.
• List their priorities among the competences of TPE they would like to acquire.
• Describe the difference between the bio-medical approach and the bio-psycho-social approach to health care, and between the management of acute disease/emergencies and the long-term follow-up of chronic illness.
• Indicate two interactive and two non-interactive learning methods and their respective advantages and drawbacks.

STORYBOARD OF THE DAY
Methods

• Participants receive a card to fill in before entering: “What do I expect from this course for my personal practice?” and are asked to place it in a box. (The card can be anonymous, but participants are asked to label it with a personal code, to be used again at the end, in order to allow pre and post comparison).

• Self-introduction of each participant:
  - “short-story” of diabetes education in the participant’s region/ workplace;
  - or, participants split into pairs, get acquainted with each other, and then each one introduces the other to the group;
  - or, personal experience in TPE by filling-in a grid: eg, name, profession, training in diabetes education, where practising...).

• Example 1. Group work (Metaplan): “Which skills/ competencies would I like to acquire/ refine, to improve my effectiveness in diabetes patient education?”

• Example 2. Individual work. Participants receive the list of all the objectives indicated in this curriculum (to which any others can be added by the organizers) and are asked to select those (about 10) which seem most important/urgent for them. (For a detailed description of a 3-stage process of identification of one’s educational needs, see Ref 3, pages 8-13.)

Note. The choice between examples 1 and 2 should mainly be based on the effective possibility for the organizers to adapt the subsequent program to the needs that have been indicated. Example 2 demands greater program flexibility, which in certain settings may not be available.
Materials required

- Grid with questions to be answered

Timing

- 10 min to fill in the card about personal expectations
- 50 min for introduction of all participants
- 60 min for definition of personal or group objectives

Formative evaluation: pretesting

Methods

- Multiple-choice questionnaire. (See page 53).

Overview of DESG Curriculum

Methods

- Lecture. Presentation of the DESG Curriculum.
- Group work (Metaplan). Strong and weak points of the curriculum. Which changes to the present curriculum are desirable/possible to better satisfy the educational needs of participants?

Materials required

- Multiple-choice questionnaire.
- DESG Curriculum.
- Metaplan, or other materials for group work.

Timing

- 30 min for initial evaluation (pretest)
- 30 min for the presentation of DESG curriculum
- 45 min for group work on present curriculum
- 15 min for reports in plenary and discussion
KEY CONCEPT 1

Different approaches to health care: acute vs chronic medicine; bio-medical vs bio-psycho-social approach

Methods
• Lecture or summary. Features of emergency medicine vs chronic medicine. Role of TPE.
• Role playing. 1) Biomedical HCP with anxious diabetic patient. 2) Bio-psycho-social HCP with anxious diabetic patient. 3) Bio-psycho-social HCP with traditional, non-compliant patient.

Materials required
• Table with comparative analysis of medical approaches (Assal).
• Stage setting for role-playing.

Timing
• 30 min for lecture or summary
• 30 min for preparing the role-playing
• 45 min for 3 role-plays
• 15 min for discussion in plenary
KEY CONCEPT 2

Learning by doing: the role of interactive learning methods

Methods
• Lecture or summary. Learning domains and most appropriate teaching/learning methods. Explanation of the interactive methods used in this curriculum: Metaplan, role-playing, case/problem-based learning.

• Group work (Metaplan). Participants list the difficulties they have experienced with their own traditional education and possible solutions from different educational approaches.

Materials required
• Metaplan, or other materials for group work.

Timing
• 30 min for lecture or summary
• 60 min for Metaplan
• 30 min for report in plenary and discussion
Module 2 - PSYCHOLOGICAL SKILLS - A

KEY CONCEPTS

• Active listening, a powerful tool for effective counselling.
• Different personalities require different approaches.

OBJECTIVES

At the end of the day, participants will be able to:
• Define the characteristics of active listening and reformulation, and the conditions when they should or should not be used.
• Start changing their spontaneous attitudes with patients, being empathetic and using active listening.
• Describe their own personality.
• Define different patients' personalities and the most appropriate respective approaches.

STORYBOARD OF THE DAY

Active listening, a powerful tool for effective counselling

KEY-CONCEPT 1

Methods
• Lecture or summary. Characteristics of a helping relationship and the role of active listening.
• Work in small groups (case reports and pre-prepared answers). Ascertain the spontaneous attitudes of HCPs that are roadblocks to a helping relationship.
Find the appropriate answer (active listening) for each case report.
• Work in small groups. Practise active listening in groups of three: one exposes a problem or concern of his, one listens, and one observes and evaluates the quality of listening (using an observational rating scale). Participants rotate, each practising the three roles.
• Plenary, with summary and discussion.

**Materials required**
• Example of case reports with spontaneous answers
• Grid of spontaneous attitudes of HCPs (eg, Porter)
• Grid to evaluate the quality of listening (eg, Gordon-IACP)

**Timing**
• 20-30 min for lecture or clarifying introduction
• 90 min for working in small groups on spontaneous barriers
• 90 min for exercise on active listening
• 30 min for summary in plenary and discussion

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**Different personalities require different approaches**

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**KEY CONCEPT 2**

**Methods**
• Clarifying introduction.
• Individual work. Discover your personality by completing a Personal Test: are you promoter, controller, facilitator, or analyzer?
• Work in small groups (case reports). Participants diagnose the patient’s personality and propose the appropriate education strategy.
• Group work (Metaplan). Difficulties to change one’s attitudes and to adopt different professional approaches.
• Work in small groups. Practise the four approaches in groups of four (role playing). By rotation, each one plays a diabetic patient with a different personality, another one plays the HCP applying the appropriate educational approach, and two observe and evaluate the appropriateness and effectiveness of the approach (by possibly using an observational rating scale).
• Summary in plenary and discussion.

