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ORIGINAL ARTICLE

DEFICIENCIES IN THE APPLICABILITY OF POLICIES DIRECTED TO DIABETES MELLITUS AND HUMANIZATION IN PRIMARY CARE[1]

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ABSTRACT

Objective: To evaluate how the professionals of the family health teams conduct public policies aimed at assisting diabetes mellitus and humanization to people using insulin. **Method:** Qualitative evaluative research, based on the National Humanization Policy and the Primary Care Plan as a conceptual basis. Participants were 29 professionals working in the Family Health Strategy. For data collection, interviews and observation of activities from January to May 2014 were used and, the analytical steps of Grounded Theory were used in the data analysis. **Results:** Two categories emerged: “Deficiencies in health care for people who use insulin” presenting the limitations of care related especially to health education; and “The humanization of people who use insulin in daily practice” illustrative of the absences of health professionals related to the humanization of care in this context. **Final Considerations:** Care for people using insulin showed weaknesses, without an approach that would prevent the risks inherent in this therapy, in addition to difficulties in monitoring and guidance by professionals, with a view to the totality and comprehensiveness of health care for this population.

Keywords: Diabetes mellitus. Humanization of Assistance. Primary Health Care. Health Services Research.

INTRODUCTION

In the last 20 years, the number of people with diabetes mellitus (DM) has more than doubled, especially due to the emergence of type 2 DM in children, adolescents and young adults(1). Research on world statistical projections of DM estimates that in 2040, a total of 642 million people will have the disease(1,2).

About 14.3 million people have the disease in Brazil, and approximately 500 new cases are diagnosed daily(3). The country is the fourth-ranking of the world’s highest prevalence of DM(3-4). It is also estimated that almost half of people with DM are unaware of their diagnosis and, among those previously diagnosed, 22% do not go through any treatment(5).

The care that involves DM is considered complex; they demand efficient and feasible public policies and committed and trained health professionals to act in this context. It also involves the self-management of the affected person, who may be influenced by several intervening factors for its control and need a range of interventions to improve the results and avoid the complications of the disease(4-6).

Thus, since 2001 the Ministry of Health (MS) has been approving public policies to organize care for people with DM in Primary Health Care (PHC). The official documents that support the reorganization of assistance to DM aim to provide technical support to PHC professionals, especially those working in the Family Health Strategy (FHS). These professionals are considered the main actors to reorganize the care to DM and ensure that people with DM have free access to medicines, materials and supplies necessary for the treatment, control and monitoring of the disease(7).

Despite being targeted at a specific

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population, policies aimed at DM include an articulation with several other health care policies in the MS. In this study, we highlight the National Humanization Policy(8) (PNH), which encompasses all other public policies in the context of health.

The PNH is based on three fundamental principles: transversality; inseparability; and the confirmation of the importance and autonomy of the subjects and collectives. The transversality seeks to transform working relationships by expanding the contact and communication between people and groups. Inseparability must exist between care and management, in which workers and users seek to know the management of services and the health network works, and actively participate in the decision-making process in health organizations and collective health actions. In the confirmation of the importance and autonomy of the subjects and collectives, users are not only patients, workers not only follow orders and the changes happen with the recognition of each one’s role. This is because a humanized health service recognizes each person as a legitimate citizen of rights and values and encourages their performance in health results(8).

The following conditions are considered: the need for periodic evaluations in health services to add improvements in the quality of care; the high demand of people with DM treated at PHC; the specifics and needs regarding the use of insulin; and the need of implementing the PNH in this care level. Given the above, the following question arose: considering the National Humanization Policy, how do health professionals conduct it in the care of people with DM who use insulin in PHC? Thus, the study aimed to evaluate how the professionals of the family health teams (FHS) conduct public policies aimed at assisting diabetes mellitus and humanization to people using insulin in PHC.

METHOD

Qualitative research that had as conceptual bases the health policies of the Ministry of Health (MS) for the Care to people with diabetes mellitus in PHC(7) and the National Humanization Policy(8), and as a methodological reference, evaluative research.

