# Therapeutic factors in a group of people with diabetes

FATORES TERAPÊUTICOS EM GRUPO DE DIABÉTICOS

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## **ABSTRACT**

The objective of the present research was to analyze the therapeutic factors identified in the accounts of the participants of a group of people with diabetes. An exploratory, assessing research carried out by means of semi-structured interviews pinpointed the following therapeutic factors: information availability (100%); cohesion (100%); universality (86%); interpersonal learning (57%); development of socialization techniques (57%); altruism (28.5%); imitative behavior (28.5%); and hope stimulus (28.5%). The implementation of group intervention actions for the promotion of self-care towards diabetes carriers can generate a beneficial interaction among group members, thus allowing for experience exchange processes, as well as a broader understanding of the disease and other positive experiences evidenced by the presence of the therapeutic factors.

#### **KEY WORDS**

Health education. Diabetes mellitus. Nursing Care. Group structure.

## **RESUMO**

O objetivo da presente pesquisa foi analisar os fatores terapêuticos presentes nos relatos dos participantes de um grupo de diabéticos. Pesquisa exploratória, de avaliação, cujos dados foram obtidos por meio de entrevista semiestruturada, cuja análise permitiu a identificação dos seguintes fatores terapêuticos: oferecimento de informações (100%); coesão (100%); universalidade (86%); aprendizagem interpessoal (57%); desenvolvimento de técnicas de socialização (57%); altruísmo (28,5%); comportamento imitativo (28,5%) e instilação de esperança (28,5%). Intervenções grupais, realizadas na promoção do autocuidado às pessoas portadoras de diabetes, podem promover interação benéfica entre os membros, permitindo troca de experiências, compreensão de uma dimensão maior do problema e outras vivências positivas evidenciadas pela presença dos fatores terapêuticos.

## **DESCRITORES**

Educação em saúde. Diabetes mellitus. Cuidados de enfermagem. Estrutura de grupo.

## **RESUMEN**

El objetivo de la presente investigación fue analizar los factores terapéuticos presentes en los relatos de los participantes de un grupo de diabéticos. Investigación exploratoria, de evaluación, cuyos datos fueron obtenidos por medio de entrevista semiestructurada; el análisis permitió la identificación de los siguientes factores terapéuticos: ofrecimiento de informaciones (100%); cohesión (100%); universalidad (86%); aprendizaje interpersonal (57%); desarrollo de técnicas de socialización (57%); altruismo (28,5%); comportamiento imitativo (28,5%) e introducción de esperanza (28,5%). Las intervenciones grupales realizadas en la promoción del auto cuidado a las personas portadoras de diabetes pueden promover una interacción benéfica entre los miembros, permitiendo el intercambio de experiencias, la comprensión de una dimensión mayor del problema y de otras vivencias positivas evidenciadas por la presencia de los factores terapéuticos.

#### **DESCRIPTORES**

Educación en salud. Diabetes mellitus. Atención de enfermería. Estructura de grupo.

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## INTRODUCTION

Diabetes is characterized as a public health problem due to its pandemic proportions, as well as its related comorbidities and complications that hamper productivity, quality of life and survival rates of people who are afflicted by it<sup>(1)</sup>. Another consequence of the disease is the stress placed on the family structure, caused by patient needs related to diet, hygiene, physical exercise, comfort and drug treatment, which must be provided by a caregiver<sup>(2)</sup>.

The therapeutic plan for individuals afflicted by diabetes mellitus, as well as those who have non-transmittable chronic diseases in general, must be designed with a focus on awareness about healthy habits so that complications can be avoided or controlled.

This study is derived from a larger project, namely the Nursina Process based on Orem's Model as a healthcare strategy for people with type 2 diabetes, in which educational group activities were implemented after a systematic nursing approach, assessing the healthcare status of diabetics

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and identifying the related nursing diagnoses. The goal of these activities was to help the participants to change their behavior(3) by focusing on the importance of self-care.