**Materials**
• Personality test (eg, Persona)
• Case reports

**Timing**
• 15 min for clarifying introduction
• 30 min for participants’ personality test
• 45 min for case reports and patients’ personality diagnosis
• 45 min for Metaplan on difficulty to change
• 90 min for role playing on four different approaches
• 15 min for summary in plenary and discussion
Module 3 - PSYCHOLOGICAL SKILLS - B

KEY CONCEPTS

- Acceptance of a life-long disease, like diabetes, develops through stages.
- Patients’ health beliefs have great influence on the way they cope with diabetes.

OBJECTIVES

At the end of the day, participants will be able to:
- Indicate the different stages of acceptance of a chronic disease, and their typical features.
- Recognize a patient’s stage of acceptance of diabetes, and describe HCPs’ actions appropriate for each stage.
- Describe the four components of the health belief model and correlate them with patients’ motivation and adhesion to treatment.
- Help the diabetic patient decrease the inconvenience of treatment and better understand its advantages, in order to decrease its perceived cost/benefit ratio.

STORYBOARD OF THE DAY
KEY-CONCEPT 1

Acceptance of the disease

Methods

• Clarifying introduction.
• Work in groups (7 to 10 participants). Build the different stages of acceptance of diabetes. Describe the patient’s attitude and behavior at each stage.
• Exercises with videos (or case reports) in order to diagnose different stages of acceptance.
• Practise in groups of three (role playing by rotation: HCP, patient, observer) in order to improve spontaneous attitudes of HCPs for each stage of acceptance.
• Plenary, with summary and discussion

Materials required

• Examples of case reports and videos of patients with different stages of acceptance.
• Grid with spontaneous attitudes and adequate reactions of HCP for each stage.
• Summary

Timing

• 15 min for clarifying introduction
• 60 min for work in groups on different stages
• 45 min for diagnosis of stage on videos (or case reports)
• 90 min for practice in groups of three
• 30 min for plenary with summary and discussion
**KEY CONCEPT 2**

**Health belief models**

**Methods**
- Clarifying introduction.
- Group work. Build the four steps of the health belief model and define for each of them the patient’s learning objective, ie, the patient should acknowledge that: a) he/she is sick, b) he/she is susceptible to complications of the disease, c) the treatment is effective, d) the cost/benefit ratio of treatment is favorable.
- Group work (Metaplan). Which other chronic diseases fit with the four steps of the health belief model? Which questions could be used to discover at which step the patient is blocked, and help him/her to move on.
- Practise in groups of three (role playing by rotation: HCP, patient, observer) in order to motivate the patient to move on.
- Plenary, with summary and discussion

**Materials required**
- Summary and literature of the model (eg, Rosenstock).
- Examples of questions to ask in order to help the patient to move on.

**Timing**
- 15 min for clarifying introduction
- 60 min for building the four-step health belief model
- 45 min for Metaplan on diagnostic questions
- 90 min for practice in groups of three
- 30 min for plenary with summary and discussion
Module 4 - TEACHING SKILLS - A

KEY CONCEPTS

• Modern education is learner-centred and nondirective, as opposed to the traditional teacher-centred, directive approach.
• Effective education starts with a clear, detailed definition of short-term learning objectives.
• Learning in the three domains of knowledge: intellectual, practical (skills) and existential (behaviors), is best helped by the use of specific methods/tools.
• One usually learns by doing and, when possible, it is better to start from practice and build theory upon it.
• Teaching on an individual basis has advantages and disadvantages vs. group teaching, and precise indications.
• Non-verbal communication should always be congruent with verbal assertions.

OBJECTIVES

At the end of this module, participants will be able to:
• List the characteristics of the learner-centred, nondirective educational approach and of the teacher-centred, directive approach, and describe their respective advantages and drawbacks.
• Distinguish between long-, mid-, and short-term educational objectives.
• Discern the three learning domains.
• Define a list of short-term detailed, observable, measurable, learning objectives for a given diabetic patient, without forgetting relevance.
• Select and build suitable educational tools for each of the learning domains.
• Describe advantages, disadvantages and indications for individual one-to-one teaching.
• Recognize, describe and implement ways of verbal and nonverbal communication that convey different feelings towards the individual facing them.

STORYBOARD OF THE DAY
KEY-CONCEPT 1

Learner-centered vs teacher-centered educational approach

Methods
• Lecture on theoretical aspects of traditional and modern pedagogy. Three modern educational principles:
  a) students should select/agree upon their learning objectives; b) interactive learning methods are more effective; c) regular evaluation of self progress by students improves learning speed and quality.
• Observation of selected scenes from movies: teacher in traditional schools, bad results: new approach, good results.
• Exercise (role playing). Participants split into two groups and prepare one skit each, stressing either approach of an HCP educating a group of diabetic patients.

Materials required
• Suitable movie(s).
• Metaplan or facilities for role-playing.

Timing
• 30 min for lecture and summary (including possible movie)
• Role-playing: 30 min for planning, 20 min for each performance, 20 min for discussion.
KEY CONCEPT 2

Learning by objectives

Methods
• Lecture. Characteristics of general, intermediate and specific short-term educational objectives. The concept of relevance.
• Exercise in small groups: each small group (5 to 7 people) receives a case report and the task of defining the most urgent one or two short-term learning objectives.
• Report in plenary.
• Discussion and comments from the expert.

Materials required
• Four to eight case reports, each with evident educational needs, preferably different from one another in terms of type of diabetes, age, motivation to learn, priorities...
• Ref 3: pages 1.30-1.31, 1.55-1.62, 1.71.
• DESG Teaching Letter No. 11: Checklist for diabetic patient education.

