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ACTIONS OF FHS TEAMS FOR THE QUALITY OF LIFE OF PEOPLE WITH DIABETES[1]

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ABSTRACT

The objective of this study was to identify the actions developed by Family Health Strategies to improve the quality of life of people with diabetes. This is a qualitative study, performed in 14 teams from the Family Health Strategies of a municipality in the countryside of the state of Rio Grande do Sul, Brazil. Interviews were conducted with 14 professionals and 14 people with diabetes treated in the services. The results showed that the teams of the Family Health Strategies promote various interactive actions to improve the quality of life of people with diabetes. The actions reported by participants based on groups for nutritional support, hike, nutritional consultation, nursing consultation, medical consultation, distribution of medicines, household visits, good service, group of diabetic and hypertensive individuals and health education group. Education in diabetes is also promoted in spaces outside services (women's group and schools). The description of actions identified in this study may subsidize health professionals to implement in their professional routine and, thus, contribute to improvements in the health of the population in the context of promoting the quality of life of people with diabetes.

Keywords: Diabetes *mellitus*. Primary health care. Health promotion. Quality of life.

INTRODUCTION

Diabetes *Mellitus* (DM) is a disease that presents high prevalence and relates to high rates of morbidity and mortality[1], representing an important public health problem[2]. This disease affects approximately 246 million people around the world, and is becoming the epidemic of the century[3].

Evidence from a population-based survey conducted in 2008 found that the prevalence of DM in Brazil is 7.5%[2]. In the present study, the prevalence of individuals with DM indexed in the Basic Care Information System, reported in the years 2011 through 2013, is 3.0%[4].

The estimates show that, after living for 15 years with the DM, 2% of the affected individuals present blindness, 10%, severe visual problems, 30% through 45%, some degree of retinopathy, 10% through 20%, some degree of nephropathy, 20% through 35%, some degree of neuropathy, and 10% through 25% cardiovascular diseases[5]. Such effects may lead to a depreciation of the quality of life (QOL), because it can be reflected in its different aspects, such as weakness of physical status, loss of functional capacity, pain in the limbs, lack of vitality, difficulties in social relationships, emotional instability, among others[6].

QOL is people's perception of their position in life in their culture context and system of values in which they live and in relation to their expectations, standards and concerns. It is a broad concept, since it incorporates, in a complex way, physical health, psychological state, level of independence, social relations, personal beliefs and the relationship with significant aspects of the environment[7].

In this perspective, the QOL theoretical model of satisfaction stands out, which is related to satisfaction with the various areas of life, defined as important by the individual[8]. In this way, a person can be satisfied with his/her QOL having different levels of acquisitions, depending on his/her expectations.

Estimates show that some diabetic people are unaware of their condition. For these reasons, teams of the Family Health Strategy (FHS) shall be alert, not only for symptoms of diabetes, but also for its risk

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factors (unhealthy habits, sedentary lifestyle and obesity)[3]. Attention directed to people with DM, especially in relation to actions developed to promote their QOL, needs to be discussed by the FHS, since it is the main strategy of organization and expansion of Primary Health Care (PHC).

FHS teams should stimulate preventive actions relating to each of the major risk factors associated to behaviors and life styles, constructed based on evidence of their effectiveness, for individual or small-group application[9]. Screening people with high risk of developing diabetes and encouraging them to engage in preventive care, as well as screening those with diabetes and unaware of it, allows offering early treatment and preventing possible complications[3]. These actions may particularly contribute to improvements in the QOL of these people.

Therefore, the following guiding question emerged: what are the actions developed by Family Health Strategies to improve the quality of life of people with diabetes? And, as objective: to identify the actions developed by Family Health Strategies to improve the quality of life of people with diabetes.

METHODOLOGY

This is qualitative research carried out with 14 diabetic people, indexed in the Basic Care Information System (SIAB - *Sistema de Informação da Atenção Básica*) or e-SUS, attended to by FHS teams of a municipality in the state of Rio Grande do Sul. Fourteen health professionals who work with this population also participated in the survey. The study included a professional and a diabetic person from each FHS team.

The municipality has 71,445 inhabitants, and 99.9% of the population is urban (IBGE, 2010). The primary care of the municipality has 14 FHS teams that use the SIAB/e- SUS. In the study period, the city had 70% coverage by the FHS.