The research location chosen was a medium-sized municipality in the State of Paraná. The study participants were FHS health professionals who assisted people with DM in their daily practice. The selection of participants took place based on data from the Primary Care Information System (SIAB), with a search for FHSs that had a greater number of people with DM assigned in the coverage area. The inclusion criterion included the teams with the medical professionals and nurses. By exclusion criterion, professionals on leave of any kind were excluded during the data collection period.

Data collection took place between January and May 2014, through single interviews with all participants and observation of the activities developed by professionals in the care of people with DM. An interview was conducted with each participant, with an average duration of 90 minutes. It was recorded in audio and took place at the location of the participants’ choice, which was the Basic Health Unit where they worked. The questions asked for health professionals included mainly: how people with DM were treated at that UBS; how was the care of people who started using insulin; how health education was provided to these people; and how follow-up of this population was carried out and programmed.

The observation technique of the activities performed by professionals in the care of people with DM subsidized and confirmed the data of the interviews provided support and originality to the qualitative evaluative research and helped the interpretation of the data resulting from the interviews. Eighteen trips were made to the field, for a total of 40 hours of activity. At the end of the observation, still at the UBS, the data were recorded in field diaries including: observation notes (ON): records of the information from the observations; technical notes (TN): a record of interpretations made by the researcher; and methodological notes (MN): a record of the strategies used during data collection (9).

After transcribing the interviews, the software ATLAS.ti 7.1.7 - license number 58118222 was used as an aid for analysis. Grounded Theory analytical steps (open coding and axial coding) were applied in the software(10). In the open coding stage, the interviews were coded and the codes were grouped and regrouped to assess how the members of the eSF acted in the care of people with DM who use insulin given the public policies that constituted the theoretical bases adopted in the study. In the axial coding stage, the codes were gathered based on the investigated axis and organized into the categories presented in the study.

The work was evaluated by the Ethics Committee in Research with Human Beings of the Federal University of Santa Catarina with opinion number 466.855 and authorization was obtained from the Health Department of the municipality where the research was carried out. Participants signed the Informed Consent Form in two copies. To protect their identifications, the statements were described using the occupation, followed by the letter P and a number corresponding to the order of their interview in the software used.

This is an extract from the database of the thesis entitled “Primary Health Care and the prevention of chronic complications to people with diabetes mellitus in the light of complexity”, presented in 2015 in the Graduate Program in Nursing at Universidade Federal de Santa Catarina (UFSC), which was supported by the National Council for Scientific and Technological Development (CNPq) through a doctoral scholarship.

RESULTS AND DISCUSSION

The research participants were 29 members of five FHS, being five nurses, five doctors, four nursing assistants and 15 community health workers (CHW). Only two doctors were male. Age ranged from 24 to 59 years; the oldest professional category was that of CHW and the youngest was that of doctors. As for the time of experience in the FHS, there was a range from four months to 14 years. Only two participants had been included in this care model for less than a year.

Concerning education, the category of nurses had specialization, except for one who had a master’s degree; among doctors, only one was still a graduate, the rest were specialists. All nursing assistants had high school and a Nursing Technician course, and one of them was graduated in Social Work. Among the CHW, only one had not completed high school, the others had completed that level of education.

There were several deficiencies in the care of people with DM who use insulin in the context evaluated, pointing to a distance between health professionals and the guidelines of specific policies for the care of DM, and in the humanization policy. The results are presented in two categories.

The first category “Deficiencies in health care for people who use insulin” presents the limitations of care related especially to health education, having as reference the public policies aimed at care for people with DM in PHC. The second category, “The humanization of people who use insulin in daily practice”, is illustrative of the absences of health professionals related to the humanization of care in this context.

Deficiencies in health care for people who use insulin

The care offered to people who use insulin in the assessed scenario showed their access to treatment and supply of the materials necessary for Capillary Glucose Self-Monitoring (DGSM) at home, despite delivery taking place without systematic monitoring, with a view to all people with DM.

