



The role of the diabetes educator

MODULE



Overview

Diabetes educators are an integral part of the diabetes management team. The role of the educator is to enable people with diabetes to manage their diabetes-related health to the best of their abilities, to allow them to make choices and take actions based on informed judgment, and to enhance the quality of life of the person with diabetes. Diabetes educators may come from a variety of health professions and other backgrounds. While they will primarily practice within their professional role, there needs to be some overlap with other team members. This means that some skills will be common to all team members — refer to **Module 1-2, Team management**.

Goals

Educators will understand that they are part of a team, which includes the person with diabetes at its centre, and that their role is to work with other team members to improve the health and quality of life of their patients.

Objectives

After completing this module, the participant will be able to:

- Describe the role of the educator in their particular setting
- Discuss methods of increasing and maintaining their own skills and knowledge
- Discuss methods of collaboration with the interdisciplinary healthcare team
- Discuss the scope of practice of each health professional within the team
- Discuss the expanding clinical role of the diabetes educator in relation to the increasing prevalence of diabetes globally

Teaching strategy	Discussion with experienced diabetes educators
Suggested time	1 hour
Who should teach this module	Diabetes educators from different professions, ie nurse, dietician, pharmacist
References	<p>American Association of Diabetes Educators (AADE) Task Force. The scope of practice for diabetes educators and the standards of practice for diabetes educators. <i>Diabetes Educ</i> 1992;18(1):52-56.</p> <p><i>Diabetes Educator Section Belief Statement</i>. Toronto, ON: Canadian Diabetes Association; 1992.</p> <p>Diabetes Educators Section Task Force. <i>Standards for diabetes education in Canada</i>. Toronto, ON: Canadian Diabetes Association; 1995.</p>



MODULE

1-2

Team management

Overview

This module aims to provide participants with the opportunity to consolidate their understanding of the social, educational, dietary and psychological requirements of people with diabetes and how they need to be met using an interdisciplinary approach. The module focuses on the professional roles required for true interdisciplinary care. It emphasizes the need for team members to have blended rather than discrete roles and discusses the need to extend traditional roles if specialized team members, such as dietitians or podiatrists, are not available. The module also emphasizes the importance of ongoing education in diabetes care for all team members and establishing common protocols and management goals.

Goals

To provide participants with an understanding of the special need for interdisciplinary care in the management of diabetes.

To highlight the expanded roles of health professionals involved in providing diabetes care.

To emphasize the blended and overlapping nature of roles in a truly integrated team.

Objectives

After completing this module, the participant will be able to:

- Discuss why interdisciplinary care and the overlap of professional roles are important in the management of diabetes
- Identify the various members working within an interdisciplinary team (for example, generalist doctors, specialist doctors, nursing staff, podiatrists, dietitians, psychologists, etc) and their primary roles

<p>Objectives cont'd</p>	<ul style="list-style-type: none"> • Discuss the importance of the person with diabetes in the team • Discuss the role of the co-ordinator of the team • Identify how the roles of different team members can overlap and interact • Discuss the importance of interdisciplinary communication, including team meetings • Identify the ongoing educational needs of team members to enable them to function in an interdisciplinary environment at their best capacity and to allow them to contribute to team initiatives • Identify the person responsible for ensuring all members of the team have access to ongoing training in diabetes care • Discuss the need for a common protocol to ensure all members of the team work towards the same goal and use a common framework to avoid confusing a person with diabetes, duplicating care or miscommunication • Discuss the importance of respecting and evaluating the performance of all team members
<p>Teaching strategies</p>	<p>Case study that highlights the medical, social, dietary and psychological requirements of a person with diabetes and demonstrates interdisciplinary care</p> <p>Group discussion regarding different approaches to interdisciplinary care</p> <p>Role play to demonstrate the different behaviours and approaches of team members</p> <p>Clinical placement within an interdisciplinary team</p>
<p>Suggested time</p>	<p>Formal session: 1–2 hours</p> <p>Clinical placement: 1 week</p>
<p>Who should teach this module</p>	<p>An interdisciplinary diabetes care team</p>
<p>Evaluation of learning</p>	<p>Completion of a plan for adopting interdisciplinary care in the participant's own setting</p>

References

Bayless M, Martin C. The team approach to intensive diabetes management. *Diabetes Spectrum* 1998;11(1):33-37.