For people with DM, the following inclusion criteria were established: individuals with DM indexed in the SIAB/e-SUS in the year 2014 aged more than 18 years old. There was exclusion of people who were not able to answer the question, due to some disease. In the end, 14 people with DM were interviewed, one from each team.

The inclusion criterion for participating professionals was: being a health care professional acting in the FHS for at least six months. Professionals who were on vacation or medical leave during the data collection period were excluded. Fourteen health professionals participated, one from each team, namely: two dieticians, two nurses, four Community Health Agents (CHA).

The participants were randomly chosen, both professionals as people with diabetes. The services provided the lists with the names of people with diabetes. Data collection occurred in the period from April to October 2015 through interviews with the following guiding question: *What strategies your team is developing to promote the quality of life of people with DM?* This question guided the interviews for professionals and people with diabetes.

The interviews with the professionals were performed in the service itself and the interviews with people with DM were held at their home, previously scheduled. These interviews were recorded, with the participants' consent, and had an average duration of 60 minutes.After that, they were fully transcribed, and submitted to a thematic analysis of the Operational Proposal of Minayo, which is supported by the current philosophy of dialectical materialism, which constitutes the basis of the socio-cultural aspects. The analysis occurred by the discovery of the meaning cores, which establish a communication on the frequency or the presence of a particular meaning for the analyzed object[10]. This analysis allowed demonstrating that the actions developed in the FHS promote education in DM, which can improve the QOL of individuals with DM.

The Research Ethics Committee of the University Center UNIVATES assessed and approved the research project, under number: 997.286, and CAAE: 42472215.7.0000.5310. Data collection occurred after signing the Informed Consent Form (ICF). To maintain the confidentiality of the participants' speeches and identity, the professionals were identified as "PS" and people with DM as "PD" followed by a number indicating the order of the interviews.The participants were informed about the risks and benefits of participation in the survey.

RESULTS AND DISCUSSION

The results showed several interactive activities developed in the FHS teams that promote education in DM, which can improve the QOL in this population. The actions reported were: nutritional support group, hike group, nutritional consultation, household visits, groups of hypertensive and diabetic individuals or health education groups.

Education in DM is also promoted in spaces outside the FHS (women's group and schools). Women's groups happen in community public environments and at women's homes. Such actions will be presented and discussed below.

Nutritional support group

The nutritional support group is conducted in the health units of cities covered by the FHS. This program focuses on promoting benefits inherent to a healthy diet, such as guidance and assistance to weight loss, in a healthy and conscious manner, fostering, continuously, positive results.

People with diabetes are invited to participate in the group, since implementation of the diet control contributes to their treatment. In this way, both professionals as people with diabetes believe that the offer of this nutritional support group in the health units can improve the QOL of people with the disease. This group is called *friends of balance*.

> We have this group, friends of balance, in which diabetic people participate. The dietician always talks about food, gives advices, brings recipes before starting and ending the group. (PS1).

> There is the group friends of balance, I like this group, because I was checking my weight every week and I was taking care of myself, I was doing everything they told me to (PD4).

The professionals also reported that, in some FHSs, the nutritional support group did not have a good adhesion of participation by the community, which prevented the effectiveness and continuity of the project in these regions.

The offer of groups of nutritional support in the FHSs is one of the interactive strategies assessed. In the context of food excellence of the population, it is necessary to identify and understand the differences that make up the community at the level of attention of health teams, and, on nutritional issues, observing the whole individual ensures that his/her beliefs are tied to professional requirements toward the improvement of his/her QOL[11].

The nutritional support group, whenever possible, associates the educational guidance in hikes. The hike group, therefore, emerged as a strategy offered by the FHSs, which also aims to improve the QOL of individuals with DM.

Hike group

The hike group was also mentioned as a strategy offered by the FHS, which can improve the QOL of people with diabetes. In most cases, this activity is allied to the nutritional support group.

> In my unit, we have a hike group coordinated by the dietician [...] (PS2).

> We have a very strong hike group, and sometimes we intervene in this hike group, because it does not have the health education group. (PS7).

In the units in which the effectiveness of nutritional support group was not successful, the hike group was still active, which enabled professionals, in the course of these meetings, to perform some guidelines of care they judged necessary. At some units, the hike group is coordinated by the dietician, while, in others, by the CHA, with the participation of several professionals from the team.

