

EDUCATIONAL PRACTICES IN DIABETES *MELLITUS*: UNDERSTANDING THE SKILLS OF HEALTH PROFESSIONALS¹

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ABSTRACT: The aim of this study was to understand the skills of health professionals in the educational practices in type 2 diabetes in primary care. A total of ten health professionals included in basic Belo Horizonte-MG, Brazil, participated in interviews and focus groups. The findings were organized from the identification of the following categories: importance of educational practices, knowledge, skills, and attitudes. This study shows the importance of reorienting the skills of health professionals in diabetes education practices, through training, continuing education and strengthening teamwork.

DESCRIPTORS: Competency-based education. Health personnel. Diabetes. Health communication.

PRÁTICAS EDUCATIVAS EM DIABETES *MELLITUS*: COMPREENDENDO AS COMPETÊNCIAS DOS PROFISSIONAIS DA SAÚDE

RESUMO: O objetivo desse estudo foi compreender as competências necessárias aos profissionais de saúde nas práticas educativas em Diabetes tipo 2 na Atenção Primária. Um total de dez profissionais de saúde inseridos em Unidades Básicas de Belo Horizonte-MG, Brasil, participaram de entrevistas e grupos focais. Os achados foram organizados a partir da identificação das seguintes categorias: importância das práticas educativas; conhecimentos; habilidades; e atitudes. Este estudo mostra a importância de se reorientar as competências dos profissionais de saúde nas práticas educativas em diabetes, por meio de capacitação, de educação permanente e do fortalecimento do trabalho em equipe.

DESCRIPTORIOS: Educação baseada em competências. Pessoal de saúde. Diabetes *Mellitus*. Comunicação em saúde.

PRÁCTICAS EDUCATIVAS EN DIABETES *MELLITUS*: COMPRENDIENDO LAS COMPETENCIAS DE LOS PROFESIONALES DE LA SALUD

RESUMEN: El objetivo de este estudio fue conocer las competencias de los profesionales de la salud en las prácticas educativas en la diabetes tipo 2 en atención primaria. Un total de diez profesionales de la salud incluidos en el básico de Belo Horizonte-MG, Brasil, participaron en las entrevistas y grupos focales. Los resultados fueron organizados a partir de la identificación de las siguientes categorías: importancia de las prácticas educativas, el conocimiento, habilidades y actitudes. Este estudio muestra la importancia de la reorientación de las habilidades y competencias de los profesionales de la salud en las prácticas de educación de la diabetes, mediante la capacitación, educación continua y el fortalecimiento de trabajo en equipo.

DESCRIPTORIOS: Educación basada en competencias. Personal de salud. Diabetes *Mellitus*. Comunicación en salud.

INTRODUCTION

Diabetes Mellitus (DM) is a chronic, non-communicable disease of great relevance in public health and society. The high prevalence of DM poses a great economic burden for the country as it causes functional impairment, productivity losses and early retirement. In Brazil, 12.4 million people were living with DM in 2011, and it is estimated that this figure will increase to 19.6 million people by 2030. Among the types of the disease, Type 2 DM (DM2) accounts for 90% of the current cases worldwide and shares a close relationship with excessive body weight and physical inactivity¹.

From this perspective, educational activities for self-care in DM, when conducted by skilled health professionals with their skills outlined in the learning process may contribute to better metabolic control of the individual, because it is up to them the responsibility of producing favorable conditions for the acquisition process of knowledge on DM, which might lead to change in lifestyles and handling of the disease.²

The competence of health professionals in the educational process, particularly in DM, may be understood as the ability of the professional in conducting an intervention, in addition to knowing how to act responsibly, in a recognized way, implying the mobilization of knowledge and skills, adding, therefore, value to the organization and the professional.³ It may be described as "taking the initiative" and "taking on the responsibility", on the part of the individual, in the several professional situations, characterizing as a practical understanding of situations, supported on knowledge acquired in professional trajectory, liable to changes as situations change.⁴ In addition, it can also be understood as the capacity to mobilize other players to work in the same situation, sharing the responsibilities and implications of their actions. It may finally result from three factors: knowing or knowledge, knowing how to do or skills, and knowing how to be or attitudes.⁵

The study⁶ identified that health professionals in Primary Care have difficulty understanding the concept of competence – the set of knowledge, skills and attitudes – in the activities they develop as the Family Health Team, despite this notion being the key element for professional performance, in accordance with the reasoning of the principles of the Unified Health System (*Sistema Único de Saúde* - SUS). One must add that few studies have been conducted to understand the skills of health professionals.