Timing
• 20 min for lecture
• 40 min for work in small groups
• 40 min for report in plenary and vote
• 20 min for comments from the expert
KEY CONCEPT 3

Choosing appropriate tools / methods according to the learning objective

Methods
• Lecture on the whole range of education tools for improving theoretical knowledge, skills and behaviors. Stress on the advantages of interactive methods and building theory from practice.
• Group work (Metaplan). Planning an interactive learning session (or possibly the first of a series) with patients on specific behavioural objectives: eg, 1) Daily foot care; 2) Losing weight; 3) Initiating a daily program of moderate exercise.
• Report in plenary and discussion.

Materials required
• Patient Education Basics Nos 2, 4 and 12.

Timing
• 30 min for lecture and summary
• 60 min for Metaplan
• 30 min for report in plenary and discussion
KEY CONCEPT 4

**Individual teaching.**
**Verbal / nonverbal communication**

**Methods**
- Lecture. One-to-one teaching and its advantages, limitations, requirements and indications with diabetic patients.
- Lecture. Focus on nonverbal communication and its congruence with verbal expression (with possible projection of videos or scene(s) from movies: eg, Patch A dams).
- Exercise 1. Plenary: two to three skits (role-playing) on congruence between verbal and nonverbal communication (based on pre-prepared charts with characteristics of patient and HCP: eg, patient worried about a complication, doctor distracted by own problems; patient not caring for weight loss, dietician making all efforts to motivate him; patient and nurse distracted by environment).
- Group work (Metaplan). Obstacles to openness and availability in individual consultation, and ways to overcome them.
- Exercise 2. Exercise in small groups: same skits as above, with the other members of the small group marking on a grid the quality of congruence between verbal and non-verbal expression (for both patient and HCP).
- Discussion in the small groups.
- Plenary with reports and discussion.

**Materials required**
- Video(s) on nonverbal communication, or scenes from movies (eg, Patch A dams).
- Charts for skits on congruence between verbal and non-verbal communication.
- Grid for evaluation of congruence

**Timing**
- 30 min for the two lectures or summaries
- 60 min for practice of nonverbal communication
- 30 min for plenary with reports and discussion
Module 5 - TEACHING SKILLS - B

KEY CONCEPTS

• Modern theories of learning, relevant to TPE. From apprenticeship to confident knowledge.
• The case/problem-based learning method.
• Group teaching: public speaking, lecturing.
• Group teaching: managing group dynamics.

OBJECTIVES

At the end of this module participants will be able to:
• List the currently accepted educational principles which are considered most effective in TPE and the main learning theories from which they originated.
• Describe the characteristics of a teaching program for people with diabetes, whose aims are: a) to build on the patient's errors, and b) relapse prevention in the long-term follow-up.
• Build a case report and implement a case/problem-based learning session
• List the most frequent errors that hamper effective communication when lecturing, and the ways to avoid them.
• Describe advantages and limitations of group teaching, and its indications for diabetic patients.
• Describe advantages and limitations of group teaching (as opposed to individual teaching), and its indications for diabetic patients.
• List the most frequent difficulties encountered when conducting a group, and the ways to overcome them.

STORYBOARD OF THE DAY
KEY CONCEPT 1

Modern theories of learning, relevant to therapeutic patient education.
From apprenticeship to confident knowledge

Methods
• Lecture on theories of learning, and the teaching methods derived from them that are most suitable for TPE.
• Group work (Metaplan): 1) Strategies to promote the patient’s progress from apprenticeship to confident knowledge about the choice of foods; 2) Most frequent errors made by patients, and the ways to build on errors in the search for success; 3) Strategies to prevent relapse in the long-term, or when a late complication appears/worsens.

Materials required
• Ref 3: pages 3.39-3.46.
• Metaplan, or other materials for group work

Timing
• 30 min for lecture and/or summary
• 60 min for group work
• 30 min for report in plenary and discussion
KEY CONCEPT 2

Problem-based learning

Methods
• Lecture on the case/problem-based learning method.
• Work in small groups. Each group of 5-6 builds a case report focusing on a specific problem of a given diabetic patient. Each case/problem should be suitable for the research of possible solutions by a group of patients.

Materials required
• Ref 3: pages 3.47-3.55.
• Transparencies or Metaplan

Timing
• 30 min for lecture and summary
• 60 min for work in small groups
• 30 min for reports in plenary and discussion
KEY CONCEPT 3

G roup teaching: public speaking, lecturing.

Methods

• Lecture on frontal lecturing. Conditions for effective communication to a group: setting the scene (space, lighting, sound), knowing the audience, language and attitudes of the speaker, talk structure, audio-visual aids, feedback assessment.

• Work in small groups. “To improve a bad lecture.” Half of the groups (2 or 3) receive the text of a very bad lecture on a well-known topic (related or not to diabetes, eg, causes of type 2 diabetes, or dangers of scuba diving) together with a small series of transparencies and/or slides. Their task will be to adjust the text (one small group), the transparencies (another group) and the slides (another group). The other groups will only be informed of the title and will have to prepare from scratch text, transparencies and slides, respectively.

• Plenary. The lecture (or part of it) will be repeated three times: 1) in the worst possible way; 2) in the adjusted way, as well as possible; 3) in the version freshly created, again, as well as possible.

Materials required

• Text of a bad lecture, with very bad transparencies and very bad slides.
• Evaluation grid for lectures (all aspects).
• If possible, PC with Powerpoint.