The hike group also emerged, in the perception of people with DM, as an action developed by the FHSs that contributes to improve their QOL.

> I always go for the hikes offered by the health center, they are very cheerful (PD10).

> On Mondays, Wednesdays and Fridays, we have hikes, including groups of hypertensive people and others, everybody has groups, but each group has its things (PD14).

People reported they like the animation of professionals who coordinate the hikes, demonstrating appreciation for the stretching promoted at the end of the activities.

Currently, with the incorporation of the concepts of amplified clinic in health programs, it is possible to notice the expansion of guidelines on the need to perform physical activities, concomitantly with adherence to good eating habits, as a prerequisite for a healthy life.

The exercises have a dual purpose, presenting energy expenditure and psychic comfort as benefits, and, when performed in groups, the experience becomes even more enjoyable[12]. At the time of collection, there was no qualified professional - the physical educator - to coordinate the practice of physical activity, thus, who guided the hikes were dieticians and CHAs.

Nutritional consultation

Besides the care offered in nutritional support groups, the FHSs also offer nutritional consultation. This consultation represented another educational

action promoted by the FHSs, improving the QOL of individuals with DM.

The dietician seeks to prescribe a diet based on the socio-economic reality of each one and, if necessary, he/she goes to the person's residence to know better and prescribe a food menu compatible with the patient's uniqueness. This action is envisioned by both professionals as the people attended to in the FHSs.

> We have consultations with the dietician who helps us, because she explains everything we can and cannot eat (PD8).

> The nutritional service is performed according to each one's reality, whenever possible, she goes to the person's house, so she is able to see their reality and, sometimes, there are two people with the same problem (PS4).

During the nutritional follow-up, promoting health education is necessary, with an emphasis on food habits that, when modified, have the potential to prevent or delay the complications of DM type 2[3].

The professionals recognized and appreciated the work done by the dietician. However, according to reports, unfortunately, at some health units, the dietician is no longer part of the team, because of the current economic situation, since it requires economy and decreased costs by the municipality, according to the following speech:

> We used to have a dietician once a week, now, we don't have anymore. It's a shame, because today, in the morning, three out of the four who went to see the dietician were diabetic (PS9).

Nursing consultation

Professionals and people with DM mentioned that the nursing consultation also represents an action developed by the FHSs that can improve the QOL of individuals with DM.

> What I do are nursing consultations. That's when we provide guidelines on self-care (PS4).

> We have nursing consultations, which help clarify the necessary changes in our life style and habits, and regarding the care to control the disease [...] (PS11).

> There are nurses that attend to me whenever I need. They schedule a consultation and explain everything. I like all the professionals very much (PD10).

> The nurse talks to me and guides me. She attends to me with no rush, I like the consultation with the nurse very much (PD8).

In the monitoring of people with DM, the actions of the multiprofessional are often resolute. Among these professionals, the nurse stands out for being responsible for implementing the nursing consultation, which is an assistance strategy that offers quality to the service offered.The nursing consultation follows a proposal based on practical and scientific models of observation and assessment of the individual's health status, which allows developing an individual care plan, thus ensuring QOL for people with DM[13].

In the nursing consultations, the educational process needs to contemplate the orientation of measures that improve the QOL: stimulus to regular physical activity, healthy eating habits, reduced consumption of alcoholic beverages and smoking cessation.For the follow-up of the person with the diagnosis of DM, the nursing consultation can be carried out by applying the Nursing Care Systematization (NCS), whose nurse's responsibility is to perform screening consultations on the target population defined by the health service[3].

Medical consultation

The medical consultation also emerged as a strategy developed in the FHS that can improve the QOL of people with DM, according to the reports below:

> The doctor is very good! These days, I went to undergo all the examinations, then he told me I had to take care of myself (PD1).

> This doctor is so simple, I like him, he listens to me, talks to me, provides me guidelines and asks for all exams (PD14).

People with DM reported being satisfied with the service of the medical professional, since they listen to people during consultations, dialog, request referral to necessary tests, renew prescriptions and carry out guidelines on the importance of self-care and possible complications due to the lack of disease control.

The professionals mentioned that a teamwork is being developed, so that a professional sends the person to another according to the individual's needs, as exemplified by the report:

> The doctors diagnose diabetes and already send to the nurse to make the follow-up and for the nutritional consultation (PS8).