As a complement, authors⁷⁻⁸ claim that health professionals recognize the importance of the educational program in the management of DM; however, a number of limitations to the implementation and continuity of the educational process is placed by health professionals, such as: 1) the lack of preparation for the organization, planning and implementation of educational practices, often related to non-academic training in the area of health education; 2) ineffective interpersonal relationships, and 3) the lack of training on DM. These issues have brought the need to reorganize the educational practices in DM, including the skills of each professional and the performance goals in the educational actions, in order to establish strategies for promotion, prevention and control of the disease.

Thus, this study aims at understanding the skills listed by primary care professionals for educational practices in DM.

METHOD

This case study was performed using a qualitative descriptive-exploratory approach⁹⁻¹⁰ conducted at four Basic Health Units in eastern Belo Horizonte-MG, Brazil, in the period between August and November 2010. The selection criterion of the recruitment location was based on the easiness of access, resulting from the link with the university services. The health professionals were included in this study because they participate in the educational program in DM, and also because they have experience and interest in health education. They are, therefore, ten health professionals, with higher education, working in primary care, particularly involved with the care of individuals with diabetes, having the aim to improve and expand the educational program.

Information collection occurred in three stages. The first was through completing a form identifying the professionals that included questions on age, gender and professional training. The second, through semi-structured interviews that had been previously scheduled, as per the interest of the professionals, and held at their workplace. The themes addressed the issues of educational activities by the professionals, the skills that they identified the strengths and difficulties for the implementation of practices, and ways to develop the skills. Finally, a focal group⁹ was conducted to obtain information from the discussions and reflections of ten health professionals, lasting one hour. Initially we used a

presentation dynamics and warming up, in which the participants were encouraged to talk about skills in educational practices, from reading a text depicting the entwining of a fabric strip, representing teamwork and building skills, directing to the focus of the debate. To carry out these steps, we used specific instruments proposed by the researchers.

In order to maintain the participants' anonymity, we used numbers in the interview (I1, I2, I3, I4, ..., I10), to separate the participants. The material was registered, systematized and categorized to make up a database, considering recurrent and frequently expressed opinions, disagreements and agreements. Then we carried out the processing and interpretation of data using the thematic analysis approach in its version adapted by Bardin, from exhaustive reading of the instruments, performed in three steps: pre-analysis, categorization and handling of information with inferences and interpretation.¹¹

The following major categories resulted from the analysis of the material: importance of educational practices; knowledge; skills, and attitudes.

The study was approved by the Ethics Committee of the Municipal Health Department of Belo Horizonte (MG), (Opinion 0024.0.410.203-09 A) having complied with all requirements established by Resolution n. 196/96 of the National Health Council.

RESULTS

The participation of health professionals favored the knowledge of skills necessary to organize and plan educational practices for clients with DM.

They worked in the areas of nursing, nutrition, physiotherapy, medicine and pharmacy. The length of service in the primary network ranged from nine months to 26 years, and most was female. All doctors and nurses had a specialization in Family Health Strategy; of the other professionals, only two had some kind of specialization.

From the survey of knowledge, skills and attitudes of professionals involved in educational practices in DM primary care, we present a summary chart of professional skills necessary to develop the study of educational practices.

Chart 1 - Identification of professional skills for educational practice in type 2 diabetes in Primary Care by health professionals

Knowledge	Skills	Attitudes
Knowing the theory of Type 2 Diabetes: physiopathology, nutrition and physical activity and patient care. Knowing the theory of educational activities. Knowing the population.	Knowing how to listen. Communicate; knowing how to express, adapt the language. Lead. Evaluate. Work as a team.	Being empathetic. Be welcoming, human. Being calm and peaceful. Accepting assessments. Motivating (clients and staff). Being optimistic/having a positive attitude. Being flexible. Being creative. Taking the initiative.

To better understand the phenomenon under study, the data were separated into categories, as described below.

Importance of educational practices

All professional respondents recognized the importance of educational practices that are considered strategic for the control and prevention of injuries to clients with DM, as shown in the statements:

we must invest in groups. Everyone in the group exchanges ideas, interacts more than if it were one on one (E1; E7).

[...] the group must be important to everyone and is a good way to make everyone think about the group, the ACSs, the auxiliaries, and sometimes even the clients can say which subject they want to learn (E8).

For the development of educational practices in DM skills related to knowledge, abilities and attitudes were outlined.

Knowledge

For health professionals who work in carrying out educational practices for clients with DM, theoretical knowledge on the physiopathology of the disease, nutrition and the practice of physical activity was paramount for them to succeed in this activity.