During these meetings, topics such as health awareness, the meaning of having diabetes, aspects related to the condition (risk factors, complications), and aspects related to the treatment of diabetes (dietary habits, physical activity, rights, family participation), as well as other topics, were all discussed, aiming at promoting health, preventing complications and favoring group learning and respon-

sibility for their own well-being. It is worth noting that this group did not have a psychotherapeutic focus.

The assessment stage is important in the context of group interventions, with the therapeutic factors (4) working as units of meaning that allow for the identification of the effectiveness of the group activities based on the participants' reports or opinions.

Therefore, based on the group interventions performed and due to the importance of assessment as one of the operational stages in group coordination(3), the present study was performed in order to analyze the presence of therapeutic factors<sup>(4)</sup> in the reports of the group participants.

## LITERATURE REVIEW

Healthcare education activities are important mechanisms for the incorporation of healthy practices in the daily routine of people with diabetes. They can be achieved through different strategies<sup>(1)</sup>. Group interventions are one of the possibilities. Healthcare professionals must pay close attention to the quality of such actions, since simply giving information is not enough(3) – developing assertive interventions in order to change behaviors and lifestyle habits is paramount<sup>(5)</sup>. This strategy is considered effective when attempting to foster motivation and interest in self-care (6).

The group activities developed with people afflicted by non-transmittable chronic diseases encourage active participation in caring for one's own health, making it possible to consciously achieve healthy habits<sup>(7-8)</sup>. The opportunity to discuss difficulties and experiences among people with similar problems broadens the comprehension of the disease process and facilitates the commitment to change (3-4). The acquisition of knowledge within the group must also be paired with encouragement to perform self-care effectively, as a way to guarantee effective changes in behavior (3-4).

Regarding collective health, group activities are part of a set of actions within the healthcare programs, including those aimed at people with chronic diseases (10). The initiative of the Ministry of Health in the implementation of the Plan for Reorganization of Hypertension Care and Diabetes Mellitus is a noteworthy example, including group activi-

> ties as intervention strategies(11). To perform these activities, it is necessary to plan accordingly, in order to activate the best influence that the group can exert on its members<sup>(3)</sup>.

In the case of healthcare education groups. these plans include adapting the activities to the desired goals, guaranteeing adequate conditions for them to be performed, establishing a contract with the clientele and, most of all, the utilization of assessment criteria, which must occur within a continuous procommitment to change. cess. This process should include the group and be coordinated systematically(3) to analyze the effectiveness of the practices and

their applicability to the context of the participants' lives.

However, the assessment of group activities is often neglected. This neglect may occur because it is related to a set of subjective data that demands a close analysis, in addition to careful preparation of the group coordinator – both to assess and to perform the necessary adaptations (3). The assessment of the group process is important and provides feedback to the coordinator about the effectiveness of the group, regardless of its goals - either psychotherapeutic or operative. The present study was performed in accordance with the latter type, aiming at encouraging the independence of its members, allowing active and creative adaptation to reality, which results in free, mature choices<sup>(12)</sup>.

One of the ways to assess the effectiveness of group interventions is to identify therapeutic factors (TFs) by observing the group dynamics and the communication expressed by its members<sup>(4)</sup>. In spite of being described in the psychotherapeutic context, most of them can be found in other group types.

The proposed TFs for this study are: 1. Instillation of hope: a factor that is characterized when the participants

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report improvements based on the hope that other members of the group will also improve; 2. Universality: occurs when people realize that their experiences with hardships are not unique to them, but are also experienced by other people, which provides relief; 3. Providing information: the group coordinator or other members offer educational information, advice or orientation on several topics; 4. Altruism: feeling of usefulness perceived by the group members when sharing similar problems, making suggestions and reassuring each other; 5. Development of socialization techniques: improvement of basic social skills, based on the group experience; 6. Imitative Behavior: learning by substitution occurs when one evaluates the improvements experienced by another member; 7. Group cohesion: refers to the feeling of belonging among members, which offers conditions for acceptance and understanding that are absolutely necessary for group effectiveness as a form of intervention; 8. Interpersonal learning: interaction occurs every time a group gathers together, and it has a great potential for learning and change; 9. Catharsis: a complex phenomenon related to venting emotions, sharing inner feelings and the acceptance of these by the group; 10. Corrective transfer from the family group: transferring responses that were formerly related to relatives to the members of the current group; 11. Existential factors: characterized by reflecting on existential questions such as isolation, freedom and lack of purpose, assumptions of the eternal human struggle.

