RESEARCH | PESQUISA

The perception of users with diabetes regarding a group education strategy for the promotion of self-care

A percepção dos usuários com diabetes sobre a estratégia de educação em grupos na promoção do autocuidado

La percepción de los usuarios con diabetes sobre la estrategia de educación en grupos en la promoción del autocuidado

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Abstract

Objective: To analyze the perception of users with type 2 *diabetes mellitus* regarding education strategies in groups for the promotion of self-care. **Methods:** A descriptive, qualitative study, conducted between January 2011 and September 2012. Data collection was carried out with 12 users of a Primary Health Unit who participated in the education groups. Two focus groups were conducted. The data were analyzed through content analysis. **Results:** The categories highlighted by the study (learning through the participation in the groups, self-care in diabetes, overcoming barriers in the pursuit of a healthy lifestyle, addressing feelings through the group education, and benefits related to participation in the groups) show that the group education strategy contributed to learning and encouraged self-care practices in diabetes. **Conclusion:** Group education was found to be an effective strategy to help people with diabetes to live better with their condition.

Keywords: Health Education; Group Structure; Knowledge; Self-care; *Diabetes Mellitus*.

Resumo

Objetivo: Analisar a percepção dos usuários com *diabetes Mellitus* Tipo 2 sobre a estratégia de educação em grupos na promoção do autocuidado. **Métodos:** Estudo descritivo, de abordagem qualitativa, realizado entre janeiro de 2011 e setembro de 2012. A coleta de dados foi realizada com 12 usuários de uma Unidade Básica de Saúde que participaram da educação em grupos. Foram realizados dois grupos focais. Os dados foram analisados mediante a análise de conteúdo temática. **Resultados:** As categorias evidenciadas pelo estudo (aprendizagem por meio da participação nos grupos; autocuidado em diabetes; superação de barreiras na busca de um estilo de vida saudável; abordagem dos sentimentos por meio da educação em grupos; e benefícios relacionados à participação nos grupos) demonstram que a estratégia de educação em grupo contribui para a aprendizagem e estimula as práticas de autocuidado em diabetes. **Conclusão:** A educação em grupo apresenta-se como uma estratégia efetiva para auxiliar pessoas com diabetes a conviver melhor com a sua condição.

Palavras-chave: Educação em saúde; Estrutura de grupo; Conhecimento; Autocuidado; *diabetes Mellitus*.

Resumen

Objetivo: Analizar la percepción de los usuarios con *diabetes Mellitus* Tipo 2 sobre la estrategia de educación en grupos en la promoción del autocuidado. **Métodos:** Se realizó un estudio descriptivo de enfoque cualitativo, llevado a cabo entre enero de 2011 y septiembre de 2012. La recolección de datos fue realizada con 12 usuarios de una Unidad Básica de Salud que participaron de la educación en grupos. Se realizaron dos grupos focales. Los datos fueron analizados por análisis de contenido temático. **Resultados:** Las categorías evidenciadas por el estudio (aprendizaje a través de la participación en grupos, el autocuidado en diabetes, la superación de barreras en la búsqueda de un estilo de vida saludable, abordaje de los sentimientos a través de la educación en grupos, y los beneficios relacionados a la participación en los grupos) demuestran que la estrategia de educación grupal contribuye al aprendizaje y fomenta las prácticas de autocuidado en diabetes. **Conclusión:** La educación en grupo se presenta como una estrategia eficaz para ayudar a las personas con diabetes a vivir mejor con su condición.

Palabras clave: Educación en salud; Estructura de grupo; Conocimiento; Autocuidado; *diabetes Mellitus*.

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Submitted on 04/05/2016.
Accepted on 11/30/2016.

