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Health promotion for people with diabetes: perceptions of primary health care professionals

Promoção da saúde à pessoa com diabetes: percepções dos profissionais da atenção primária à saúde

Promoción de la salud para personas con diabetes: percepciones de los profesionales de atención primaria de salud

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ABSTRACT
Objective: to identify the perception of health professionals working in primary care about health promotion for people with diabetes. **Method:** qualitative study, of the action research type, through Paulo Freire's Research Itinerary, which comprises three stages: thematic investigation, codification and decoding and critical unveiling. A culture circle was held in September 2021 with six health professionals from a Basic Unit in a city in southern Brazil. **Results:** professionals identified that health is not just the absence of disease, but involves social determinants in a person's life. They relate health promotion with socioeconomic conditions, lifestyle and balance between both. **Final considerations:** when professionals identified care based on social determinants and health promotion, they envisioned building an individual care protocol with improved quality of life for people with diabetes.
Descriptors: Health Promotion; Social Determinants of Health; Diabetes Mellitus; Primary Health Care; Health Personnel.

RESUMO
Objetivo: identificar a percepção dos profissionais de saúde que atuam na atenção primária sobre a promoção da saúde às pessoas com Diabetes**. Método:** estudo qualitativo, do tipo pesquisa ação, por meio do Itinerário de Pesquisa de Paulo Freire, que compreende três etapas: investigação temática, codificação e descodificação e desvelamento crítico. Realizou-se um círculo de cultura em setembro de 2021 com seis profissionais de saúde de uma Unidade Básica de uma cidade do sul do Brasil. **Resultados:** os profissionais identificaram que a saúde não é somente ausência da doença, mas envolve os determinantes sociais na vida da pessoa. Relacionam a promoção da saúde com as condições socioeconômicas, estilo de vida e equilíbrio entre ambos. **Considerações finais:** os profissionais ao identificarem o cuidado com base nos determinantes sociais e a promoção da saúde vislumbraram a construção de um protocolo individual de atendimento com melhoria da qualidade de vida das pessoas com diabetes.
Descritores: Promoção da Saúde; Determinantes Sociais da Saúde; Diabetes Mellitus; Atenção Primária à Saúde; Pessoal de Saúde.

RESUMEN
Objetivo: identificar la percepción de los profesionales de la salud que trabajan en la atención primaria sobre la promoción de la salud de los pacientes con diabetes. **Método:** estudio cualitativo, del tipo investigación acción, a través del Itinerario de Investigación de Paulo Freire, que comprende tres etapas: investigación temática, codificación y decodificación y develamiento crítico. En septiembre de 2021, se realizó un círculo de cultura con seis profesionales de la salud de una Unidad Básica de una ciudad del sur de Brasil. **Resultados:** los profesionales han identificado que la salud no es sólo la ausencia de enfermedad, sino que involucra determinantes sociales en la vida de una persona. Relacionan la promoción de la salud con las condiciones socioeconómicas, el estilo de vida y el equilibrio entre ambos. **Consideraciones finales:** cuando los profesionales identificaron la atención basada en los determinantes sociales y la promoción de la salud, vislumbraron la construcción de un protocolo de atención individual con mejora de la calidad de vida de las personas con diabetes.
Descriptores: Promoción de la Salud; Determinantes Sociales de la Salud; Diabetes Mellitus; Atención Primaria de Salud; Personal de Salud.

INTRODUCTION

The creation of the Unified Health System (*Sistema Único de Saúde - SUS*) in Brazil in 1990 enabled numerous benefits to the population, consolidating the Primary Healthcare (PHC) area as a central part of the system. The Family Health Strategy (*Estratégia de Saúde da Família - ESF*) is based on PHC with the primary characteristic of offering solutions to the health needs of the individual/family[1].

The Family Health Teams (*Equipes de Saúde da Família - eSF*) add values such as equity, comprehensiveness and participation, benefiting health promotion in PHC. In doing so, the social determinants of the healthcare process need to be addressed by *eSF* with planning and involvement of local social participation. Furthermore, its role is to emphasize health promotion and add treatment strategies for non-transmissible chronic diseases, including in the case of diabetes mellitus[1].