It is also important to note that the last three factors are more commonly found in psychotherapeutic groups, as they demand the approach of human psychodynamics, in a clinical relationship defined towards that end<sup>(4)</sup>.

This study may open new channels for the assessment of other group activities, encouraging future studies towards the understanding of the usual therapeutic factors related to this type of group, as well as providing direction regarding changes or improvements in how to address groups of diabetic people.

## **METHOD**

This is an exploratory study with a focus on assessment, whose purpose is to elaborate procedures to assess a program, care technique, practice or policy, in order to find answers to issues regarding practical realities(13). In the

present study we chose to assess the TFs according to the reports of the subjects after they had participated in the group, since this is one of the ways to assess the group process. These processes can also be assessed by the group coordinator in a field journal<sup>(4)</sup>.

The study was approved by the Review Board of Hospital das Clínicas da Universidade Federal de Goiás (protocol #017/06). The research was performed with seven adult individuals who received care using a systematic nursing approach. The educational group activity was implemented after the assessment of the participants' health status and the identification of the nursing diagnoses. The study was performed from August to December of 2006, with weekly 90-minute meetings.

Following the group intervention, each member was invited to take part in an individual semi-structured interview, with questions covering the group intervention. Such questions aimed at identifying TFs that could be a consequence of the benefits of the subjects' participation in the activities. As such, aspects that characterize TFs were analyzed in the content of the patients' reports, as described before.

In this manner, the identified TFs were collected from the patients' reports, considering the focus of the group as an educational activity for health promotion, without psychotherapeutic purposes.

The interviews were held from December, 2006 to February, 2007, with a maximum duration of one hour each, where each participant's report was registered.

After the registries of reports were analyzed, the evidence of the therapeutic factors<sup>(4)</sup> was identified according to how often they were mentioned in the registries (13). In addition, some excerpts were taken from the reports in order to illustrate certain aspects of the identified factors.

#### RESULTS

Seven individuals with diabetes mellitus took part in this study - three males and four females, aged 46 to 71. All of them were married, and had a family background of diabetes and difficulties with self-care regarding their disease.

The presence of the TFs in the interviews is described in Table 1:

Table 1 - Distribution of the identified TFs in the interviews, according to each subject's (S) report - Goiânia - 2006-2007

Therapeutic Factors / Interviews	S1	S2	S3	S4	S5	S6	S7	Total
Providing information	x	X	X	X	X	X	X	100%
Group Cohesiveness	X	X	X	X	X	X	X	100%
Universality	X	X	X	X	X		X	86%
Development of socialization techniques	X	X		X			X	57%
Interpersonal learning	x		X	X	X			57%
Instillation of hope			X				X	28.5%
Altruism	X						X	28.5%
Imitative Behavior	x				X			28.5%



The factors above are described and analyzed according to how frequently they were mentioned in the subject's reports.

Providing Information and Group Cohesiveness: these TFs were present in the reports of all participants. Some testimonies were remarkable in the description of providing information, since they portrayed the group as a place of learning for the participants, according to the purposes intended by the coordinator:

I really came to know about the problem of diabetes with the group [...] The best thing, I think, was to have taken part and acquired more knowledge about my problem (S2).

As people talk about that topic, we learn and warn others... (S3).

It helped me think things out better... (S5).

Regarding Group Cohesiveness, the members emphasized the integration of the group, which was necessary to maintain its closeness:

The participation, motivation, cooperation and interaction issues were nice, the group interacted well, we could see it happening (S3).

Because I'm diabetic and I could do more by participating, get closer to other people, and I could exchange ideas during those meetings... (S5).

I believe that when you're together as a group... if we're with you, gathered there, it's incredible. If someone new joins the group, it takes a while for us to feel comfortable. At first, we simply watch... (S3).