Timing

• 20-30 min for lecture or summary
• 60 min for work in small groups
• 30 min for the 3 lectures in plenary and discussion
KEY CONCEPT 4

**Group teaching: managing group dynamics**

**Methods**
- Lecture. Group teaching and its advantages, limitations, requirements and indications with diabetic patients. Most typical group dynamics and how to manage them.
- Group work in three groups (role-playing). One group prepares two role-playing sessions to show respectively the maximal advantages and drawbacks of the one-to-one approach. The other two groups prepare one skit each, showing respectively the maximal advantages and drawbacks of group teaching.

**Materials required**
- DESG Teaching Letter No 18: Group versus individual therapeutic patient education.
- Materials for role-playing.

**Timing**
- 30 min for lecture and/or summary
- 30 min for preparing the role playing and skits
- 60 min for the 4 performances in plenary and discussion
Module 6 - PSYCHO-SOCIAL SKILLS

KEY CONCEPTS

• Role of the disease on the social environment of the patient
• Role of the family, work environment, friends,... on diabetes self-management
• Role of a patient’s locus of control on the motivation for diabetes self-management
• Emotional intelligence and its role in diabetes care

OBJECTIVES

At the end of the day, participants will be able to:
• Describe the role of a destructive, integrated, or beneficial disease on the social environment of the patient.
• Help the patient understand the impact of diabetes on his social environment, and vice versa, the importance of his social environment for diabetes control.
• Associate different patients’ attitudes towards diabetes self-management with different health loci of control.
• Explain the importance of sharing the control of treatment with the patient.
• List the seven main components of intelligence and the five competencies of emotional intelligence.
• Select the competencies of emotional intelligence that are most relevant: a) for HCPs in order to better care for diabetic patients and, b) for patients in order to better manage the psychological and social factors that interfere with diabetes care.
• List a number of emotions that can be beneficial or harmful for diabetes control.

STORYBOARD OF THE DAY
KEY CONCEPT 1

Role of the disease on the social environment of the patient
Role of the family, work environment, friends... on diabetes self-management

Methods
• Clarifying introduction
• Group work. Develop the three roles played by a disease, i.e., destructive, integrated, or beneficial. Describe their impact on: the patient, his social environment, his adherence to treatment, and his relationship with HCPs.
• Group work (Metaplan). Which other chronic diseases can play these roles? Which questions could be used to discover which role a disease plays for a given patient?
• Exercise with videos, in order to diagnose different roles of disease.
• Practice in groups of three (role playing by rotation: HCP, patient, observer). Patients are each interpreting one role of the disease. The HCP tries to improve the relationship with the patient.
• Plenary with summary and discussion

Materials required
• Summary and literature of the model (e.g., Herzlich).
• Examples of questions to use in order to help the patient help himself in his social life.
• DESG Teaching Letter No 20: The function of psycho-social support in diabetes education

Timing
• 15 min for clarifying introduction
• 45 min for building the different social roles of disease
• 60 min for Metaplan on diagnostic questions
• 30 min for exercise with videos
• 90 min for practice in groups of three
• 30 min for plenary with summary and discussion
KEY CONCEPT 2

Role of a patient's locus of control on the motivation for diabetes self-management

Methods
• Lecture or summary. The health locus of control model, and its correlation with the patient's attitude towards diabetes self-management.
• Group work (Metaplan). Which is the specific role of HCPs in relation to different patient's loci of control? Can we do something to promote patient empowerment?
• Report in plenary and discussion.

Materials required
• Summary and literature of the locus of control model.
• DESG Teaching Letter No 13: Motivating the diabetic patient.

Timing
• 30 min for lecture and summary
• 60 min for Metaplan
• 30 min for report in plenary and discussion
KEY CONCEPT 2

Emotional intelligence and its role in diabetes care

Methods
• Lecture or summary. Emotional intelligence: EQ vs IQ. Emotional skills and emotional education: their relevance to diabetes self-care. How to recognize and take advantage of patients’ emotional intelligence.
   NB: As an alternative, relevant documents can be sent to the participants beforehand, and the participants asked to read them prior to the exercise. Then only a short clarifying introduction will be necessary.
• Exercise. Role-playing. A healthcare professional (HCP) and a patient with strong emotions that hamper communication (e.g., nurse anxious for new job, patient scared of new diagnosis of “background retinopathy”)
• Exercise in small groups (5): each participant recalls a personal experience involving a very strong emotion, and whether or not he/she: a) recognized it; b) controlled it; c) used it or suffered some consequences because of it...

Materials required
• Summary on Emotional Intelligence, its characteristics, typical components, evaluation, education, results.

Timing
• 20 min for lecture
• 40 min for role playing
• 40 min for work in small groups
• 20 discussion in plenary
Module 7 - TEAM BUILDING AND ORGANIZATION OF LONG-TERM FOLLOW-UP

Teamwork is necessary in the management of long-term follow-up of chronic diseases. In fact, since the patient is always a member of the team, even one HCP and a patient can be a team, provided the patient is involved in the decision-making process. Compelling evidence, however, is accumulating which shows that a multidisciplinary team approach is beneficial to the management of diabetes mellitus. This module is intended to enable you to establish and/or enhance your team, in order to achieve the best outcomes for your patients.

KEY CONCEPTS

- Characteristics, advantages, and difficulties of teamwork.
- Roles of team members: horizontal or vertical team; multi-professional and/or multi-disciplinary team. Rewards to prevent professional burnout (recognition, etc...), flexibility of schedules, participation at national/international workshops, seminars, etc.
- Organization of teamwork and long-term follow-up.