The physician, in turn, carries out the initial assessment consultation of people diagnosed with DM. In this evaluation, the professional should indicate the

risk factors, assess health conditions, check the cardiovascular risk of the person and guide on the prevention and management of chronic complications. The medical consultation needs to involve four basic and essential areas: person's history, physical examination, laboratory assessment and stratification of cardiovascular risk[3].

Doctors and nurses from the PHC teams are professionals who carry out most of the monitoring of people with DM in individual consultation. Thus, these professionals need to be trained to identify the risk factors associated with food and need to know how to guide on healthy eating to control blood glucose and prevent complications[3].

Distribution of medicines

In the conception of people with DM, the supply of medicines necessary for controlling DM represented one of the strategies offered by the FHSs that can improve their QOL.

> Everything I needed, they always helped me. They serve me well, give me the medicines (PD06).

> They give us the medicines we need; they are always where when we need them (PD12).

> Thy give us the medicines, I'm very grateful for all of this [...] (PD13).

People said that they are satisfied with the distribution of medicines and showedgratitude to health services by receiving the medicine. The drugs are part of the treatment, and its use is necessary in most cases. However, professionals need to know their adverse effects and their possible drug interactions[3,14].

Due to the high prevalence of DM and SAH (Systemic Arterial Hypertension), people commonly use anti-hypertensive and hypoglycemic drugs at the same time, increasing the incidence of drug interactions. The interactions can occur due to the change in absorption, distribution, biotransformation and excretion of a drug to another, or from a combination of their actions or implications, resulting in adverse reactions. The drugs most likely to cause drug interactions are: Metformin, Enalapril, Atenolol, ASA, Amlodipine and Glibenclamide[14].

Household visit

Household visit (HV) also represented a strategy developed in the FHSs that seeks to improve the QOL of people with DM, besides providing interaction between community and service. Several professionals from the multidisciplinary teams (nurses, doctors, CHA, dieticians) conduct the visits, according to the needs of the population.This action was also reported by people with DM, who expressed that they like and that they are satisfied with the HVs received by health professionals in their residences.

> We have visits of agents that talk about, advising them to seek the unit to perform the HGT or even the blood exam (PS5).

> Many times, nurses and doctors also perform the visits(PS7).

> They come visit me a lot, look at me, and do everything I need, the health agent visits me, so does the doctor (PD9).

Furthermore, the HV approach is more curative than preventive, because there are priorities for visiting the most serious cases of people with DM, those who do not adhere to treatment or the cases that already have complications from the disease.

> When we have an available car, we also perform household visits, but not for every diabetic person, it is for the most serious cases, it is not as preventive as it should be, it is curative, we perform few visits (PS14).

The professionals realize that the HV approach is more curative than preventive, because the priority is to visit the most serious cases of people with DM, those who do not adhere to treatment or those who already have complications from the disease. One of the reasons mentioned is the restricted availability of transport, which hinders the HV of professionals to people living far from the health unit.

The home visit becomes an important intervention tool, if used correctly by health teams, because it allows the professionals a broad overview and direct the needs of the community[15]. These visits make actions for health promotion and disease prevention valid, as in the case of DM, because the multidisciplinary teams provide support to health surveillance activities[16].

Nevertheless, the practice of HV was recently incorporated to PHC support models, finding resistance mainly of professionals that base on the assumptions of mechanistic health, prevailing at the end of the last century. These models affect the implementation of expanded practices of situational approaches along with individuals, focusing on curative approach of existing pathologies, without the concern to prevent them[17].

Groups of hypertensive and diabetic people or health education groups

The results also showed that the group of diabetic and hypertensive people also represents an action that can improve the QOL of individuals with DM. The professionals that integrate the group seek to plan them so that people feel free to participate in the discussions. A schedule is organized with the themes that will be addressed, including self-care. This action was also mentioned in the perception of people with DM.

> There meetings with diabetic and hypertensive people. There is a schedule according to the themes we find important. It is simple and people ask a lot, we discuss many themes, self-care, taking care of oneself (PS7).

> There are many meetings and they bring people to guide us on diabetes, it is a group of hypertensive and diabetic people (PD10).

> The group of hypertensive and diabetic people is great and happens once a month. I always enjoy it, because we always learn something (PD14).