Franz MJ, Monk A, Bergenstal R, Mazze R. Outcomes and cost-effectiveness of medical nutrition therapy for non-insulin-dependent diabetes mellitus. *Diabetes Spectrum* 1996;9(2):122-127.

Hennings J. Diabetes in pregnancy: lessons for the multidisciplinary team. *Diabetes Nursing* 1998;2(3):77-78, 83-84.

Johnson JA. Self-efficacy theory as a framework for community pharmacy-based diabetes education programmes. *Diabetes Educ* 1996;22(3):237-241.

O'Neill S. How to achieve effective diabetes management. *Nurs Times* 1999;95(1):53-54.

Sumner J. Diabetes. More than the sum of its parts ... a multidisciplinary diabetes team. *Nurs Times* 1998;94(35):72, 75-76.

Teaching and learning

MODULE

1–3

Overview

Teaching skills are integral to the role of the diabetes educator. Diabetes educators should do more than give out information; they should have a good understanding of the principles of the education process and be able to apply those principles in practice. Education is an ongoing process of assessment, planning, implementation and evaluation. High-quality diabetes education is not dependent on the availability of ‘high-tech’ resources. A knowledgeable person with excellent communication skills is all that is required. Diabetes education needs to be individualized. This means that people vary in the amount and type of information they require. Education sessions can range from minimal contact to a comprehensive programme.

Goals

To provide the participant with the knowledge and skills of the education process to enable them to be effective diabetes educators.

To develop good communication skills.

Objectives

After completing this module, the participant will be able to:

Introduction and theory:

- Differentiate between teaching and learning
- Discuss barriers to teaching and learning
- Explain the benefits of patient education
- Discuss the principles of adult learning theory (Knowles, 1984) and therapeutic learning (Lacroix, 1998)
- Identify ways in which children learn — refer to **Module IV-I, Diabetes in children and adolescents**
- Give examples of how learning principles can be applied in practice

Objectives cont'd**Assessment of learning needs:**

- Describe the components of a learning needs assessment in the following key areas:
 - demographical
 - cultural
 - attitudes and beliefs
 - environmental
 - psychological
 - current health practices
 - developmental stage
 - socio-economic resources
- Describe how to undertake a learning needs assessment
- Determine how to assess a person's readiness to learn
- Discuss the implications of a client's readiness to learn
- Discuss how to assess learning styles
- Identify three general styles of learning
- Identify the role of the family/support people in the education process

Planning:

- Discuss the need for programme content to be culturally sensitive
- Identify the difference between goals and objectives
- Discuss the three domains of learning: cognitive, affective and psychomotor
- Discuss the levels of learning within each domain
- Write accurate and concise behavioural objectives in each domain
- Discuss the advantages and disadvantages of different teaching methods
- Select the teaching methods that respond best to different learning styles

Implementation:

- Describe how to use each teaching method most effectively (lecture, individual, small group)

Objectives cont'd

- Discuss how to manage group dynamics
- Demonstrate active listening skills
- Demonstrate the use of open-ended questions
- Demonstrate giving positive feedback

Evaluation:

- Refer to **Module I-7, Evaluation**
- Distinguish between different types of evaluation, structures, processes, content, outcomes, impact and programmes
- Discuss evaluation methods, including how to evaluate the programme and the participant's achievement of the learning goals
- Design an instrument to evaluate participants' impressions of the programme
- Discuss the barriers to conducting a programme evaluation

Health education materials:

- Identify the magnitude of illiteracy or low literacy in the specific community
- Explain strategies for teaching clients with low literacy skills
- Assess educational materials for their readability and therefore appropriateness of use
- Develop health education materials for low literacy groups
- Develop health education materials for general use

Special populations:

- Describe teaching strategies for people who are either visually or hearing challenged
- Discuss teaching materials that would be appropriate for people with disabilities or handicaps

Teaching strategies

Reflect on own learning experiences (include the teacher, learner and the environment), both positive and negative, and analyze the experience