OBJECTIVES

At the end of this module participants will be able to:

- List the benefits and the difficulties of working in a team
- Describe the ways horizontal and vertical teams operate
- Describe the characteristics of multi-professional and multi-disciplinary teams
- List causes and symptoms of professional burnout
- Propose feasible mechanisms of reward for teamwork activity
- Define a way of working, according to an agreed, non-hierarchical, sharing of tasks and responsibilities.
- Propose some changes in the organization of each one’s work place to improve the long-term follow-up of people with diabetes

STORYBOARD OF THE DAY
KEY CONCEPT 1

Characteristics, advantages, and difficulties of teamwork

Methods
• Lecture. General characteristics of teamwork, and how they can help managing long-term situations or emergencies. Different team structures: horizontal and vertical teams. (Lecturer’s profile: management expert or consultant).
• Group work. (Metaplan). 1) Difficulties in sharing the responsibility of diabetes care with other health professionals, with the patient, with his family. 2) Main advantages of teamwork in regular follow-up and education; main advantages in the management of acute illness.

Materials required
• Metaplan, or other materials for group work.

Timing
• 30 min for lecture and/or summary
• 60 min for group work (Metaplan)
• 30 min for reports in plenary and discussion
Methods
• Exercise: Experiential learning. One exercise or game to be performed in groups, consisting of a task that can only be fulfilled by proper team approach, eg, “Steadying the egg.”

Materials required
• Materials for the experiential learning exercise or game.

Timing
• 30 min for the team lecture
• 75 min for exercise or game in groups
• 15 min for discussion in plenary
KEY CONCEPT 3

Rewards to prevent professional burnout

Methods
• Lecture. The vicious circle of demotivation and burnout, vs the virtuous circle of re-motivation, in HCPs caring for diabetic patients. (Lecturer’s profile: psychologist or psychiatrist with experience in professional burnout of HCPs).
• Group work (Metaplan). 1) What aspects of care would I, as a patient, value most if I had a chronic disease requiring long-term follow-up? 2) Which rewards/changes in my practice could more effectively prevent the risk of professional burnout?

Materials required
• Metaplan, or other materials for group work.

Timing
• 30 min for lecture and/or summary
• 60 min for group work (Metaplan)
• 30 min for reports in plenary and discussion
KEY CONCEPT 4

Organization of team work and long-term follow-up

Methods
• Lecture. Organization of teamwork (time, space, schedules for regular team meetings) and its responsibility. Organization of care (long-term follow-up and acute situations). Agreement on different paths for different patients and different needs [flow chart], with clear sharing/definition of responsibilities. The patient member of the team agrees to follow a negotiated program of care [therapeutic contract].
• Work in very small groups (ideally 2-3 members of same team). Prepare an action program on the topic: “What changes could be introduced now in my workplace to improve the team approach and the follow-up of our diabetic patients?.” With analysis of obstacles, resources, time schedule.

Materials required
• DESG Teaching Letter No.7: Patient education, a lifelong process...
• DESG Teaching Letter No.12: How to improve follow-up in the long term disease.
• Transparencies or Metaplan for reports.

Timing
• 30 min for lecture and/or summary
• 45 min for preparing transparencies
• 45 min for reports in plenary and discussion
Module 8 - EVALUATION

The evaluation of the attainment of predefined objectives is an essential component of patient care, as well as of any education process. Evaluation of the effectiveness of TPE should be performed regularly, and be based on the attainment of the short-term learning objectives.

Therapeutic patient education has therapeutic as well as educational objectives. The former are obviously the most relevant, but in order to get direct feedback allowing for possible adjustments of an educational process, the latter ought to be considered first. Moreover, it has been so well shown that the attainment of educational objectives (e.g., new behaviours such as proper foot care, or regular exercise) results in positive therapeutic outcomes, that its continuous demonstration is not really necessary in the process of TPE.

Together with the attainment of learning objectives, two other important topics to consider are: the impact of diabetes treatment and education on the patient’s quality of life, and the efficacy of our activity, i.e., the cost-effectiveness of the entire process, according to the principles of total quality management.

KEY CONCEPTS

• Evaluation of patients’ behavior, skills, and knowledge.
• Evaluation of patients’ quality of life and the impact of treatment on it.
• Evaluation of cost-effectiveness of TPE.

OBJECTIVES

At the end of this module participants will be able to:

• Define the principal role of evaluation, describe its relationship with the other parts of the educational process, its classification (formative and certifying), and list the positive and negative features of a test.
• Choose an appropriate evaluation method for measuring the patient’s attainment of a specific educational objective.
• Design a practical test to evaluate a patient’s practical skill, and an observation-
al rating scale to evaluate the patient’s behaviour in real life.
• Prepare three multiple-choice questions (MCQ) in the domain of intellectual skills, one per each level of mental process: ie, 1) simple recall, 2) data interpretation, 3) problem solving.
• Define and classify quality of life, and list the variables to consider in its evaluation.
• Plan a minimal quality of life evaluation method that could be used to evaluate the impact of a TPE program on patients’ well being.
• List which changes in health care would improve their patients’ quality of life.
• List the variables to consider in order to perform a cost-benefit analysis of TPE.
• Describe the aims and the main features of Total Quality Management (TQM) in health care.
• List possible advantages of TQM in diabetes care for the parties involved: patients, HCPs, health administrators, society.

**STORYBOARD OF THE DAY**
**KEY CONCEPT 1**

**E valuation of patients' behavior, skills, and knowledge**

**Methods**

- Lecture or summary. The educational planning spiral (Guilbert). Different evaluations for different purposes. Qualities of a measuring instrument: validity, reliability, objectivity, practicability...
- Or, clarifying introduction about what is going to happen. (Prior to this session, participants will have been given and invited to read specific documents.)
- Exercise. Each group of 15 selects, from a list, three educational objectives for a diabetic patient: 1) one whose main component is an attitude; 2) one whose main component is a skill (sensory-motor competence), and 3) one involving more the intellectual domain. They then split into three small groups of 5 and work separately on each objective:
  - a) construct a descriptive rating scale for the evaluation of objective 1 (according to example in Ref 3, p. 4.32);
  - b) construct a descriptive rating scale for the evaluation of objective 2;
  - c) prepare three multiple-choice questions dealing with objective 3, being careful about correctness of formulation and making sure that each question tests one of the three intellectual levels (according to Ref 3, p 4.39-44).