People with diabetes reported enjoying participating in discussions and clarification promoted in groups. However, they regretted that, at some FHSs, this group is not occurring anymore, and understand that this should have happened by the lack of community participation.

The achievement of groups of education in diabetes are actions performed by health teams, with the purpose of encouraging debates regarding matters related to individuals. Moments of reflection stimulate health education, strengthening the bonds of trust with professionals and encouraging adherence to the performed guidelines[6,18].

Other educational strategy evidenced, which can improve the QOL of people with DM developed in the FHSs is the health education group. At some FHSs, this action emerged from groups of hypertensive and diabetic patients, even replacing them in some cases. The health education groups discuss various topics related to health promotion, including DM. These groups are generally performed by means of wheels of conversations and themes are defined based on the participants' questions.

> We have the health education group. So, we discuss diabetes in these groups, we also discuss what can be done to prevent the disease (PS4).

> We have the monthly health education group which deals with diabetes. We have around 60, 70 people participating in it (PS13).

> We have a support group, which talk about all kinds of diseases. Then, nurses and health agents come and also explain and talk about diabetes (PD1).

These health promotion groups, with the purpose of promoting education to the population, are validated by the actions of multidisciplinary teams due to the scope of their activities[19]. In times of health education, the practice of health promotion opens room for other interventions, being largely directed to the prevention of diseases and the rehabilitation of their complications[19].

Women's group and schools

In addition to the activities developed in the FHSs, health professionals go beyond the borders of the units of FHS, with a view to health promotion, contemplating, among the topics discussed, education in DM. The professionals seek inclusion and promote educational and interactive activities in women's groups (home context) and at schools.

> We have the women's group, which provides guidelines on their doubts regarding health and diabetes (PS1).

> At the unit, we don't have any group, the neighbors and friends meet to eat, make handicraft and talk. Then the professionals give the guidelines in this group(PS12).

> We go to the school to talk about several health education themes, we also talk about diabetes (PS12).

Diabetes is a metabolic syndrome that can affect any individual, regardless of age or population group, requiring a special attention in health education activities[3]. Good health practices are incorporated into the community by means of creative interventions consistent with their specificities, without neglecting the basic needs of certain population[13]. Educational actions contribute to care and decision making that favor the QOL of individuals with DM[20].

FINAL CONSIDERATIONS

By knowing the actions developed by the FHS that may improve the QOL of people with DM, several interactive activities promote education in DM, such as: nutritional support group, hike group, nutritional consultation, nursing consultation, medical consultation, distribution of medicines, household visits, groups of hypertensive and diabetic individuals or health education groups.Education in DM is also promoted outside the FHS (women's group and schools).

When considering that DM is a chronic disease, FHSs shall establish, among their objectives, the promotion of actions that aim to improve the satisfaction of people affected by the disease, contemplating the success of the treatment coupled with their general well-being.Multidisciplinary teams must be engaged in the activities offered by the FHSs, which must be educational, dynamic, interactive and attractive, focusing on the active participation of individuals with DM. The findings of this study can subsidize professionals from other FHSs to apply in their professional routine and, thus, may contribute to improvements in the health of the population in the context of promotion of the QOL of individuals with DM.

AÇÕES DAS EQUIPES DA ESF PARA A QUALIDADE DE VIDA DAS PESSOAS COM DIABETES

RESUMO

O presente estudo teve como objetivo identificar as ações desenvolvidas pelas Estratégias Saúde da Família para melhorar a qualidade de vida das pessoas com diabetes. Trata-se de um estudo com abordagem qualitativa, realizado nas 14 equipes da Estratégia Saúde da Família de um município do interior do estado do Rio Grande do Sul, Brasil. Foram realizadas entrevistas com 14 profissionais e 14 pessoas com diabetes atendidas nos serviços. Os resultados evidenciaram que as equipes da Estratégia Saúde da Família promovem diversas ações interativas para melhorar a qualidade de vida das pessoas com diabetes. As ações relatadas pelos participantes pautaram-se no grupo de apoio nutricional, grupo de caminhadas, consulta nutricional, consulta de enfermagem, consulta médica, distribuição de medicamentos, visita domiciliar, bom atendimento, grupo de diabéticos e hipertensos e grupo de educação em saúde. A educação em diabetes também é promovida em espaços externos dos serviços (grupo de mulheres e escolas).A descrição das ações constatadas neste estudo poderá servir de subsídios para os profissionais de saúde aplicarem no seu fazer profissional e, deste modo, contribuir em melhorias na atenção à saúde da população na perspectiva da promoção da qualidade de vida das pessoas com diabetes.