To start using insulin, a registration was first performed at the Basic Health Unit (UBS), to receive the device for DGSM. That done, the person went to the health service that distributed insulin once a month to receive it and attended the HIPERDIA group, designed to care for people with DM and high blood pressure, which took place every two or three months, depending on the FHS agenda.

In all UBS, there was a list with the name of people who used insulin, which simplified their systematic monitoring, with direct supervision of the care involved in the correct use of this medication. The results of the study pointed out how daily practice by health professionals became operational was not sufficient for comprehensive care and caused deficiencies in monitoring this population.

> The patient picks up the device here. This way it would be easier to follow-up. You know who the patient you are giving the device to, you know

> who the patient is who uses insulin. It is like this, who uses insulin, I know who uses it, but I do not do the follow-up of this person who uses insulin. Because she comes in the group, takes the insulin and leaves. So, I don't know how she uses that insulin. I don't even know how much insulin she takes, if it is administered correctly, I don't know **(Nurse-P1).**

Even though the DGSM device was given to the users be at the reference UBS, the distribution of insulin was centralized in some reference UBS, a fact mentioned as deficient both for people to move around in search of medication, and for the professional to provide more participatory care.

> He doesn't get insulin here, because we don't give out insulin in the unit, he'll get at UBS X or UBS Y, and that's it, it's over. That's the service... only dispensing the medication (Nurse-P2).

Insulin plays an essential role in controlling blood glucose levels. Furthermore, for other types of DM, except for people with type 1 DM, this treatment is not the first choice. This fact must be monitored by health professionals for the success of the person with this therapy(3).

In none of the interviewed FHSs, there was care directed specifically to people with DM who use insulin. In some random moments, there was a professional who provided general guidance on the transport and storage of this medication. However, study participants did not report a more systematic moment of health education, with an exchange of information between professionals and users and investigations about the correct use of this medication. There was the recognition of the participants, although without actions aimed at stimulating behavioral change and the empowerment of the user to comply with the recommendations of the established policies.

> [...] this is something that we need to improve. Because there is no right direction, it is not clear who will have this function of guiding the patient. It is usually when he goes to get insulin from the pharmacy, but we do not know how this information is being passed on, and sometimes, even with guidance, patients use it wrong. It is something we need to see how to improve. Sometimes, they did not understand, but do not say it because they are ashamed [...] **(Physician-P31).**

As established by public policies for DM, the condition for receiving free treatment, including insulin, is that the person is enrolled in special education programs for this condition(7-9). Therefore, it is necessary health professionals must use these spaces to effectively work on the complexity of therapy, in the sense that the patient has a positive response to prevent complications caused by DM, since several studies mention prevention as the most effective practice to avoid complications(5,11).

The monitoring of health education programs by a multidisciplinary team is still recommended after the definition of drug treatment, to assess the evolution of the disease, adherence to the guidelines, the person's empowerment and their autonomy to self-manage the disease(7).

The public policies of the Ministry of Health aimed at people with DM provide their care together with people with arterial hypertension (AH). However, health professionals often ended up directing care more to people with AH than to those with DM, without differentiating those who used insulin in this group, and thus, exempting themselves from the responsibilities required by this chronic condition, such as the absence of a follow-up assessment of whether people use this medication correctly or not.

> [...] in the group, blood pressure, height, weight, waist circumference are checked and if the person uses insulin, we check blood glucose, which was an improvement. Because up to a year ago I said: 'guys, who is a diabetic in this group?" Then I remembered! Because not even blood glucose was checked. I asked who was diabetic and they raised their hands. I said to my team: "guys, within this group we are going to register who is diabetic, because we need to know". And they didn't know, they just called hypertensive patients. And we realized that diabetics were forgotten within the group. So, we started to check blood glucose levels, and not so long ago [...] **(Nurse-P1).**

> [...] The patient who uses insulin, he is just one more. Because, what happens: when the doctor prescribes insulin, he advises the person to go and come back here so we can give instructions, for him or for the person who will do it at home. So, here we give guidance and say, if you have any questions, you should come back, but you don't have that thing of being after the patient, only on the group day. Yes, but it is not enough just to give guidance, it is necessary to go there and see how he is doing at home, and we do not do that

> [...] **(Nursing Assistant-P8)**.