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Diabetes is a chronic disease with alarming data since the numbers are related to factors such as obesity and poor physical exercise. The Pan American Health Organization (PAHO) estimates that currently 62 million people live with diabetes in the Americas. The number of people with diabetes in the entire world should reach 642 million in 2040, with the greatest increases in prevalence in regions with developing economies[2].

Promoting the health of people with diabetes seeks to improve their quality of life. Care includes individualized assessment through outpatient consultations with a multidisciplinary team that covers medicine, nursing, nutrition, social work, dental care, psychology and physical activity. Brief and personalized interventions seek the basic concepts of education and quality of life with diabetes[3].

The National Health Promotion Policy (*Política Nacional de Promoção da Saúde – PNPS*) created in 2006 and reformulated in 2014 and 2017, seeks to improve the population's quality of life through integrated and intersectoral actions in such a way that the private sectors, governmental and non-governmental sectors, together with civil society, participate together in the debate on the Social Determinants of Health (SDH) and enhance expanded health intervention forms[4,5].

The importance of the SDH as the main tool for working on health-conditioning resources is emphasized. Such resources are defined as economic and social conditions that influence the health of people, communities and territories. The SDH also indicate to professionals the concept of being healthy or not, individually or collectively impacting different territories and social segments[6].

Thus, in order to avoid complications such as cardiovascular diseases, kidney diseases, endocrine/metabolic complications and other chronic complications in people with diabetes and reinforce health promotion (HP) actions, the following question emerged: How do primary healthcare professionals perceive health promotion in the care of people with diabetes?

The objective of the study was to identify the perception of health professionals who work in primary healthcare on health promotion for people with diabetes. The study was based on the theoretical assumptions of health promotion, originating in the Ottawa Charter of 1986. Based on this document, five axes of action are proposed: elaboration and implementation of healthy public policies, creation of environments favorable to health, reinforcement of community action, development of personal skills and reorientation of the health system[4,5]. In relation to the referenced assumptions, the PNPS seeks to promote quality of life and reduce vulnerabilities and health risks related to their determinants and conditions[4,5].

METHOD

This is a qualitative participatory action research study based on Paulo Freires Research Itinerary based on three distinct and interconnected stages: thematic investigation – generating themes are raised and discussed by the participants; coding and decoding – stage where the meaning, proximity and contradictions of the themes are identified; critical unveiling – process where "magic" solutions disappear and the critical perception of reality undergoes transformation', as shown in Figure 1.

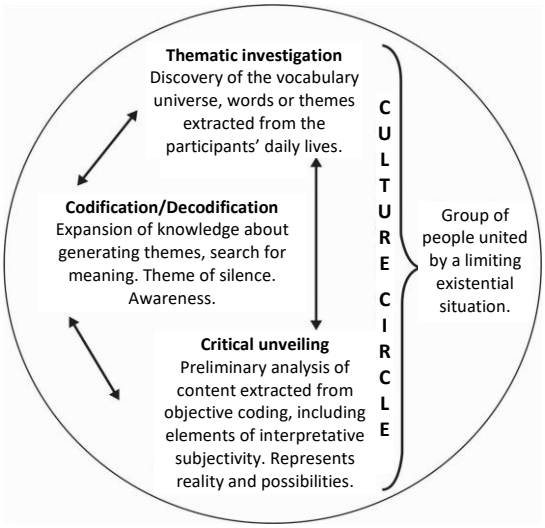

Figure 1: Representation of Paulo Freire's Research Itinerary, adapted from Heidemann et al[7]. Florianópolis, SC, Brazil, 2021.

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The study was conducted in July 2021 in a Basic Health Unit (*Unidade Básica de Saúde – UBS*) located in one of the southern neighborhoods of the island area of a capital in the south of Brazil with six professionals. The inclusion criteria were: being linked to the *eSF* or the Expanded Family Health Center of the Regional Health Department and working in the *eSF* with the largest number of people with diabetes per territorial area. As an exclusion criterion, being on vacation or leave of any nature during the research period was considered.