Role play

Practice teaching in various situations, ie one-on-one, group, lecture

Teaching strategies cont'd	<p>Observe others teaching</p> <p>Assess existing health education resources for reading level, cultural appropriateness</p> <p>Prepare a course outline, to include assessment, objectives, planning and evaluation*</p>
Suggested time	<p>Theory: 6 hours</p> <p>Clinical practice: 24 hours (3 days)</p>
Who should teach this module	<p>Education specialist, diabetes educator</p>
Evaluation of learning	<p>Demonstration of good communication skills</p> <p>Demonstration of teaching practice</p> <p>Assignment — development of a teaching plan or course outline*</p>
References	<p>Doak C, Doak L, Root J. <i>Teaching patients with low literacy skills</i>. 2nd edn. Philadelphia, PA: Lippincott; 1995.</p> <p>Knowles M. <i>The adult learner: a neglected species</i>. Huston, TX: Gulf Publishing Co.; 1984.</p> <p>Lacroix A, Assal JP. <i>Therapeutic education of patients</i> [French]. Paris: Vigot; 1998.</p> <p>Peters J, Jarvis P. <i>Adult education: evolution and achievement in a developing field of study</i>. San Francisco, CA: Jossey-Bass; 1991.</p> <p>Redman BK. <i>The practice of patient education</i>. 7th edn. Toronto, ON: Mosby; 1993.</p>

*Indicates objectives at an advanced level



Psychosocial and behavioural approaches

MODULE

1-4

Overview

Diabetes mellitus is a chronic condition that has a major impact on the lives of people with diabetes and their families. In children and adolescents, diabetes can interfere with normal psychological and social development and complicate family functioning. People with diabetes are faced with the challenge to self-regulate their diabetes while living a full, normal life. Learning to perform diabetes self-care activities and integrate these health behaviours in daily life, in the face of other responsibilities and life stresses, is psychologically complex and burdensome. Acute and chronic diabetes complications can negatively affect the person's well-being and role functioning. People differ in their appraisal of, and ability to cope effectively with, the demands of diabetes self-management. Subgroups of people with diabetes are psychologically more vulnerable and warrant special attention. Therefore, due to the complexity of changing behaviour, educators need not only teaching skills but also skills in approaches to behavioural change and motivational interviewing.

Goals

To highlight the psychosocial needs of the person with diabetes and their family.

To provide participants with the knowledge and skills to enhance the psychological well-being of people with diabetes using a patient-centred approach.

To encompass behavioural approaches, motivational techniques, goal setting and emotional support in self-management education.

Objectives

After completing this module, the participant will be able to:

- Describe the psychosocial impact of diabetes and its treatment on the person with diabetes and individual family members

<p>Objectives cont'd</p>	<ul style="list-style-type: none"> • Identify professional attitudes and behaviours that are helpful/harmful to people with diabetes • Recognize that: <ol style="list-style-type: none"> 1. Adjustment to diabetes is ongoing and needs to be addressed both in the early stages and throughout the life-cycle 2. Living with diabetes requires changes to lifestyle that are difficult for most people with diabetes 3. Diabetes-related stress is common, particularly fear of hypoglycemia and long-term complications 4. People can use different cognitive and behavioural strategies to cope with the demands of diabetes and treatment-related stresses • Discuss cognitive, emotional, behavioural and social barriers to self-care and strategies to address these barriers • Identify and offer appropriate emotional and behavioural support to people with diabetes and their families within the context of diabetes education • Discuss theories of behavioural change, including the role of motivation, and incorporate appropriate theories into practice to guide individual and group education and care effectively • Develop skills to incorporate appropriate behavioural approaches into clinical practice to effect change in a person with diabetes • Have knowledge of prevalent psychological disorders among people with diabetes that warrant special attention and specialized mental healthcare (eg depression, anxiety, eating disorders, substance abuse) and understand the impact on emotional well-being, self-management behaviours and clinical outcomes • Discuss community understanding and attitudes to diabetes • Discuss the support services available to people with diabetes and their families
<p>Teaching strategies</p>	<p>Interactive workshop, including role play and problem-solving through case study</p> <p>Interactive session with person or persons living with diabetes</p>
<p>Suggested time</p>	<p>2–3 hours</p>