[...] we need to be prepared, trained, have knowledge, to convey accurate information to the client about the disease, on diet, physical activity, drugs that are part of his/her everyday life it (E5); [...] we need to know the population to be able to understand the difficulties that this population has to follow the guidelines that we convey (E1).

Most of the interviewed professionals recognize the importance of knowledge on planning and evaluating educational practices and consider that they have little knowledge on the subject, as presented in the following statements.

[...] often the professional who is acting in public health has no teaching training to know how to perform an educational practice (E1).

[...] we, doctors, do not have much practice or training to form groups [...] lack of training is an impediment to the implementation of educational measures (E7).

Allied to the knowledge, skills consolidate the knowing how to do of the professional. Educational practices for clients with type 2 diabetes require that health professionals have skills in planning, execution and assessment.

Skills

The skills are necessary for the educational process to happen efficiently, making the target audience to understand the lifestyle changes that will promote a better metabolic control, thereby increasing the quality of life.

The educational process in DM requires the involvement of health professionals with different kinds of knowledge. Being a skill, teamwork plays a prominent role in this context, since it is directly related to the effectiveness of this activity. It was seen as a motivator in the workplace.

[...] we have to work together in teams and study educational practices together [...] we have to have cooperation, mutual assistance (E3).

[...] one has to overcome the difficulties of others in the team, and what is common we have to seek help from other teams, from the schools that operate here and even from other places [...] and that mutual help, mo-

tivates us, because you cannot keep waiting for things to happen by themselves (E2).

The skill of communication is quoted in several interviews as one of the main factors that lead to effective educational practice.

[...] have the ability to speak in public, mastery in speech [...] persuasiveness (E7).

Knowing how to listen is a skill that professionals mention as being essential to the achievement of educational practices.

They must be able to listen to clients and professionals (E4).

Another point raised is leadership. This theme was taken up mainly in the speech of nurses.

[...] they must have leadership, because if we do not lead, the groups are not formed (E2).

The evaluation of educational practice is a tool for decision making, seeking to improve the activity and to strengthen teamwork.

Attitudes

Attitude, in the skill model, can be understood from the way the professional acts in a given situation. The warm and gentle ways in which health professionals behave towards individuals who participate in educational practices in DM are seen as facilitators of the process.

[...] you have to be empathetic, calm and peaceful, have a proactive behavior and a welcoming attitude; if not, it is difficult to lead the group [...] (E1; E3).

To respondents, creativity is seen as a tool for coping barriers in the work of health education. Professionals tend to deal creatively in various situations to help them reach their goals in educational practices.

Creativity. We have to be creative [...] because we have neither place nor material to gather the groups (E3, E9).

Flexibility is presented in the statements as a competence for the evaluation of educational practices, as well as a characteristic of teamwork. Thus, flexibility is a prerequisite for the multidisciplinary practice.

[...] accepting the patient's, colleague's and your own criticism.. When you notice that something did not work, let's change [...] have this self-criticism [...] we must have suppleness, be flexible (E4).

The ability to motivate, both clients and team members, and have a positive attitude towards the work being developed is also identified

as dealing with many difficulties in carrying out educational practices.

[...] one has got to know how to motivate the client, use ways to encourage him/her to follow the treatment correctly (E2).

DISCUSSIONS

The use of educational practices as a strategy in the treatment of DM aims to improve the individual's knowledge about diabetes and its monitoring, as well as lead to a healthy lifestyle, improving the quality of life and increasing their autonomy towards the disease.

A feature of these practices is the ability to unite people with similar histories, who will share experiences, with the possibility of improving knowledge, change attitudes and skills that will promote a change in behavior for improved disease control and quality of life.¹²⁻¹³ The choice of the theme to develop an action in health must always be based on the subject bearing the needs, since this is a bio-psycho-social being. The assessment of these needs must go beyond an epidemic, and be social and subjective.¹⁴⁻¹⁵ In this study, the respondents recognize the importance of educational practices in the conduct of DM treatment, citing them as an effective strategy for monitoring the disease, as well as an alternative to deal with the growing demand of individual assistance, even if some report difficulties in relation to planning, conduction and evaluation of this process.

Teamwork is seen as a skill capable of consolidating the strategy of educational practices. It is a contemporary need, but the group of people does not guarantee practices that reflect this work. This practice goes beyond, by creating links between the components, which from the common goals build the process of working with ethical commitment and responsibility of their components.¹⁶

When the professionals involved in the process of teamwork manage to maintain an frank communication, respecting the differences between the members and getting together towards a common and greater good, this happens effectively, and changes in the determining factors of the health-disease process are likely to happen. Educational practices in Diabetes are part of these scenarios where the skills of the professionals protrude and the union can bring about beneficial results to clients, related to the improvement of disease control and professional fulfillment.