Universality was found in 86% of the testimonies, as an important ally in the maintenance of the group bonds provided by the feeling of proximity to experiences or feelings caused by the disease:

It was great, they're all diabetic (S5).

Seeing that those who have this kind of problem are not alone, there are people who want to welcome us, who have an interest in it (S3).

I think the greatest benefit was seeing that I can control myself and that my problem is not as serious as the problem that other people have (S7).

Interpersonal Learning and Development of Socialization Techniques were identified in 57% of the interviews.

The participants can experience self-perception during the group interactions. Also, this experience may cause changes in behavior, according to testimonies on Interpersonal Learning:

I think many things have changed. I used to think about others more often after the meetings. It was great for me, I started to think about myself more often (S4).

The group was very good, they all treat us very well... They bring changes, as there are things we agree with and things we disagree with, they tend to get more comprehensive... (S5).

The presence of the Development of Socialization Techniques FT showed the possibility of solving or perceiving social interactions that were not well adapted, through insights that occurred during the group interactions:

Also, the moment of participation was good, because I was concerned about the moment, feeling the responsibility of using that moment to do something different (S2).

Altruism, Instillation of Hope and Imitative Behavior were present in 28.5% of the interviews.

When the participants mention the benefits obtained by helping other members of the group, they refer directly to the Altruism FT:

When a person cares for another, that person is taking care of their own condition (S1).

We have to try to help others (S7).

Instillation of Hope can be observed when the members mention stronger beliefs in the possibility of improvement regarding the disease and its complications, as seen below:

The best thing was to have known so many people with the same problem, and knowing that mine is minor when compared to the others (S7).

Imitative behavior indicates the participants' ability to replicate different behavioral patterns, learned from other group members:

I learned with them, their life, each of them, and I learned a lot about how they live and their excesses. They say, when another person's beard is on fire, we should douse ours in water (S1).

The therapeutic factors *Catharsis, Corrective Transfer* from the Family Group and Existential Factors were not identified in the content analysis of the interviews.

## **DISCUSSION**

The potential of the group to incite behavioral changes is made evident by the presence of the TF in the content of the interviews. Therefore, the effectiveness of the group experience within the context of treatment and monitoring of people with non-transmittable chronic diseases is confirmed by the evidence of symbolic, cognitive, interactional, social inner reflections and those regarding lifestyle habits.

The presence of each TF varies according to the type of group (whether open or closed), the goals (information or psychotherapy, for example), among the members (each member benefits from specific therapeutic factors), the phase (either the beginning or the end) and the duration

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of the group therapy (short-term or long-term groups)<sup>(4)</sup>. It is worth noting the importance of the specifics and focus of the studied group in obtaining the desired results.

Providing information is related to the learning experience that occurs in the group context, either through orientation provided by the group coordinator or by experiences exchanged by the participants<sup>(4)</sup>. The presence of this TF in all testimonies shows coherence with the focus intended for the group, whose goal was to provide enough knowledge for the subjects to develop an active and conscious participation in self-care.

Other studies<sup>(2,6,8-9)</sup> show that knowledge is a fundamental element in the therapy provided to individuals with diabetes by making them aware that changes in lifestyle are necessary, despite the limits imposed by the disease, as well as the maintenance of autonomy and quality of life.

The cognitive construction of the participants was gradually developed by exchanging information and experiences, with the subjects being active providers of knowledge. Communication and language are essential parts of group identity, setting the groups apart from each other<sup>(15)</sup>. In the case of the studied group, communication was the main force behind learning and the consequent achievement of the goals.

Knowledge was built collectively by the group and the coordinator. This situation made it easier for all the members to understand the information; it especially strengthened the importance of practical application. Therefore, in this specific group, the participants experienced feelings of being useful and building together. This is evident in the example of the testimony where the subject refers to the group instead of himself when attributing the locus of learning to it:

As one talks about that topic, we learn and warn others... (S3).

Group Cohesiveness is responsible for the motivation of the members regarding their participation, collaboration and mutual support<sup>(4)</sup>, which are fundamental for obtaining results from a group intervention. Being accepted in the group and maintaining relationships that provide trust and support to the participant tend to improve self-esteem<sup>(4-16)</sup>.