Next, three meetings were held in July 2021 to investigate the themes, lasting two hours each. The themes were recorded using a voice recorder in a notebook. A Culture Circle was conducted in a circle format to facilitate viewing of all participants, encourage dialogue and provide participants with equal conditions, as proposed by Paulo Freire. As it was developed during the COVID-19 pandemic period, so safety measures such as social distancing between participants as well as the use of masks at all times during collection were maintained.

The activity began with the introduction of the participants, asking for their name, professional activity, place of employment and length of time working in the *eSF*'s assigned territory. An analogy was made with the figure of the human body for the Thematic Research stage, and the potentialities and difficulties regarding health promotion in diabetes care were proposed. The mediator initially explained to the group that the objective of drawing a human body, which had the pancreas in red, was to establish a relationship with diabetes, as shown in Figure 2.

Figure 2: Generating keywords/themes fixed on the human body poster. Florianópolis, SC, Brazil, 2021.

In turn, two guiding questions were asked to support the debate: What do you understand by Health Promotion? What actions are developed to promote the health of people living with diabetes mellitus?

Participants were invited to divide into two groups, being encouraged to list keywords/generating themes on colored cards. As a result, 21 relevant generating themes were proposed, which were transcribed onto paper and displayed on the Human Body poster, shown in Figure 2.

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The participants subsequently shared experiences in the coding and decoding stage, and when provoked by the mediator they selected the most relevant themes to be placed on the posters entitled: Potentialities and Difficulties. From this, three generating themes were selected: definition of concepts by health professionals about health promotion, nutrition and health promotion, and the family context and health promotion. These themes were written down individually on A4 sheets and a copy of each theme was given to the groups. The mediator spoke and asked each group to reflect on diabetes care, relating investigated themes.

Then in the critical unveiling stage, the two groups discussed the coded and decoded themes, relating them to their practice. The activity took place concomitantly with the thematic investigation in the coming and going process from the concrete to the abstract, a stage called data analysis, in which the participants were supported with reading, reflection and interpretation of the themes[8].

The research protocol followed the principles of Resolution 466/12 of the National Health Council and was approved by the ethics committee. All participants signed the Informed Consent Form.

RESULTS

The participants' age range ranged from 22 years to 46 years, their time since graduating from two to 22 years, and working in PHC from 10 months to 22 years. Five of the six study participants work in the *ESF* and one works in the Family Health Support Centers (*Núcleos de Apoio à Saúde da Família – NASF*) of the Health Regional administratively responsible for the *UBS*. The Community Health Agent (*Agente Comunitário em Saúde – ACS*) was the professional with the longest experience in the *eSF*'s assigned territory. Figure 3 presents the generating themes listed by the group.