DOI: 10.5935/1414-8145.20170017

INTRODUCTION

The increase in the prevalence of type 2 *diabetes mellitus*, the costs associated with its treatment and the years of life lost due to the mortality associated with this condition have sparked discussions about possible strategies aimed at achieving effective results in the management and control of this disease.[1] The policy of confronting noncommunicable chronic diseases (NCDs), directed towards *diabetes mellitus*, aims to know the distribution, the magnitude and the risk factors for this chronic condition, prioritizing educational activities and focusing on healthy eating and physical activity.[2]

Complementarily, authors[3-5] emphasize the importance of supporting and planning educational groups based on theories that consider the behavioral and psychosocial aspects of diabetes, in order to construct knowledge and attitudes that encourage people with diabetes to carry out self-care practices associated with the adoption of a healthy eating plan and performance of regular physical activity, necessary for metabolic control and prevention of complications.[5-7]

In addition, studies show that group education is an effective strategy to address the issues related to care in *diabetes mellitus*, as it allows the exchange of experiences among participants and the discussion of doubts and feelings about living with this condition.[3-5] Among the educational groups used in this strategy that stand out are those formed by a small group of people with similar characteristics and common goals, gathered at a certain place and time, and articulated by their mutual internal representation in order to accomplish a task.[8,9]

Considering that group education is a strategy that facilitates the process of teaching and learning to control diabetes,[6] it is necessary to conduct studies to consider the perception of users of the Primary Health Units, aiming to verify the methodological steps that may be improved or simply to recognize the contributions of this strategy for self-care practices in diabetes. Thus, the aim of this study was to analyze the perceptions of users with diabetes regarding the group education strategy for the promotion of self-care.

METHODS

This descriptive, qualitative study was carried out between January 2011 and September 2012 in a Primary Health Unit in Belo Horizonte, MG. Among the inclusion criteria for the study were: to be aged over 18 years and to have a diagnosis of type 2 *diabetes mellitus*. People who did not meet the established criteria and those with mental, hearing or speech impairments were excluded. Clinical information related to the exclusion criteria were obtained through the medical records.

The participants of the groups were randomly drawn from the list of users registered with a diagnosis of type 2 *diabetes mellitus* in the pharmacy of the Primary Health Unit.

Those who met the inclusion criteria (n = 56) received an invitation, via telephone or through the Community Health Agent, to participate in the groups. Of the 56 users invited, 32 expressed interest in participating. Considering the number of participants, a division was carried out so that each group had at most a total of 12 participants.[8] The meeting of each group took place on different days of the week, always being conducted with the same participants. It should be mentioned that, throughout the year, nine users stopped participating in the groups due to the existence of personal commitments (seven users) or illness (two users).

All the users were informed about the aims of the study and signed the consent form, attesting to their voluntary participation.

The group education

The group education was developed in order to favor the exchange of experiences, the construction of knowledge, change of attitudes related to the experience of living with diabetes and strengthening of the bond between the participants and the health professionals. According to the perspective adopted, the discussions were guided by the reports of the experiences and the topics agreed among the participants.[8] From the agreed topics (healthy eating, physical activity, prevention of complications, use of medications, foot care), playful strategies, such as games or theater, were used to promote interaction among the participants.

In the first meeting, contract was established in which the goals, the topics to be discussed, the number of meetings, the day of the week that these meetings would be held and the time and duration of each meeting were agreed.[8] Nine meetings, of approximately 90 minutes each, were conducted by two nurses. According to the agreed topics, other professionals were invited to join the groups, namely, a nutritionist, physiotherapist and physician.

Discussions emerged in each session in addition to those previously planned, such as feelings and barriers involved in the practice of self-care. The people reflected together on ways to deal with their problem, to plan self-care goals or to feel better given the difficulty experienced that influenced the behavior.

The nurse responsible for the coordination conducted the group sessions, seeking to welcome ideas and reflections, discussing the topics that required more complex investigation. The nurse who took the role of observer recorded the impressions and the various interactions in the group, such as the feelings hidden in the speech and the non-verbal communication.[8]

The following sessions, in turn, were all started with a discussion in which the observations made in the previous meeting were resumed.

Collection and analysis of data

After the end of the nine sessions of group education, two focus groups were performed (each with 6 people) to collect data in the Primary Health Unit.[10] The selection of the users who participated in the focus groups was conducted through a draw, based on the number of group education participants.