The participants refer to the other members of the group in a welcoming and accepting way, which suggests the reason why they trust and find the opportunity to speak, being unafraid of rejection. As such, in cohesive groups, it is possible to see a stronger influence of the group members on the group members themselves<sup>(4)</sup>. Their coordinator has an implicit need to reflect on the cultural values of the group members in order to contextualize the disease and its implications. In this sense, cohesiveness of the group and the feeling of belonging allow for better production and provision of knowledge by allowing for spontaneous manifestations.

One of the participants described the strength of the group cohesiveness when he mentioned the arrival of a new

member to the group, which caused instability until the others accepted him.

If someone new joins the group, it takes a while for us to feel comfortable (S3).

This testimony shows the feeling of unity provided by the group experience, where the insertion of a new member makes other members feel wary until the new member is really accepted.

Universality describes the identification among the members, consisting of the participants' perceptions that their experience of suffering is not unique to them or that it is not as strong as those felt by other people, and can be shared<sup>(4)</sup>.

One of the group benefits is related to the perception of similarity in the collective situations experienced by the group members. This factor highlights the feelings of relief that people experience when they find that they can share their difficulties related to the limitations imposed by the disease, in addition to their experiences in coping with it.

The feeling of loneliness prior to the group experience is revealed when the participants described their feelings of togetherness following the group experience, and that they awakened to the existence of people with problems that are similar to theirs. As such, a problem is not *yours* or *mine*, but *ours*, showing that this process leads to the perception that other people also live with diabetes mellitus, with differing levels of difficulty. The acknowledgment of behaviors through reports from other people allows experiences to be identified and shared. As such, universality is a TF that highly contributes to cohesiveness itself, being essential to achieving the goals set for the group.

Interpersonal Learning consists of the fundamental mechanism for change, since it is derived from the interpersonal relations that occur every time a group meets. Learning emerges from perceptions among the group members, based on the behavior and relationships, allowing for the correction of maladjusted interactions<sup>(4)</sup>.

The content analysis of the testimonies shows a movement of reflection, which occurred due to information shared within the group context, triggering the perception of the differences, or even changes, in the behavior of the participants.

Divergent and convergent opinions among the group members during the learning of self-care encouraged reflection on the construction of knowledge, which favored the behavioral changes. This process made it possible to discuss the issues that emerged when there were two or more ways of performing the same self-care routine, leading to the same results. This increased the choices available to the participants.

One of the greatest benefits provided by group orientation is the possibility to learn from people with similar



experiences, allowing the participants to affirm their own capacity of perceiving and changing themselves, based on orientations built by people who experienced the same challenges<sup>(5,8,12)</sup>.

The *Development of Socialization Techniques* (57%) includes the acquisition of social skills that can help the participants in future social interactions<sup>(8)</sup>. In this context, beginning with the relationship patterns that occur within the group, it is possible to create more authentic and spontaneous relationships<sup>(4)</sup>. As such, the group assists its members to understand behavioral characteristics or patterns that make social interactions more difficult, allowing them to realize and reflect on these characteristics, enacting changes in their lifestyle as they become aware of the need for adequacy.

This aspect can be observed in the testimonies where the participants suggest that, by reflecting on their own actions and those of the group members, they acknowledge their own behavior, showing a critical perception regarding their own actions, which will form the basis for change<sup>(3-4)</sup>.

This reflective-critical movement supports the participants in future interactions. Participation, added to cohesiveness and other TFs that integrate the members in group activities, allows them to listen to the contributions or reports from other people and analyze them critically, avoiding misinterpretations<sup>(15)</sup>.

Altruism is of benefit to the participants, as they feel useful when they help others during the meetings. The altruistic experience is renewing, and it also increases self-esteem. It is a general characteristic of groups, including operative groups, as seen in this study, where the individual can benefit other people and also receive benefits by taking turns playing these roles<sup>(4)</sup>.