The 3 small groups join together to share what they have done and prepare a common report for the plenary session.
- Reports in plenary and discussion.

**Materials required**

- Ref 3, pages 4.31-32, 4.39-44.
- DESG Teaching Letter No 24: Evaluating diabetes education

**Timing**

- 15 min for clarifying introduction
- 75 min for group work: 15 for choosing three educational objectives for a patient; 40 for developing the respective evaluation tests; 20 for sharing results and preparing the report
- 30 min for reports in plenary and discussion
KEY CONCEPT 2

Evaluation of patients' quality of life and the impact of treatment on it

Methods
- Lecture or summary. Definition of quality of life. Why evaluating diabetes-related quality of life is important. Current knowledge about quality of life and diabetes. Problems in the evaluation of quality of life. (All this can be included in documents given to participants prior to the workshop).
- Exercise. Role playing to stress the different points of view of patients and HCPs on the patient's quality of life.
- Exercise (Metaplan). What do we do to decrease the quality of life of our patients? What can we do to improve the quality of life of our patients, and which variables could we measure to verify it? Which changes in health care would improve my own quality of life, were I a diabetic patient? What compromise between the really necessary changes and the best possible quality of life?
- Reports in plenary and discussion.

Materials required
- Sample tests to measure quality of life (eg, MOSF 36)

Timing
- 15 min for clarifying introduction
- 45 min for 2 role-playing: 30 min for preparing it (2 groups) 15 min for performing
- 45 min for Metaplan
- 15 min for reports in plenary and discussion
KEY CONCEPT 3

**E valuation of cost-effectiveness of therapeutic patient education**

**Methods**
- Clarifying introduction.
- Exercise. Draw a diagram where TPE is linked with all the other elements of health care that contribute to the quality of care of diabetic patients.
- Exercise. Plan an estimate of the cost of therapeutic education of diabetic patients, listing all the variables that ought to be considered. (The actual estimate of monetary costs and benefits would require local health economic input).

**Materials required**
- DESG Teaching Letter No 23: Diabetes TPE and cost control...

**Timing**
- 15 min for clarifying introduction
- 75 min for exercise (in small groups or 2 Metaplan)
- 30 min for plenary and discussion

**EVALUATION OF PRESENT COURSE**

**Formative evaluation: pre-final comprehensive testing**

**Methods**
- Multiple-choice questionnaire. (See page 53).

**Evaluation of the course by the participants**
**Methods**

- Questionnaire prepared according to instructions and example given in Ref 3, pages 5.25-5.32.

**Materials required**

- Ref 3: pages 5.25-5.32.

**Methods**

- Multiple-choice questionnaire. (See page 53).
OVERVIEW OF EDUCATIONAL METHODS

METAPLAN

Metaplan is a particularly effective method for group work facilitation and organizational analysis, consisting of a specific setting, a wide range of materials and a series of specific procedures. Developed in Germany in the 1960s by Eberhard Schnelle, it is based on the assumption that the subject of a change must be directly involved in both the analysis and planning of future actions, in order to gain effectiveness in the implementation phase. This assumption requires a model of personal involvement that allows for the stimulation of individual creativity, and at the same time effectively organizes the results obtained. The Metaplan approach consists of an original way of visualising a problem, allowing all participants, from the beginning, to see, examine, discuss, and choose useful elements, and share solutions.

THE METHOD

Participants sit in half circle, facing one or two large pin-boards. The facilitator turns one board, showing the pre-prepared topic question, written on a banner as a title. Participants are asked to write their answer(s) on the cards that they have received, using one card per sentence. It is important that they write large and clearly enough with a felt-tipped pen or marker, that cards can be read by all the others; a good advice is to use a maximum of 10 to 12 words on 2 lines. The number of cards to be filled out by each person depends on the number of participants and the time available; it usually varies between 1 and 3 cards (with individual exceptions usually allowed).

Once they have finished, participants give their cards to the facilitator, who then puts them, one after the other, on the pin-board, reading them aloud and making sure that their meaning is clear to everybody. The cards are anonymous, but the explanation of a cryptic sentence can always be asked, for the sake of clearness. No card can be rejected because of its content. A participant may be asked to kindly rewrite his card if it is unreadable, if it could be phrased more clearly, or if two or more sen-
sentences have been grouped on the same card and they need to be split. When there is a major objection in the group to the content of a given card, the symbol of lightning shall be put next to it, to signify that there is disagreement in the group about that particular statement.

A skilled facilitator can start grouping cards from the beginning, always involving participants in his or her decisions. The final grouping of cards will then be completed by delineating each group with a large felt-tipped pen, and labelling each group of cards using oval-shaped or large round cards. This can be the conclusion of a short session. Otherwise, it is possible to draw connections between groups of cards (in order to define a path or a flow chart). Participants may be asked to vote on the most important or urgent aspect to address by sticking a colored dot on a given group of cards (in order to establish a set of priorities). The following step may then be to divide into smaller groups and work on the first two or three selected topics.

If two or more groups of participants have worked in parallel (on the same or on different topics), a plenary session will follow, during which a reporter nominated by each group will describe his/her group’s production.