The discussions carried out in the focus group were recorded and guided by a script with the following topics: experience regarding the participation in the groups; knowledge

about diabetes; lifestyle habits; living with diabetes; and group education. The focus group was conducted by two nurses who also supervised the sessions of the teaching and learning groups. One of the nurses conducted the focus group and the other recorded in a diary the non-verbal communications of the users, their postures and their impressions regarding the performance of the focus group. Each focus group lasted 60 minutes, a time considered sufficient for the exhaustion of discussions.[10] It should also be mentioned that if there was had not been saturation in relation to the data collected, a new focus group would have been performed with other users.[11] However, the number of participants in both focus groups allowed topics to be raised and questions to be explored in depth, with the saturation of data (which can be seen when there are no new topics during the analysis).[11]

The recorded speech and data were transcribed, systematized and categorized to form a database. The technique used for the qualitative analysis was based on the method of thematic-categorical content analysis.[11] After transcribing the statements, the textual analysis step was carried out, consists of the following stages: 1) pre-analysis, partially guided reading of the material, so that the researcher could become familiar with the expressed content, 2) exploration of the material, during which the material was organized so that the initial ideas were systematized, which required multiple readings and reinterpretations, and 3) treatment of the results, where all the material was separated into record units regarding each topic and category (inference and interpretation). It is important to clarify that, to ensure the anonymity of the users, the statements were coded using a letter (E) and numbers (1 to 12).

From the reading and interpretation of the content, it was possible to establish the following categories: 1) learning through the participation in the groups; 2) self-care in diabetes; 3) the perceived barriers in the pursuit of a healthy lifestyle; 4) the feelings related to *diabetes mellitus*; and 5) the benefits related to participation in the groups.

With regard to the collection of the sociodemographic data of the participants, a structured questionnaire was used, in which the participants were identified by the initials of their names, that included questions about: gender, age, income, marital status, occupation, education and length of diagnosis of the disease.

The study was approved by the Research Ethics Committee of the Municipal Health Department of Belo Horizonte, with authorization number 0024.0.410.203-09, issued on 27/01/2011, following the provisions of Resolution 196/96 the National Health Council.[12]

RESULTS

The majority of the focus group participants were female (77.8%), married (65%) and had a family income of 1 to 3 minimum wages. The mean age was 60.9 ± 8.4 years, with many being retired (47.6%) or housewives (30.2%). Regarding education, it was found that 74.1% had not finished elementary school, while the mean length of the diagnosis of diabetes was 11.9 ± 8.0 years.

Learning through the participation in the groups

The participants reported that they acquired knowledge related to the use of medications, healthy eating and physical exercise. Furthermore, it was possible to observe the increase in awareness of the importance of learning about diabetes for the prevention of complications. The occurrence of learning in the group space, through the exchange of experiences and feelings (mutual internal representation) was also verified. This can be seen in the statements of the participants that illustrate two different moments: before and after their participation in the groups.

> *Since I discovered I was diabetic, I had no knowledge about the treatment. The groups have helped me to learn about healthy eating and physical activity to prevent the disease from getting worse (E1).*
>
> *[...] I learned about the importance of eating every three hours [...] I was not eating right, then, after that, I started to do what we discussed in the groups I improved a lot (E9).*
>
> *When we talk, we learn (E2).*

From the reports, it was observed that in some cases the people who participated in the group education had no basic knowledge to perform the necessary actions for self-care.

Considering the importance of educational actions, new strategies and guidelines for the monitoring and treatment of people with diabetes have been instituted in Brazil.[13] However, studies show that there are numerous challenges related to treatment for *diabetes mellitus*.[14,15] Among them is the fact that professionals often feel unprepared to deal with the psychosocial aspects that influence the behavior of people living with the diabetes condition.