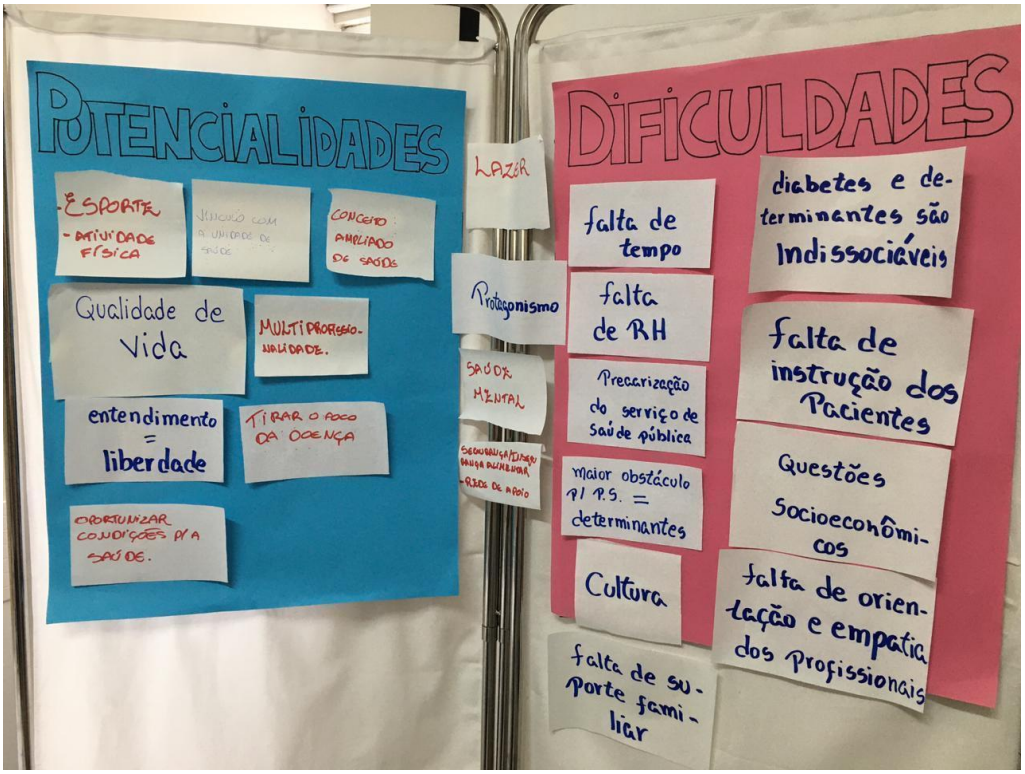

Figure 3: Potentialities and Difficulties Posters. Florianópolis, SC, Brazil, 2021.

The following are presented as health promotion potentials: sport/physical activity, quality of life, freedom, providing conditions for health, link with the health unit, expanded concept of health, multi-professionality, taking the focus away from the disease, leisure, protagonism, mental health, food safety/insecurity/support network.

Difficulties in health promotion include: Diabetes and determinants are inseparable, lack of patient education, socioeconomic issues, lack of empathy from professionals, lack of time, lack of human resources, precariousness of

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the health service, unfavorable social determinants, culture, lack of family support, leisure, proactivity, mental health and food safety/insecurity/support network.

From this, three themes emerged: Concept from the perspective of health professionals, Nutrition and Family context.

Concept from the perspective of health professionals

Participants reflected on SDH and HP and expressed the relationship with quality and lifestyle changes.

> *Health Promotion is a change in lifestyle and social determinants are linked to the patient's coexistence. It's the patient's entire personal, social and psychological side of how they will directly deal with their illness. Where are they located, which family are they located in, do they know how to read, do they know how to write, what is their literacy? It's everything that comes with it. Social determinants and diabetics have to go together and are inseparable. (L.M.)*

> *Health promotion means providing opportunities, enabling people to reflect on their health [...] (F.M.)*

For most participants, HP is synonymous with quality of life, related to socioeconomic conditions and lifestyle. The imbalance causes the disease and HP must be outside the focus of the disease.

> *Health promotion is basically taking the focus off disease and placing the focus on health, considering the expanded concept of health and non-health, a fragmented concept, in addition to the clinical condition. (T. M.)*

The SDH concept reflects the importance of participation and social control, citing the Municipal Health Council (*Conselho Municipal de Saúde - CMS*) as an example of a primary space for the development of HP actions.

> *Speaking of determinants, social control is important. We see communities that have more active, more organized social control, they achieve more; if you have a council in the neighborhood it makes a difference in the neighborhood in terms of health conditions. We see that communities that have a much more active health council achieve more things, put pressure on them and management becomes more active. This includes housing/accommodations, socioeconomic aspects, religion, leisure and mental health [...] (T.M.)*

Nutrition

The topic of food is a resistance factor when it comes to changing eating habits. One of the professionals who receives the most referrals from people with diabetes to address glycemic control and the adoption of healthy eating habits is the Nutritionist. Nutritionists work at the *NASF* with the aim of assisting the *eSF*, aiming at intersectoral health actions, promoting health education and carrying out and/or accompanying team professionals in activities aimed at healthy eating.

> *Food security is a concept which goes hand in hand with the human right to adequate food, it is not just having something to eat, but having enough quality food to eat at every meal, so that one does not replace the other [...] so I don't have to sell my house to eat. This is a very broad concept that encompasses all of this. (N.T.)*

Health professionals in diabetes care in primary care need to know the assigned territory, family habits and eating routine. One of the main problems faced by nutritionists for people with diabetes is nutritional deficiency.