Who should teach this module	Psychologist, diabetes educator, people with diabetes
Evaluation of learning	Analysis of the interaction between the person with diabetes and professional after a role play
References	<p>Anderson BJ, Rubin RR. <i>Practical psychology for diabetes clinicians. How to deal with the key behavioural issues faced by patients and health care teams</i>. Alexandria, VA: American Diabetes Association; 1996.</p> <p>Bradley C, Gamsu DS. Guidelines for encouraging psychological well-being: report of a Working Group of the World Health Organization Regional Office for Europe and International Diabetes Federation European Region St Vincent Declaration Action Programme for Diabetes. <i>Diabet Med</i> 1994;11:510-516.</p> <p>Glasgow RE. Behavioural and psychosocial measures for diabetes care: what is important to assess? <i>Diabetes Spectrum</i> 1997;10:12-17.</p> <p>IDF Consultative Section on Diabetes Education. <i>International consensus position statements for diabetes education</i>. London: International Diabetes Federation; 2000.</p> <p>Rollnick S, Mason P, Butler C. <i>Health behaviour change: a guide for practitioners</i>. Edinburgh: Churchill Livingstone; 1999.</p> <p>Rubin RR, Peyrot M. Men and diabetes: psychosocial and behavioral issues. <i>Diabetes Spectrum</i> 1998;11(2):81-87.</p> <p>Rubin RR, Peyrot M. Quality of life and diabetes. <i>Diabetes Metab Res Rev</i> 1999;15:205-218.</p> <p>Ruggiero L. Helping people with diabetes change behavior: from theory to practice. <i>Diabetes Spectrum</i> 2000;13(3):125-132.</p> <p>Shillitoe R. <i>Counselling people with diabetes</i>. Leicester: BPS Books; 1994.</p> <p>Snoek FJ, Skinner TC (eds). <i>Psychology in diabetes care</i>. Chichester: Wiley; 2000.</p>



Community awareness and promotion

MODULE

1–5

Overview

The need to increase community understanding of the special needs of people with diabetes is essential. Diabetes health professionals should also promote strategies for the primary prevention of Type 2 diabetes. Many of the strategies used to meet these goals are designed not only to bring about positive change in an individual's behaviour, but also to increase the understanding of the community and to dispel myths surrounding diabetes. Change occurs most readily and permanently when people's environment, home, work and recreation enable them to reinforce change.

Goals

To provide participants with an understanding of the community's knowledge and attitudes towards diabetes.

To provide participants with an understanding that community strategies need to reflect the differences between Type 1 and Type 2 diabetes.

To provide participants with strategies for health promotion and primary prevention of Type 2 diabetes.

Objectives

After completing this module, the participant will be able to:

- Understand the concepts of primary, secondary and tertiary prevention
- Describe the levels of health promotion for individuals, in communities, organizational settings, and public policy and practice
- Discuss approaches to health promotion: medical and behavioural change, educational, patient-centred, and societal change
- Describe knowledge and attitudes of the public towards diabetes
- Identify the health priorities and resources needed for diabetes in their country

Objectives cont'd	<ul style="list-style-type: none"> • Discuss the use and applicability of various intervention activities in relation to promoting diabetic health, such as screening programmes, educational programmes, counselling, telephone hotlines, media, school and work-site programmes • Understand the role of advocacy and communication skills in influencing policy making* • Use epidemiological data to justify prevention strategies* • Interpret country-specific surveillance data on the prevalence and risk factors for development of diabetes in the community*
Teaching strategy	Interactive workshop and discussion
Suggested time	2 hours
Who should teach this module	Health promotion professional, diabetes educator, member association personnel
Evaluation of learning	15-minute presentation of a proposed health promotion activity
References	<p>Cottrell RR, Girvan TJ, McKenzie JF. <i>Principles and foundations of health promotion and education</i>. Boston: Allyn and Bacon; 1999.</p> <p>Katz J, Peberdy A (eds). <i>Promoting health: knowledge and practice</i>. London: Macmillan Press Ltd; 1997.</p> <p>Kemm J, Close A. <i>Health promotion: theory and practice</i>. London: Macmillan Press Ltd; 1995.</p> <p>Nutbeam D, Harris E. <i>Theory in a nutshell: a guide to health promotion theory</i>. Sydney: McGraw-Hill; 1999.</p> <p>Raczynski JM, DiClemente RJ (eds). <i>Handbook of health promotion and disease prevention</i>. New York: Kluwer Academic/Plenum Publishers; 1999.</p> <p>Scott D, Weston R (eds). <i>Evaluating health promotion</i>. Cheltenham, UK: Stanley Thornes Ltd; 1998.</p> <p>Wass A. <i>Promoting health: the primary health care approach</i>. London: WB Saunders; 1994.</p>

*Indicates objectives at an advanced level



Research

Overview

The purpose of this module is to introduce research as a core component of the role of the diabetes educator. The module should be designed to cater to participants with little or no research training. It should emphasize the role of research in diabetes education and management and as an agent for change, and encourage students to reflect on their practice and develop skills in critical thinking.