Study shows that insulin is among the five drugs that cause the most harm to patients. Thus, one of the biggest problems with insulin use is related to the difficulty of people using the medication correctly, especially the elderly(3). One of the most common errors is concerning the dose, which, in addition to exposing the patient to the risk of using excessive amounts or underdoses, compromises the achievement of desirable glycemic control(12-14).

In the literature, there is a consensus that with the inadequate treatment of DM and frequent fluctuations in blood glucose, the occurrence of chronic complications is just about inevitable. This fact can lead to serious consequences such as irreversible blindness, kidney disease, cardiovascular accidents, sexual impotence, possibilities of frequent infections and limb amputations, generating disabilities and a high degree of limitations in work and leisure activities, loss of quality of life, sudden death, among others(7,15).

In the first approach to initiate treatment with insulin, besides all technical care for transport, packaging, preparation, administration and correct disposal of waste and garbage, health professionals should also investigate visual acuity. In a study conducted with people who use insulin, a decrease in visual acuity was identified in a significant number of patients with DM and in caregivers who prepared insulin doses, causing an increased risk in the administration of this medication(12).

Deficient care for people with DM who used insulin causes a gap in that care. The study also showed the existence of several opportune moments for systematic monitoring, which could occur both individually and collectively, configuring the applicability of health education actions to people with DM who use insulin, as established by public policies aimed at this public.

The humanization of people who use insulin in daily practice

This category addresses the limitations in the daily practice of the applicability of the humanization policy in the care of people who use insulin, related to the absence of strategies in serving this population. Their service was centered on medical consultation, dispensing prescriptions, without planning to carry out home visits and the flexibility of the professionals to provide differentiated care, with delays in care within the UBS and lack of privacy in care, which interfered in the dialogue and physical examination.

Study participants revealed that they were unable to implement humanization policies in PHC and recognized that this lack caused vague and superficial care.

> [...]we need to stop seeing the patient only from the professional aspect, you know? Sometimes, we have to put ourselves in the patient's position. If you did, things would be better. For example, a patient who finds it more difficult to come here at the UBS and has altered glucose, the care could be otherwise, you know? A home visit could be made to check his reality and provide the necessary guidance [...] **(CHW-P12)**.

> [...] I can't do the physical exam. With the time I have for care, this is not feasible, I cannot do it [...] **(Doctor-P9)**.

The statements regarding the deficiencies in the humanization policy were related to: absence of home visits for people with difficulty controlling DM and using insulin; little knowledge of CHW to guide people with DM, especially insulin users; delay in carrying out consultations within the UBS without apparent justification; attendance only within the minimum limit stipulated for consultations, without the professionals' flexibility to resolve some eventual cases.

> There is only one day of home visits, and on that day we visit the bedbound. But I think we could do more! On the quieter days, we could go to patients who are unable to control their blood glucose, to provide guidance. [...] I think a little more humanity is missing, let's say, a little love. And also, we have a little more information to pass on to these patients, to guide them right [...] **(CHW-P12)**.

> I get disgusted with some things .... I can't understand why, as the professional can see a person in need of him and turn away, people don't come here because they want to, it is because they need to. If doctors took better care of this, SUS in Brazil would not be so bad. This is how it is: the appointments for the day are over, they don't even stay around, they leave, they don't want to know

> if a person in need will arrive **(CHW-P18)**.

In a study that evaluated the health care performed by PHC members to people with DM from the perspective of the Care Model for Chronic Conditions, assistance centered on the biomedical model was identified, with disarticulation between FHS professionals and users, family and community, and the absence of guiding strategies for the implementation of public policies for DM in healthcare practice(16).

Another deficiency for the humanization policy reported by the participants was the lack of privacy for people with DM during collective care. In addition to inhibiting the user of speaking about problems, this would limit assistance due to the absence of physical examination in this assessment. This fact can be a disservice to people with DM, as they do not have their feet or the places of insulin administration evaluated in the search for changes that may influence the absorption of the medication.