The interactions established in the groups occur due to a

Free, more spontaneous and authentic manifestation of the feelings that flow among the members, as well as the expression of the associative material linked to their current and previous experiences<sup>(17)</sup>.

The group context provides more freedom to the participants to present their opinions and feelings, as well as closer interactions between members, encouraging the initiative of mutual support.

This willingness to help each other makes this TF an indicator for better experiences of participants in different groups, which could result in even higher personal satisfaction.

Instillation of Hope is characterized when the participants feel encouraged to perceive possibilities for improvement, by listening to other participants' reports of improvement or by noticing their own progress<sup>(16)</sup>.

The feeling that there is a possibility of relief or improvement, and that one can achieve their goal, instills a feeling of optimism and trust regarding one's potential and future<sup>(16)</sup>.

The group coordinators should exploit this factor, drawing attention to the improvements that the members achieve so that the other participants can be encouraged to follow suit<sup>(4)</sup>.

The encouragement of group members to participate in successful activities was observed in the reports regarding instillation of hope. People with diabetes mellitus need to be assertive in self-care in order to be aware of the possibility of complications in the short-, medium- and long-term, and to try to prevent them. Therefore, when behavioral changes are experienced and built collectively, they become more effective than when the person receives information privately, in a doctor's office.

Another TF present in the participants' reports was *Imitative Behavior*, which occurs after the observation of certain attitudes of another group member which are seen to be positive. In this sense, the participants are encouraged to change their behavior. In the group experience, the group members benefit from the observation of another patient with similar problems. This phenomenon is known as learning by substitution<sup>(4)</sup>.

Flaws detected in self-care were perceived by the group members and they tried not to repeat them. The group experience allows positive changes to be encouraged in different ways, through reflection and by encouragement stemming from the dialogues or observation, which confers credibility to the group interventions in the activities performed with groups of people with chronic non-transmittable diseases, which are focused on lifestyle changes.

The imitative behavior was observed in the group in both beliefs and the attitudes related to health and socialization. This movement seems to be beneficial when the participant seeks self-care references within the group, signaling their encouragement stemming from the positive experiences reported by the other members.

Because of the constant necessity of monitoring and the patients' own habits, strategies that address psychological factors should be used in the context of diabetes therapy. The professional should be prepared to monitor or identify problems that could possibly emerge, so that the patient can be referred to a specialized professional. Psychological alterations such as these influence the treatment of the disease directly<sup>(18)</sup>.

The TFs Catharsis, Corrective Transfer from the Family Group and Existential Factors were not extracted from the contents of the participants' reports in this investigation. Such a fact can be explained by the focus of the study group, whose goal was to develop an educational activity based on the provision of information about diabetes instead of a psychotherapeutic focus, where the emergence of the FTs observed is more common.

The occurrence of the aforementioned factors in the group depends on the offer of psychotherapy and having a professional with specific skills, whose therapeutic bond-

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ing and knowledge allow the subject to better understand himself and his problems<sup>(3)</sup>. Therefore, groups that focus on health education do not elicit existential issues due to their own nature and scope.

## CONCLUSION

The results obtained show that group interventions performed in the context of self-care promotion for people with diabetes may provide beneficial interactions among the group members. This interaction allows for the exchange of experiences, comprehension of the larger dimension of the problem and positive growth experiences, made evident by the TFs.

An aspect that must be carefully considered is the importance of good planning for the groups, as well as the qualification of the coordinators, allying knowledge about groups and the sensitivity to perceive the presence/absence

of TFs, which could guide the work of the coordinator in the quest for the effectiveness of the group activities.

In this sense, an assessment of this monitoring activity was shown to be of value in order to verify the possibilities and benefits of this group as an assertive intervention strategy for people with diabetes mellitus.

The presence of Providing Information and Cohesiveness as predominant FTs is relevant, since it indicates consonance with the goals of the proposed group intervention and signals the necessary level of interaction to obtain significant group results. This validates the group strategy as a way to join health promotion activities, education and the context of the participants' reality.

With this study, we can state that the group activity allowed for the achievement of positive results in the care of individuals with diabetes mellitus, especially because it facilitates and encourages self-care.

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