In addition, a study including Primary Healthcare professionals revealed that they presented difficulties related to health education practices due to their lack of technical preparation or not understanding existing teaching methodologies.[6] Therefore, the training of professionals is essential for educational actions to encourage behavioral change to achieve a healthy lifestyle.[1,7]

Simultaneously, people who have diabetes face daily challenges related to the lifestyle changes necessary to achieve metabolic control and prevent complications. One study found that educational activities are still based on a hygienist position, in which the individual is not seen as an active subject of the treatment, being blamed for the illness process.[14]

In this sense, this study draws attention to the need for proper monitoring and support for the users of the Primary Health Unit that have diabetes. A study highlighted that the educational actions conducted through groups, as well as promoting the exchange of experiences and knowledge, allowed the construction of bonds between their participants.[8] This study also showed that the acquired knowledge is translated into positive attitudes with respect to the diabetes that, in turn, became self-care actions, as shown below.

Self-care in diabetes

The users recognized the importance of participating in the group education, considering the strategy a source of support for the maintenance of self-care practices, since, over time, they had a tendency to fail to carry out the necessary actions to maintain metabolic control. Thus, it is considered that participation in groups favored changes in eating habits, physical exercise and general body care, as can be seen in the reports below.

> *I was relaxed about taking care of the disease [...]. Now that I started attending the groups, I am disciplined [...] I cut down on the bad food and went back to walking. I also used the teaching to take care of my nails, feet, shoes and clothes (E3, E5).*
>
> *[...] I will make changes in the diet and doing physical exercise, because with time we relax, I was relaxed before joining the groups (E1).*

At the same time, it was interesting to note that there was awareness of some users of the need to perform self-care actions for the management of the diabetes, such as practicing physical exercise and adopting healthy eating habits. However, it should be noted that knowledge alone is not enough for people who have diabetes to become autonomous and active in self-care actions and thereby achieve metabolic control.[3] Educational practices should be developed valuing the interdisciplinary actions of the health team, as well as the participation of psychologists who can address emotional issues related to living with diabetes and strategies for the effective management of the condition, from the experiences and barriers experienced by people with diabetes.[16]

Another aspect to note is that the constancy of the meetings proved to be relevant to assist users in making decisions, since they said they had a tendency to fail to take the actions necessary for self-care over time.

In this context, there is also the need to disseminate new practices in the field of health education, and to reorient the educative actions.[1,3] In addition, the presence of prepared and motivated staff is required to deal with people with chronic conditions, because of the difficulties that users face in the maintenance of self-care practices, as shown below.

Overcoming barriers in pursuit of a healthy lifestyle

Users reported having difficulties to change their lifestyle habits, from what they were accustomed to before the diagnosis of diabetes, which are often seen as restrictive for the eating habits. However, it was found that, from the participation in the group education, such barriers could be worked out and discussed with the other participants.

> *It is very difficult to control my eating, it always has been and always will be. But, when I started going to the groups I found other ways to deal with this difficulty (...) we share recipes and I found that a lot of people were cultivating vegetable gardens at home (E7, E11).*
>
> *When the nurse bought a nutritionist along it was very good, I could understand which foods make me well and which foods make me sick (...) I always had many doubts and ate what some neighbors suggested (E7).*

One reason for these difficulties may be the fact that the food issue is related to cultural, psychological and social aspects of the people. Therefore, factors such as personal beliefs, lack of family support, financial issues, lack of knowledge regarding diet and psychological factors can influence the attitudes of the users towards their eating.[14,15] When the diabetes condition is tackled by an interdisciplinary team, better results in metabolic control are presented, with greater benefits for the person.[17]

In addition, studies show that people living with diabetes, in general, tend to consider the nutritional guidelines provided by health professionals very difficult to follow. In other words, the guidelines are seen as restrictive, which in turn causes difficulties to adopt healthy eating habits.[18-20]

Addressing feelings through the group education

The statements of the users also reveal the presence of negative feelings about living with diabetes, such as frustration, disappointment, nervousness and helplessness, which generate an impact on the family life. Thus, the opportunity for the participants to share experiences and feelings proved to be a chance to re-shape those feelings, aiming for better living with diabetes.