> Physical exam, you don't even dream of happening. Neither for the diabetic nor anyone else. If someone said they do it, it's a lie! [...] the attending office is open, and you saw that the attendance does not take long. And neither in a group. It doesn't work in the group. The nursing consultation I do is for the child and the pregnant woman, when I start the prenatal care. Now for diabetics and hypertensive patients, the physical exam, we don't do it, we don't look at anything [...] **(Nurse-P1).**

> Regarding the structure of the Unit, I think that everyone together in the HIPERDIA groups, I think it doesn't work, because the patient wants to say things to the doctor and becomes shy, because everyone is listening. I don't agree with the group like that, with the schedule, because they have to arrive very early. The doctor wants to arrive and be ready for him to write the prescription. And, if they are not ready, he consults patients in a lousy way **(CHW-P13)**.

It is important to consider that the PNH, as a transversal and active public policy in the guiding axes in all levels of SUS, based supposes the performance of health professionals based on clinical, ethical and political guidelines, which are converted into certain work arrangements(8) and requires the integration of professionals in assisting people with DM who use insulin in PHC.

Thus, the PNH, in addition to respecting the rights of users, supports processes of change in services to make them more welcoming, to meet people's objective and subjective needs and to promote participatory management, expanding the dialogue between service managers, health professionals and the population. Among the guidelines of the PNH we name welcoming, participative management and co-management, ambiance, expanded and shared clinic, valuing the worker and defending the user's rights(8).

In a study carried out in South Africa with people with type 2 DM attended at the primary level, it was identified that the lack of information and the difficulty for health professionals to develop health education caused dissatisfaction in people regarding the service(17). The welcoming and comprehensive practice, which expresses commitment to people, is essential to qualify the service, promote resoluteness and benefit the users' health(6).

As PHC is the level of greatest coverage to the population and the gateway to the health system, it is expected to rescue its principles, especially that of comprehensive care, with a view to safe self-care, preparing people to be active, proactive and to participate in the management of their health/disease processes as empowered and autonomous beings in this care(18-19).

FINAL CONSIDERATIONS

Assessing how FHS professionals conduct public policies aimed at assisting DM and humanization to people using insulin in PHC revealed a scenario far below that established in the theoretical set of these policies. The weaknesses pointed out showed fragile care to people who use insulin, without an approach that prevents the risks inherent to this therapy. In the assessment, in addition to these people not being adequately monitored and guided, the humanization of care was also compromised, with weaknesses in the attitudes of health professionals regarding the appreciation of people in their entirety and integrality.

To establish the restructuring and expansion of humanized, resolutive and quality care for people with DM, health professionals and managers must promote multiple interventions capable of preventing chronic complications. Health professionals, especially nurses, such responsibility is given because it is understood that they are the subjects responsible to conduct public policies or some of them, in the daily practice of a collective.

As limitations, the study was conducted in a single municipality and with health professionals from five FHS as participants. It is suggested to carry out new research in other locations, to provide comprehensive discussions, capable of promoting changes, since the data presented here indicated that the care for people with DM who use insulin does not include the assistance provided for in the public policies established for these users.

As a contribution to care, it is expected to stimulate health professionals and managers to changes in attitudes that promote improvements in this care. For teaching, it is expected that the training process will stimulate students who will be future health professionals, to perform care encompassing all people with DM who use insulin. For the research, it is hoped this study awaken new perspectives and new searches willing to carry out interventions capable of contributing to the needs of the service and health professionals for new actions with this population.