**MATERIALS**

The central element of Metaplan is a 122 x 150 cm (or 96 x 150) pinboard, which is two-sided, foldable, very light and easy to transport. Additional essential items are: 20.5 x 9.5 cm cards (1/3 of an A4 sheet) of different colours, special pins, and filter pens with wedged tips. Other materials include 118 x 140 cm (or 91 x 140) sheets of paper for covering the pinboard, 118 x 15 cm (or 91 x 15) paper banners for titles, large filter pens, differently shaped and sized cards (round, 10, 15, and 20 cm diameter; oval, 10 x 20 cm), glue, 20 mm diameter coloured sticking dots.

**REQUIREMENTS**

A Metaplan session should be carefully planned in terms of number of exercises, number of participants, number of cards to give to each participant, and the prompts to write on the banners, about which the partic-
pants will be asked to give their answers. To help plan Metaplan sessions, a form may be useful. For each session the organizer in charge should fill-in: the title that has to be written on the banner, the number of participants, the number of cards to give to each participant, the time schedule, and the possible expected results.

The group size can vary from 5 to 6 to as much as 30 to 40 participants, plus one or two facilitators. The size of the room should be at least 10 x 7 m, with adequate light projected on the pinboards. A number of lightweight chairs corresponding to the number of participants, and one small table are also needed.

The time required to run a Metaplan session depends very much on the number of cards that have to be read, interpreted and classified on the board. For 30 cards, an average of 45 minutes should be allotted. The report should not last more than 5-10 minutes per group, including comments and discussion.

ADVANTAGES AND DRAWBACKS

Metaplan is very effective in that it usually allows a group to analyze a problem and propose agreed solutions in a relatively short time. Of course, this comes at the end of a process during which participants have always been highly involved and active, as in fact in any other brainstorming activity, but probably more promptly and effectively. Occasionally, the result produced is astonishingly well structured and beautifully presented. The particular advantages of Metaplan are linked to the fact that participants express their opinions only through writing, which automatically compensates for the shyness of some, or the tendency of others to monopolize the discussion. In addition, writing on single-sentence modules allows for the flexibility of the product and its adaptability during the grouping phase to a change in participants’ opinions; this cannot happen when participants’ opinions are written on a black or white-board.

Drawbacks are few. There is a potential danger of manipulation by the facilitator, namely: a) when reading the cards, if he/she does not refrain
from making any comments (but requests for explanations); b) during the grouping phase, if participants are not involved; c) when labelling the groups of cards.

Another limitation is linked to the preparation required beforehand, and to the amount of disposable material that is consumed for each session. This makes Metaplan a relatively costly method in terms of global time and money required.

**ROLE-PLAYING**

This is a well-known interactive learning method based on the playing of short scenes by a number of participants, each of whom assumes a role different from what they are in real life. For example, a doctor plays the patient, a nurse plays the doctor, a patient plays the nurse, etc. The group usually establishes the conditions, i.e., features of the characters, setting, underlying problems, and then the players are left 10 to 15 minutes to prepare the performance.

Role-playing gives participants the opportunity to experience somebody else’s point of view, and develop empathy and understanding. It facilitates the expression of one’s own emotions, and gives the learners an opportunity to develop communication skills and obtain constructive feedback from peers and teachers.

A slightly different method consists in the playing of a skit where at least one player plays the same role he or she has in real life. The purpose is usually to caricature an erroneous professional attitude... that the professional would never, of course, have in his/her work place.

Role-playing and skits are particularly suitable for working on attitudes, and the only drawbacks are that they are slightly time-consuming and dependent on students’ acting skills.

The setting should allow all participants to easily see and hear what is going on. If possible, the performance should be video recorded, and the video used by the expert for the successive discussion.
PROBLEM-BASED LEARNING
The ability to solve problems is more than just the accumulation of knowledge and rules; it is the development of flexible, cognitive strategies that help analyze unanticipated situations to produce meaningful solutions.
Real-life problems present an ever-changing variety of goals, contexts, contents, obstacles and unknowns that influence how each problem should be approached. Problem-based learning is a pedagogical strategy for posing significant, real-world situations, and providing resources, guidance and instruction to participants as they develop content knowledge and problem-solving skills. In PBL, students collaborate to study the issues of a problem as they strive to create viable solutions.
Problem-based learning normally occurs within small groups of students facilitated by a tutor. Because the amount of direct instruction in PBL is reduced, students assume greater responsibility for their own learning. Rather than increasing their knowledge of facts, the purpose of PBL is to teach them to learn how to learn. Ideally, this process should start with the identification and formulation of the problem itself, but this is not always possible to implement, and students are usually offered pre-constructed problems selected by the teacher.
The role of the tutor is to facilitate discussion and promote interaction within the group, to ensure that students stay on track by exploring the areas of knowledge relevant to the problem selected, and to plan the evaluation process. The teacher is also responsible for certifying evaluation.
For a more detailed description of PBL and indications on how to implement it, see Ref 3. p.3.47-3.58.