> *I had a patient from here and she had no possibility of expanding her food access repertoire [...] sometimes she only had access to bread. Sometimes it was just beans and sometimes it was just rice. Her diabetes issue was related to lack of access. (T.E.)*

> *I saw a patient now who couldn't read or write, she couldn't write down the HGT. I explained that she had to eat banana and oatmeal. When she came back I asked if she had made it and she said she had made it, but that she had fried it in oil. Understanding is very difficult. (L.M.)*

Family context

Feelings related to affection, respect and humanization are fundamental in the health-disease process, respecting individuality, beliefs and values for the quality of family life, as follows.

> *The patient cannot be isolated from the family, if the family changes their diet it is easier for the patient than if they just have to change their diet. It's like they are being punished. The understanding is one of punishment and not benefit, so when there is support from the family and everyone starts to make dietary changes, we can have much greater potential. (L.M.)*

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The main ally in diabetes care is the family. Therefore, it is important to identify each individual's family strengths.

> *The context in which they are inserted, the culture, whether the patient studied or did not study is very important. In making food changes, there is no need to restrict it in an absurd way, they can participate in moments with their family, they cannot deprive themselves so much of life itself. Understanding food will impact understanding of their illness. (L.M.)*

The experience in education groups was also expressed by one of the participants:

> *Back in Rio, we used the group as a great consultation, a strategy, we examined our feet, the back of our eyes, looked at the exams, we used the group as a tool to empty the offices because we couldn't handle it. [...] (L.M.)*

At the end of the Culture Circle, the participants were satisfied and reported that team meetings are rare in the *UBS*. They consider that events of this nature are important to encourage dialogue, highlighting the lack of management support as a stressful factor.

> *What I see is that we don't have management support. Today the patient has rights, they have a service card. It's very easy for the patient to come on the day they want to come. Expanded access [...] they want it a way and goes to the office and we have to do it. We have no support. (F.M.)*

DISCUSSION

The study findings pointed to the themes presented in which participants were able to express their perceptions regarding health promotion in the care of people with DM. Therefore, it is understood that PHC is the space for health professionals to approach HP with people with diabetes, working individually and/or in groups, addressing risk factors, developing clinical care protocols, teaching self-care and educational practices[9]. Thus, HP is essential to manage the disease and prevent future sequelae, with motivating actions and interests of the population in self-care, aiming for improved quality life with the reduction of complications from the disease[10].

Good socioeconomic status and physical activity during childhood guide the development of good eating habits and a healthy lifestyle, significantly contributing to the individual being healthy. Poor or inadequate living conditions can lead people to develop chronic non-communicable diseases such as diabetes[11,12]. In a broader sense, the concept of health perceived by professionals includes thinking about HP as a new model of actions oriented beyond the biological focus of the disease. Health is much more than the absence of disease, it involves social determinants and their impact on a person's life. When addressing HP for people with diabetes, the professional needs to apply individually planned actions, with subtle, culturally adapted and contextually based messages[12].

Self-care practices are influenced by cultural and social factors, decision-making, behavior control, knowledge and skills' acquisition. In the study by Corrêa and Castelo-Branco (2019)[13], the reason for non-adherence to a healthy diet by people with diabetes is related to cultural habits and childhood eating memories, which may include the consumption of a mixture of water with fish and cassava flour.

A person with diabetes who is in financial need experiences negative emotions when told by a healthcare professional that they should adopt good eating habits. Emotions affect mood, giving rise to feelings such as indignation and guilt, among others. Physical health, psychological state, personal beliefs, social relationships, cultural and environmental factors interfere in the balance of the disease, quality of life and mental health[14].

There is an interaction between diabetes and mental disorders. A person with diabetes is twice as likely as a person without the disease to develop depression, whether due to diagnosis, chronic treatment, dietary restrictions or the risk of developing complications[15].