Palavras-chave: Diabetes *mellitus*. Atenção primária à saúde. Promoção da saúde. Qualidade de vida.

ACCIONES DE LOS EQUIPOS DE LA ESTRATEGIA SALUD DE LA FAMILIA PARA LA CALIDAD DE VIDA DE LAS PERSONAS CON DIABETES

RESUMEN

El presente estudio tuvo como objetivo identificar las acciones desarrolladas por las Estrategias Salud de la Familia para mejorar la calidad de vida de las personas con diabetes. Se trata de un estudio con abordaje cualitativo, realizado en los 14 equipos de la Estrategia Salud de la Familia (ESF) de un municipio del interior del estado de Rio Grande do Sul, Brasil. Fueron realizadas entrevistas con 14 profesionales y 14 personas con diabetes atendidas en los servicios. Los resultados evidenciaron que los equipos de la ESF promueven diversas acciones interactivas para mejorar la calidad de vida de las personas con diabetes. Las acciones relatadas por los participantes se basaron en el grupo de apoyo nutricional, grupo de caminatas, consulta nutricional, consulta de enfermería, consulta médica, distribución de medicamentos, visita domiciliaria, buena atención, grupo de diabéticos e hipertensos y grupo de educación en salud. La educación en diabetes también es promovida en espacios externos de los servicios (grupo de mujeres y escuelas). La descripción de las acciones constatadas en este estudio podrá servir de ayuda para que los profesionales de salud puedan aplicar en su hacer profesional y, de esta manera, contribuir en mejorías para la atención a la salud de la población en la perspectiva de la promoción de la calidad de vida de las personas con diabetes.

Palabras clave: Diabetes *mellitus*. Atención primaria a la salud. Promoción de la salud. Calidad de vida.

REFERENCES

1. Alves AC, Bourbon MRQ. Diabetes na população portuguesa: uma análise do estudo eCOR. Obser. Bol. Epid. [online].2016[citado 2017 jan 26];5(1):3-5. Disponível em: http://repositorio.insa.pt/bitstream/10400.18/3693/1/Boletim_Epidemiologico_Observacoes_N15_2016_artigo1.pdf.

2. Flor LS, Campos MR. The prevalence of diabetes *mellitus* and its associated factors in the Brazilian adult population: evidence from a population-based survey. Rev. Bras. Epidemiol. [online]. 2017[citado 2018 Aug 04]; 20(1):16-29. doi: http://dx.doi.org/10.1590/1980-5497201700010002.

3. Brasil. Ministério da Saúde. Estratégias para o cuidado da pessoa com doença crônica: Diabetes *Mellitus* / Ministério da Saúde, Secretaria de Atenção à Saúde, Departamento de Atenção Básica. Brasília (DF). [Internet]. 2013 [citado 2017 dez 08]. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/estrategias_cuidado_pessoa_diabetes_*mellitus*_cab36.pdf.

4. Moreschi C, Rempel C, Carreno I, Silva DS, Pombo CNF, Cano MRL. Prevalência e perfil das pessoas com diabetes cadastradas no sistema de informação da atenção básica (SIAB). Rev. Bras. Promoç. Saúde. [online]. 2015[citado 2018 Aug 04];28(2): 184-190. doi: http://dx.doi.org/10.5020/18061230.2015.p184.

5. Alves VSA. Um modelo de educação em saúde para o Programa Saúde da Família: pela integralidade da atenção e reorientação do modelo assistencial. Interface – Comunic. Saúde. Educ. [online]. 2005[citado 2017 nov 18];9(16):39-52. doi: http://dx.doi.org/10.1590/S1414-32832005000100004.

6.Lima LR, Funghetto SS, Volpe CRG, Santos WS, Funez MI, Stival MM. Qualidade de vida e o tempo do diagnóstico do diabetes *mellitus* em

idosos. Rev. Bras. Geriatr. Gerontol. [online]. 2018 [citado 2018 Aug 04]; 21(2): 180-190. Disponível em: http://www.scielo.br/pdf/rbgg/v21n2/pt_1809-9823-rbgg-21-02-00176.pdf.