> *[...] and so, after I found out I had diabetes [...] I was disappointed with myself [...] I panicked [...], stayed a week without seeing right [...] I was very angry. I needed to say how I felt (E6).*
>
> *[...] to participate in the groups was very good for me, it was possible to discuss issues that worried me, that made me sad and discouraged me from looking after myself. Now I know people who went through the same problems as me (E11).*
>
> *When the group started, I felt more lively, I realized that I was less anxious (...) I could always let out what was bothering me, it helped me to care for myself better (E8).*

Depression and anxiety are also related to these feelings and are considered a constant in the lives of people who have diabetes.[21] It is argued that the feelings triggered by this condition are directly related to the behavior and attitudes of users, which, therefore, interfere in the acceptance of the diagnosis and treatment.[20] Furthermore, when these people do not see the benefits that can be achieved as a result of self-care activities, they are less likely to perform these actions.[20]

For these reasons, during the groups, it was sought to encourage the participation of users so that they could discuss, through the statements, the feelings experienced. It was possible to perceive the reduction of the basic anxieties and the

preparation to confront the challenges related to living with the condition of *diabetes mellitus*.[8,9]

Benefits related to the participation in the groups

The users considered the participation in the groups to be an opportunity to express their doubts about diabetes, their anguish and to exchange experiences. The educational program, through the groups, was seen as beneficial in that it served as support for the acquisition of new knowledge and for the maintenance of self-care practices. Furthermore, this time was used to construct relationships of bonds between the users and health professionals. The statements below corroborate this:

> *To participate in the groups was great, my mind cleared, we exchanged experiences [...] I hope it continues guiding us, strengthening us and bringing more knowledge (E2).*
>
> *I like to come to the group, we talk and make friends, we speak and are heard, the nurses who respond to our doubts are very thoughtful [...] (E7 and E10).*

It was considered that participation in the groups and the way they were conducted throughout the process favored the satisfaction of the users with the activities performed. They praised aspects such as the communication and language, which were considered appropriate for the reality of the participants.

Thus, it is argued that to know the needs and expectations of the users regarding educational actions enables better planning of activities and the determination of adequate educational strategies.[15] Similarly, it is thought that group education is an effective strategy to stimulate self-care practices in diabetes.[1-3]

In all the meetings, the presence was observed, among the participants, of the sense of belonging to the group through attendance, the discussion of the difficulties experienced and the expression of the acceptance of the other in the group.[8,9] Cooperation could be observed through the sharing of experiences and willingness to listen to the stories and feelings verbalized by the participants in each meting.[21,22]

It is important to mention that, at times, there were communication problems, due to the emergence of parallel conversations and diversion from the tasks to be performed at each meeting. However, it was possible to allay conflicts related to the group experience and gradually perceive the growing bond between the participants and the respect among them when divergent opinions emerged.

However, it should be noted that the study characteristics do not allow generalization of the results, but to comprehend the perception of the users of the Primary Health Unit that participated in the group education in the context and period in which it was developed. Thus, it is considered that this study did not present limitations that could compromise the results.

It is suggested however, the development of other studies that attempt to investigate the perception of users of Primary Health Units living with the diabetes condition, regarding different educational strategies. Furthermore, it is believed that the comparison of these strategies through qualitative approaches, will reveal the weaknesses, potential and effects of these actions from the perspective of the primary care user.

FINAL CONSIDERATIONS

To analyze the perception that users have of their participation in groups proved to be essential for it to be possible to recognize the contributions of this strategy for improving self-care in diabetes, as well as its potential and the effects on the health of these individuals.

The participants perceived the groups as an opportunity to acquire knowledge and discuss the everyday difficulties experienced in living with diabetes, in order to overcome them. The interaction between the professionals and participants, the exchange of experiences and the bonds constructed favored overcoming these difficulties. It is possible to perceive that participation in the groups assisted the subjects to make daily decisions related to self-care practices.

Thus, the importance is reiterated of encouraging education practices and innovative strategies that stimulate self-care and contribute to the quality of life of people living with this condition.

ACKNOWLEDGEMENT

To research foundation of Minas Gerais state, in Brazil, named FAPEMIG (Fundação de Amparo à Pesquisa do Estado de Minas Gerais) for funding the research project (Process APQ N. 03598-12).

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