The multidisciplinary team needs to involve the family in disease self-management when approaching the family of a person with diabetes. An intervention plan focused on adherence to the disease treatment plan (diet, physical exercise and medication) must take into account individual characteristics (age, sex, among others) and the strengths of family members (health behaviors, cultural habits, among others). It is important to maintain the integration of behavioral health into routine care for the disease[16].

Therefore, thinking about the HP of people with diabetes and integrating the family in this process is fundamental. This occurs through participatory strategies promoting dialogue, reflection and awareness in the search for a better quality of life for all. Adaptations are important in the family environment, especially with

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changes in eating habits and lifestyle, which is an adjustment for those living with the disease. Affective, emotional and mental support, plus physical support from the family are essential[17].

In an investigation of the relationship between parents and children (aged between five and nine years) and high glucose levels, it was found that adherence to treatment is greater in families in which children are able to express their feelings regarding the disease. Therefore, families who listen and support people with diabetes have greater adherence to treatment[18].

Structuring groups to address disease care leads to empowerment to transform lifestyle, with approaches that respect the culture of those involved. Such groups can be beneficial, as long as they address education early and allow expressing feelings for social support. The family also needs to be included in groups to understand the importance of self-management of diabetes, helping to reduce complications from poor control of the disease[18].

Initiatives which improve relationships between health service users and primary healthcare professionals are important for exchanging experiences and cooperation. Therefore, it is necessary to know the resources available in the community and mobilize individuals to use them[19].

Digital technology resources (smartphones, iPhone, among others) and social networks (Whatsapp®, Facebook®, Instagram®, etc.) used for personal connectivity are a good alternative for registering, maintaining contact and attracting people with diabetes to participate in online groups. They can also be used to monitor eating behavior, provide praise, rewards and social support among members, helping to change individual behavior and form good self-care habits[20]. Health promotion in primary healthcare requires interdisciplinarity and intersectorality coordinated between health professionals and municipal managers.

Study limitations

As limitations of the study, we can note the difficulty of mediating Culture Circles, making it necessary to use different methodological strategies to instigate debates and group participation. The need for continuing education was noted and further studies on HP and SDH are recommended to improve the personal skills strategy. Despite being strongly developed by PHC professionals, there is still little understanding, as it is work aimed at changing lifestyle.

It is considered that the COVID-19 pandemic also influenced holding only one Culture Circle. However, the availability of *UBS* and health professionals to participate in the study can be highlighted as positive factors.

FINAL CONSIDERATIONS

This study enabled identifying how health professionals perceive health promotion in the care of people with diabetes in the context of primary healthcare. Freire's research method contributed to the participants' dialogue, highlighting the perceptions of social determinants and HP of people with diabetes in their speeches.

The professionals perceived HP to be linked to quality of life, they understood that diabetes is a multifactorial disease, and that the group's vision is related to disease management and lifestyle. They identified that SDH are related to social control, and an organized community seeks to guarantee access to their rights and accessibility for the vulnerable population.

HP actions need to be incorporated by health professionals beyond biological determinants, allowing the focus of culpability for people with diabetes to not be solely on the subject. HP strategies in their entirety need to involve the family in the treatment and also use online social networks as a support network.

Identifying the relationship between SDH and HP in providing care for people with diabetes is the path which could enable constructing an individual care protocol in PHC. Health promotion and the interdisciplinary and intersectoral team are essential for the care of people with diabetes.

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Authors' contributions:

Conceptualization, P.S.B. and I.T.S.B.H.; methodology, P.S.B.; software, not applied; validation, I.T.S.B.H. and M.K.D.; formal analysis, P.S.B.; investigation, P.S.B.; resources, P.S.B.; data curation, P.S.B., I.T.S.B.H. and M.K.D.; manuscript writing, P.S.B., I.T.S.B.H., M.K.D. and S.D.C.; manuscript review and editing, P.S.B., I.T.S.B.H., M.K.D. and S.D.C.; visualization, I.T.S.B.H. and M.K.D.; supervision, I.T.S.B.H. and M.K.D.; project administration, P.S.B. and I.T.S.B.H.; financial aquisition, not applied. All authors have read and agreed to the published version of the manuscript.