EVALUATION OF THE COURSE
Formative evaluation allows participants and organizers to assess the learning progress throughout the course. It is a powerful learning method in itself, and it is recommended that organizers implement it whenever possible. On the other hand, summative or certifying evaluation may only
be necessary for accreditation purposes. (See Ref 3. p. 2.11-2.22)
Ideally, practical tests and observational rating scales should be used to evaluate practical skills and behaviors. If this is not possible, a reasonable alternative can be a method of formative evaluation based on multiple-choice questionnaires, like the one proposed here. It is suggested, however, that the higher intellectual processes, ie, data interpretation and solution of problems, be tested on as many questions as possible. (See Ref 3. p. 4.39-4.44).
Formative evaluation should consist of three phases: pre-testing (during module 1), interval testing (at the end of each module), and pre-final comprehensive testing (before the end of module 8). Eventually, the certifying evaluation (final testing) will follow. (See Ref 3. p. 4.65-4.68).
Each organizer or expert responsible for conducting a session shall prepare 4 to 6 multiple-choice questions (MCQs), having similar characteristics and difficulty, about his topic. Three questions will be pooled at random with those relative to the other sessions, to create three larger questionnaires. The 1st questionnaire will be used to test the initial knowledge of participants (pretesting) in order to let them better appreciate on which topics they may need more training. The 2nd questionnaire will be given shortly before the end of the course, as a pre-final comprehensive test. The 3rd questionnaire may eventually be used for the final certification testing. The remaining 1 to 3 questions will be used for the interval testing at the end of each of the modules 2 to 7, for which enough time must be allotted (15 to 30 min).
Additional very useful feedback comes from the evaluation of the course by the participants. The organizers must prepare a questionnaire for this, and include all the items that are considered useful for future improvement. For clear indications on how to prepare and evaluate such a questionnaire, see Ref 3. pages 4.23-4.27, and 5.25-5.32.
RECOMMENDATIONS

The size of the present curriculum has been kept to a very strict minimum. It is recommended, whenever possible, to extend its duration, eg, to 2 days per module. This would allow more time for training on each specific competency, and for the integration of competencies which, in fact, extend over different domains.

The Diabetes Education Study Group is fully available to help plan any adaptation of this curriculum to local needs, and to contribute whenever possible to its implementation.

Notice of any such implemented adaptation would be greatly appreciated, as well as any comments or suggestions to improve the Basic Curriculum.

Please contact us through the DESG website at www.desg.org or by fax +39 06 44703133.
DESG TEACHING LETTERS

No.1. Oral agents
No.2. Hypoglycemia
No.3. Self-monitoring
No.4 Putting a patient on a diet
No.5 Counselling on late complications
No.6 Foot care
No.7 Patient Education: A lifelong process ...
No.8 Therapeutics and education... (with poster)
No.9 Help your patients to improve self-management: B uilding a therapeutic chain
(with poster)
No.10 Managing the patient with excess weight and diabetes
No.11 Checklist for diabetic patient education
No.12 How to improve follow-up in the long-term disease
No.13 Motivating the diabetic patient
No.14 My patient is poorly controlled, how do I approach this problem?
No.15 Right from the start... Education at the time of diagnosis
No.16 Diabetic retinopathy and therapeutic education
No.17 Educational approach to the elderly diabetic patient
No.18 Group versus individual therapeutic patient education
No.19 Therapeutic diabetes education in camp settings
No.20 The function of psychosocial support in diabetes education
No.21 Therapeutic education: what a diabetes center should provide
No.22 Planning an educational program
No.23 Diabetes education and cost control: time to measure
No.24 Evaluating diabetes education
DESG PATIENT EDUCATION BASICS

No.1  How to prevent low blood sugar
No.2  Lose weight by eating better
No.3  Diabetic retinopathy and follow-up of eye problems
No.4  Prevention of foot problems
No.5  “You have type 2 diabetes” - Meaning and Implications
No.6  Preventing late diabetic complications
No.7  Ageing and diabetes management
No.8  Improving follow-up in the long term disease
No.9  Blood glucose monitoring: a must in diabetes management
No.10 Diabetes treatment and ‘the others’ (family and environment)
No.11 Prevention of heart problems
No.12 Physical exercise: a therapy for diabetes at all ages
No.13 Intercurrent diseases: a challenge for diabetes control
No.14 Preventing diabetes in your relatives
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1.2. Interactive learning methods

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2.2 Different Personalities
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3.1. Acceptance of the disease

3.2. Health belief models

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5.4. Group teaching: managing group dynamics
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6.1. Diabetes and social environment

6.2. Locus of control and motivation
6.3. Emotional Intelligence

7.1-2. Teamwork

7.3. Burnout prevention

7.4. Organization of long-term follow-up

8.1. Evaluation
Ref 3: Sections 2 and 4.

8.2. Quality of life

8.3. Cost-effectiveness
Different approaches:
acute/chronic
biomedical/bio-psycho-social

Learning by doing:
the role of interactive
classroom learning methods
Active listening, a powerful tool for effective counselling

Different personalities require different approaches
Acceptance of the disease

Health Belief Models
Learner-centered vs. teacher-centered educational approach

Learning by objectives

Choosing appropriate tools/methods according to the learning objective

Individual teaching. Verbal/nonverbal communication
Modern theories of learning, relevant to therapeutic patient education.

Problem-based learning

Group teaching: public speaking, lecturing

Group teaching: managing group dynamics
MODULE 6 - PSYCHOSOCIAL SKILLS

Reciprocal interactions between diabetes and the social environment

Role of a patient’s locus of control on the motivation for self-management

Emotional intelligence and its role in diabetes care
MODULE 7 - TEAM BUILDING AND ORGANIZATION OF CARE

Characteristics, advantages, and difficulties of teamwork

Multiprofessional and/or multidisciplinary team

Rewards to prevent professional burnout

Organization of teamwork and long-term follow-up
MODULE 8 - EVALUATION

- Evaluation of patients’ behavior, skills, and knowledge
- Evaluation of patients’ quality of life and the impact of treatment on it
- Evaluation of cost-effectiveness of therapeutic patient education
- Evaluation of present course
OVERVIEW OF EDUCATIONAL METHODS

Metaplan

Role-playing

Problem-based learning

Evaluation of the course

Recommendations

DESG teaching letters and Patient Education Basics

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DESG /Servier Partnership

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