7.Whoqol Group. The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. Soc. Sci. Med. 1995; 10(1):1403-1409.

8. FleckMPA. A avaliação de qualidade de vida: Guia para profissionais da saúde. Porto Alegre: Artmed, 2008.

9. Mendes EV. O cuidado das condições crônicas na Atenção Primária à Saúde: o imperativo da consolidação da Estratégia Saúde da Família. Organização Pan-Americana da Saúde. Brasília (DF).[online]. 2012 [citado 2017 dez 06]. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/cuidado_condicoes_atencao_primaria_saude.pdf.

10. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 14.ed. São Paulo:Hucitec, 2014.

11. Moreira DA, Horta NC, Brito MJM, Montenegro LC. Estratégias de organização e fortalecimento do trabalho na equipe de saúde da família. Rev. de Enf.Centro-Oeste Min. [online]. 2016[citado 2017 jan 22];1(6):2106-2118. doi: http://dx.doi.org/10.19175/recom.v0i0.637.

12. Teixeira DS, Palmeira AL. Expectativas e crenças: influência na saúde tendo por base o exercício físico. Rev. Iber. Psic. Ej. Dep. [online]. 2016 [citado 2017 jan 20]; 11(1): 133-142. Disponível em: http://www.redalyc.org/pdf/3111/311143051015.pdf.

13. Silva FO, Suto CSS, Costa LEL. Perfil de pacientes cadastrados no hiperdia: conhecendo o estilo de vida. Rev. Saúde Col. UEFS. [online]. 2016[citado 2017 jan 28];5(1):33-39. doi: http://dx.doi.org/10.13102/rscdauefs.v5i1.1007.

14. Rempel C, Goettert MI, Strohschoen AAG, Iarreno I, Manfroi M, Moreschi C. Análise da medicação utilizada por diabéticos e hipertensos. Cad. Ped. [online]. 2015[citado 2017 jan 28];12(1):241-252. Disponível em: http://www.univates.br/revistas/index.php/cadped/article/viewFile/948/936.

15. Maia MA, Reis IA, Torres HC. Relationship between the users' contact time in educational programs on diabetes *mellitus* and self-care skills and knowledge. Rev. Esc. Enf. USP. [online]. 2016 [citado 2017 jan 18]; 50(1): 59-64. doi: http://dx.doi.org/10.1590/S0080-623420160000100008.

16. Ribeiro KAA, Cristiane M, Figueira S, Silva LMJ. Visita Domiciliária: percepções no espaço da prática. Rev. Bras. Ed. Saúde. [online]. 2016[citado 2017 jan 18];6(1):01-04. Disponível em: http://oaji.net/articles/2016/2628-1461621080.pdf.

17. Santana JCB, Fortes NM, Gonçalves CP, Moura IC, Porto PA. Visita Domiciliar dos Agentes Comunitários de Saúde no planejamento das ações das Estratégias da Saúde da Família: avanços e desafios. Enf. Rev. [online].2015[citado 2017 jan 18];18(2):18-28. Disponível em: http://periodicos.pucminas.br/index.php/enfermagemrevista/article/view/11691/10335.

18. Salci MA, Meirelles BHS, Silva DMGV. Primary care for diabetes *mellitus* patients from the perspective of the care model for chronic conditions. Rev. Lat. Am. Enf. [online]. 2017 [citado 2018 Aug 05]; 25: e2882. doi: http://dx.doi.org/10.1590/1518-8345.1474.2882.

19. Kleba ME, Colliselli L, Dutra AT, Müller ES. Trilha interpretativa como estratégia de educação em saúde: potencial para o trabalho multiprofissional e intersetorial. Interf. Com. Saúde. Ed. [online]. 2016[citado 2017 jan 26];20(56):217-26. doi: https://doi.org/10.1590/1807-57622015.0339.

20. Olivatto GM, Teixeira CRS, Pereira MCA, Becker TAC, Marques JVP, Hodniki PP. Telephone support program for monitoring diabetes *mellitus*: satisfaction and glycemic control. Cienc. Cuid. Saude. [online].2014. [citado 2018 Aug 04]; 15(1):148-154. doi: http://dx.doi.org/10.4025/cienccuidsaude.v15i1.26029.

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