The module is included with the knowledge that the majority of students will not be formally involved in conducting research, but that they will need research skills to be able to assess research papers and use the information in their practice. The role of research for individual study should be discussed with respect to:

- Professional development
- Increasing knowledge
- Developing project management skills
- Developing critical appraisal and reflective practice skills
- Improving practice
- Making presentations and/or publishing

Goals

To provide participants with an understanding of research principles.

To provide participants with skills to read and critically analyze scientific literature.

Objectives

After completing this module, the participant will be able to:

- Discuss the three major research methods: qualitative, quantitative and quality management/audit

Objectives cont'd	<ul style="list-style-type: none"> • Identify and discuss current research in metabolic management, new technologies, surgical procedures, complication development, nutritional management, education and psychosocial management • Critique research literature, including assessment of bias • Discuss questionnaire development • Describe ethical issues in research, including informed consent • Identify the major steps in the research process, including reviewing the literature* • Describe basic methods of statistical analysis* • Interpret basic statistical results • Write basic research reports and communicate results*
Teaching strategy	Analysis of a published article, group discussion
Suggested time	4 hours
Who should teach this module	Doctor, scientist, educator with research skills
Evaluation of learning	Critique of a published piece of research, develop a research plan outline*
References	<p>De Vaus D. <i>Surveys in social research</i>. St Leonards, Australia: Allen & Unwin; 1991.</p> <p>Jenkinson C, McGee H. <i>Health status measurement</i>. Oxford: Radcliffe Medical Press; 1998.</p> <p>Owen J. <i>Programme evaluation</i>. St Leonards, Australia: Allen & Unwin; 1993.</p>

*Indicates objectives at an advanced level



Evaluation

Overview

Evaluation is a process by which practice can be justified. Evaluation can be used to assess learning, assess and improve the practice of healthcare professionals, assess a programme's viability and justify expenditure. All diabetes educators should understand that evaluation is integral to programme planning and should be incorporated into the education plan from the beginning. Teaching should be evaluated both at the individual level (did the person with diabetes learn or make the behavioural change?) and at the programme level (did the programme meet the needs of participants?).

Goals

To understand the different types of evaluation and when they are best used.

Objectives

After completing this module, the participant will be able to:

- Identify the purpose of evaluation
- Discuss how to evaluate an individual's learning, ie open-ended questioning, return demonstration, story-telling
- Describe the difference between formative and summative evaluation
- Give examples of methods to conduct structure, process and outcome evaluation
- Discuss the importance of using validated questionnaires
- Discuss the use of skills checklists
- Discuss the importance of making evaluation a positive experience for the participant and not a threatening one

Teaching strategy	Small group work
Suggested time	1–2 hours
Who should teach this module	Diabetes educator
Evaluation of learning	Development of an evaluation plan
References	<p>Glasgow RE, Osteen VL. Evaluating diabetes education. Are we measuring the most important outcomes? <i>Diabetes Care</i> 1992;15(10):1423-1432.</p> <p>Larme AC, Meyer JS, Pugh JA. Use of qualitative methods to evaluate diabetes education programmes. <i>Diabetes Educ</i> 1998;24(4):499-500, 504, 507-508.</p> <p>Maryniuk MD. Measuring outcomes in diabetes care and education. <i>Diabetes Spectrum</i> 1996;9(4):260-262.</p> <p>Peyrot M. Evaluation of patient education programmes: How to do it and how to use it. <i>Diabetes Spectrum</i> 1996;9(2):86-93.</p> <p>Worral PS. Evaluation in health-care education. In: Bastable SB (ed.). <i>Nurse as educator: principles of teaching and learning</i>. Sudbury, MA: Jones & Bartlett Publishers; 1997.</p>