INSUFICIÊNCIAS NA APLICABILIDADE DAS POLÍTICAS DIRECIONADAS AO DIABETES MELLITUS E A HUMANIZAÇÃO NA ATENÇÃO PRIMÁRIA

RESUMO

Objetivo: Avaliar como os profissionais das equipes de saúde da família aplicam as políticas públicas destinadas à assistência ao diabetes mellitus e humanização às pessoas usuárias de insulina. **Método:** Pesquisa qualitativa avaliativa, tendo como base conceitual a Política Nacional de Humanização e o Caderno de Atenção Básica. Participação de 29 profissionais que atuam na Estratégia Saúde da Família. Para a coleta de dados, foram utilizadas entrevistas e observação das atividades no período de janeiro a maio de 2014 e na análise dos dados, as etapas analíticas da *Grounded Theory.* **Resultados:** Emergiram duas categorias: “Insuficiências na atenção à saúde às pessoas que usam insulina” apresenta as limitações da atenção relacionadas especialmente à educação em saúde; e “A humanização às pessoas que usam insulina na prática cotidiana” é representativa das ausências dos profissionais de saúde relacionadas com a humanização da atenção nesse contexto. **Considerações Finais:** A atenção às pessoas usuárias de insulina apresentou fragilidades, sem uma abordagem que prevenisse os riscos inerentes a esta terapêutica, além de dificuldades no acompanhamento e orientações por parte dos profissionais, com vistas à totalidade e integralidade da atenção em saúde a essa população.

Palavras-chave: Diabetes mellitus. Humanização da assistência. Atenção primária à saúde. Avaliação de serviços de saúde.

INSUFICIENCIAS EN LA APLICABILIDAD DE LAS POLÍTICAS DIRIGIDAS A LA DIABETES MELLITUS Y LA HUMANIZACIÓN EN LA ATENCIÓN PRIMARIA

RESUMEN

Objetivo: Evaluar cómo los profesionales de los equipos de salud de la familia aplican las políticas públicas dirigidas a la atención a la diabetes mellitus y humanización a las personas usuarias de insulina. **Método:** investigación cualitativa evaluativa, teniendo como base conceptual la Política Nacional de Humanización y el Cuaderno de Atención Básica. Participación de 29 profesionales que actúan en la Estrategia Salud de la Familia. Para la recolección de datos, fueron utilizadas entrevistas y observación de las actividades en el periodo de enero a mayo de 2014 y en el análisis de los datos, las etapas analíticas de la *Grounded Theory.* **Resultados:** surgieron dos categorías: “Insuficiencias en la atención a la salud a las personas que usan insulina” presenta las limitaciones de la atención relacionadas especialmente a la educación en salud; y “La humanización a las personas que usan insulina en la práctica cotidiana” es representativa de las ausencias de los profesionales de salud relacionadas con la humanización de la atención en este contexto. **Consideraciones Finales:** la atención a las personas usuarias de insulina presentó fragilidades, sin un abordaje que previniera los riesgos inherentes a esta terapéutica, además de dificultades en el acompañamiento y las orientaciones por parte de los profesionales, con objeto de la totalidad e integralidad de la atención en salud a esta población.

Palabras clave: Diabetes mellitus. Humanización de la atención. Atención primaria de salud. Evaluación de servicios de salud.

REFERENCES

1. Zimmet PZ. Diabetes and its drivers: the largest epidemic in human history? Clinical Diabetes and Endocrinology. 2017; 3(1):1-8. DOI: https://doi.org/10.1186/s40842-016-0039-3

2. International Diabetes Federation (IDF). Diabetes ATLAS. [on-line]. 2015. [citado em 26 abr 2017]. Disponível em: file:///C:/Users/Sony/Downloads/IDF_Atlas%202015_UK.pdf

3. Oliveira JEP, Vencio S. Sociedade Brasileira de Diabetes. Diretrizes. São Paulo: A.C. Farmacêutica. [on-line]. 2016. [citado em 17 set 2017]. Disponível em: file:///C:/Users/den/Downloads/DIRETRIZES-SBD-2015-2016-2.pdf

4. Teston EF, Serafim D, Cubas MR, Haddad MCL, Marcon SS. Fatores associados ao conhecimento e à atitude em relação ao diabetes mellitus. Cogitare enferm. 2017; 22(4): e50850. DOI: http://dx.doi.org/10.5380/ce.v22i4.50850

5. American Diabetes Association (ADA). Standards of medical care in Diabetes - 2016. Diabetes Care. [on-line]. 2016. [citado em jun 20 2017]; 39(S1):1-19. DOI: https://doi.org/10.2337/dc16-S003