To the respondents, the theoretical knowledge about DM and its treatment is well established. Many, however, recognize the little training on planning and developing this part of the educational practice process from the empirical knowledge they bring professionally, or from the few capabilities in which they had the chance to participate.

The discussion and learning about educational practices, their organization, are required so there is understanding of the work and broadening of the perspective on the group, although theoretical references and methods are still quite scarce.¹⁵

Among the skills listed by the professionals, we highlight the importance that the professionals give to the process of communication between staff and clients. Effective communication is intended to make information clear and accessible, contributing to the success of educational practices, as well as leading to the satisfaction of all involved. This ability can be used as a tool in identifying problems, helping in the analysis of situations come across and guiding toward solutions. Thus, strengthening the communication process is essential in health actions, for the exchange of information between institutions, services and the population is very much welcome.¹⁷

Leadership, as an ability, was significant in the speech of nurses. These, in turn, historically, play this role on the team, but in a subtle way, it is inferred that they may also be developing that competence from the difficulties or disinterest of other team members in relation to educational practices in Diabetes. The true leader is not that who is in a management position, but, rather, one who influences other professionals to drive the group's work. Nurses may, therefore, be simply assuming one more activity in which their colleagues have no interest at that time.¹⁸

In the day to day of educational practices, the nurse has the opportunity to exercise all the knowledge, skills and attitudes, so that he/she can pursue and develop his/her characteristics as a leader. However, it would be interesting if that leadership were shared with other team members, according to different situations, as this would bring a gain to staff and clients, since different ways to coordinate, make decisions, when combined with flexibility, lead to new knowledge and new pathways, or even to increasing the bond of the client with the professionals, to greater satisfaction of all, given the more active participation in the group's decision process.

The professional attitude is crucial, therefore, for the effectiveness of an educational practice for clients with type 2 Diabetes. The way this professional receives the individual, that is, the reception this client gets, his/her creativity in conducting this process, as well as the flexibility, are attitudes that can define the conveyance of the practice in order for it to be effective.

Thus, reception can be understood as an attitude, a way to welcome the client and direct his/her care in an attempt to better meet the health demands arise from the individual. The appreciation of different subjects involved in the health production process, the recognition of co-accountability, as well as the need to develop autonomy and role-playing of the individual with Diabetes type 2, as of the establishment of solidary bonds between professionals and clients,¹⁹ have shown the way to the development of professional attitudes for a pleasant educational practice.

Creativity, in turn, must seek and find solutions to problems, as professionals who possess this competence bring with them personal qualities, their values.²⁰ In diabetes educational practices, this feature is important. Planning a group of health education requires more than theoretical knowledge about the disease. Creativity comes to ally to this knowledge and other skills and attitudes in the search for the adequacy of the subject to everyday life of those involved, as well as in dealing with hindering factors mentioned by the professionals. They understand its importance and use it daily, as it was made explicit in the statements.

Another important attitude taken into account by the professional was flexibility, which is constituted as a process of constant learning and practice. For the professional to be able to apply flexibility in the workplace, he/she must thoroughly know the mission, planning and objectives of the company, as well as have in mind his/her own objectives.²¹ A flexible professional has the ability to seek different solutions to achieve the objectives proposed for the educational practices. He/she uses his/her ability to change, transforming the work processes, seeking allies for their implementation, strengthening teamwork.

Moreover, motivation is pointed out by professionals as an effort to overcome the barriers and difficulties of teamwork and coordination of educational practices. In educational practices, enthusiasm, job satisfaction, along with a motivating work sphere, are essential to the success of this

action. The development of the ability to motivate is related to the professionals who exercise leadership, since it is up to the latter to encourage and stimulate the potential of other team members. Achieving a motivating atmosphere can be worked by the whole staff in the development of educational practices. When they can work together with mutual support and search for the same purpose, motivation comes naturally, as well as the positive results arising from the action.

FINAL CONSIDERATIONS

During the identification of professional skills, we realized the great importance these give to educational activities related to DM. They recognize this activity as complementary to clinical practice, with enormous potential as a support and propagator of the required changes in lifestyles.

It is necessary that primary care professionals know/recognize the skills needed for the work on educational practices in DM. The initiative of each one is important, which often develops empirically its function, but these have the potential for the systematic development of skills that would make the work more effective and thus satisfactory.

The development of all competencies identified and studied in this work is related to teamwork and the need for continuing professional education. The identification and study of professional skills for the educational practices in DM allowed us the opportunity to perceive the wide field of debate surrounding the theme, as well as the need for more studies on it.

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