6. Salci MA, Meirelles BHS, Silva DMVG. An insight to prevention of chronic complications of diabetes in the light of complexity. Texto & contexto enferm. 2018;27(1): e2370016. DOI: http://dx.doi.org/10.1590/0104-07072018002370016

7. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Estratégias para o cuidado da pessoa com doenças crônicas: diabetes mellitus. Brasília; [on-line]. 2013. [citado em 17 set 2017]. 1(36):160. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/estrategias_cuidado_pessoa_diabetes_mellitus_cab36.pdf

8. Ministério da Saúde (BR). Secretaria de Atenção à Saúde. Política Nacional de Humanização-PNH. Brasília; [on-line]. 2013. [citado em 17 set 2017]. 2(1): 256. Disponível em: http://redehumanizasus.net/acervo/cadernos-humanizasus-volume-2-atenc%cc%a7a%cc%83o-basica/

9. Prado ML, Del Valle AMQ, Ortiz LGC, González ER. El diseño en la investigación cualitativa. In: Prado ML, Souza ML, Carraro TE. Investigación cualitativa en enfermería: contexto y bases conceptuales. Washington: Paltex; 2008. P. 87-100. Disponível em: https://iris.paho.org/handle/10665.2/51581

10. Strauss A, Corbin J. Pesquisa qualitativa: técnicas e procedimentos para o desenvolvimento de teoria fundamentada. 2ª ed. Porto Alegre: Artmed; 2009.

11. Moreschi C, Rempel C, Backes DS, Pombo CNF, Siqueira DF, Pissaia LF. Ações das equipes da ESF para a qualidade de vida das pessoas com diabetes. Cienc Cuid Saude. 2018; 17(2):1-8. DOI: https://doi.org/10.4025/cienccuidsaude.v17i2.41000

12. Carvalho GC, Freitas RW, Araújo MF, Zanetti ML, Damasceno MM. Visual acuity in the management of diabetes mellitus: preparation of the insulin dose. Acta Paul Enferm. 2017; 30(1):25-30. DOI: http://dx.doi.org/10.1590/1982-0194201700005.

13. Cunha GH, Barbosa RVA, Fontenele MSM, Lima MAC, Franco KB, Fechine FV. Insulin therapy waste produced in the households of people with diabetes monitored in Primary Care. Rev. Bras. Enferm. 2017; 70(3):618-625. DOI: http://dx.doi.org/10.1590/0034-7167-2016-0406

14. Souza JD, Baptista MHB, Gomides DS, Pace AE. Adherence to diabetes mellitus care at three levels of health care. Esc. Anna Nery. 2017; 21(4): e20170045. DOI: https://doi.org/10.1590/2177-9465-ean-2017-0045.

15. American Diabetes Association (ADA). Standards of medical care in diabetes 2015: summary of revisions diabetes care. Diabetes Care. [on-line]. 2015 [citado em jun 20 2017];38(S1):S4. DOI: https://doi.org/10.2337/dc15-S003

16. Salci MA, Meirelles BHS, Silva DMGV. Primary care for diabetes mellitus patients from the perspective of the care model for chronic conditions. Rev. Latino-Am Enfermagem. 2017; 25:e2882. DOI: https://doi.org/10.1590/1518-8345.1474.2882 .

17. Steyl T. Satisfaction with quality of healthcare at primary healthcare settings: perspectives of patients with type 2 diabetes mellitus. S Afr J Physiother. 2020; 76(1):1321. DOI: 0.4102/sajp.v76i1.1321.

18. Araújo LO, Souza ES, Mariano JO, Moreira RC, Prezotto KH, Fernandes CAM, et al. Risk of developing diabetes mellitus in primary care health users: a cross-sectional study. Rev Gaúcha Enferm. 2015; 36(4):77-83. DOI: http://dx.doi.org/10.1590/1983-1447.2015.04.50195

19. Mendes EV. Interview: The chronic conditions approach by the Unified Health System. Ciência & Saúde Coletiva. 2018; 23(2):431-435. DOI: 10.1590/1413-81232018232.16152017

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