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INTEGRATIVE REVIEW ARTICLE

STUDIES ON DIABETIC PATIENTS IN PRIMARY CARE ESTUDOS SOBRE PACIENTES DIABÉTICOS NA ATENÇÃO PRIMÁRIA ESTUDIOS SOBRE PACIENTES DIABÉTICOS EN LA ATENCIÓN PRIMARIA

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ABSTRACT

Objective: to analyze the scientific productions about diabetic patients in Primary Care. **Method:** integrative review carried out in the Lilacs, Medline and BDNF databases, from August 2016 to January 2017, in search of articles published in the last ten years in Portuguese that deal with diabetic patients in Primary Care. A bibliographic analysis was performed, as well as an exploratory and critical reading of the 14 selected studies. **Results:** problems such as difficulty in obtaining consultations, lack of medication in the Health Units and physical examination / unsatisfactory anamnesis, as well as an increase in the incidence of the disease as age progression and increased risk for cardiovascular diseases in diabetic patients were evidenced. **Conclusion:** the need for investment and development of Public Health in Brazil is evident. The importance of professional qualification is appreciated, in order to strengthen the assistance and educational actions in the Family Health Strategy, aiming at the higher quality of life of the patients. Thus, the study contributes to the areas of teaching, research and assistance by expanding knowledge in the area and stimulating investments and studies in this scenario. **Descriptors:** Diabetes Mellitus; Primary Health Care; Primary Prevention; Health Promotion; Family Health Strategy; Family Health.

RESUMO

Objetivo: analisar as produções científicas sobre pacientes diabéticos na Atenção Primária. **Método:** revisão integrativa realizada nas bases de dados Lilacs, Medline e BDNF, no período de agosto de 2016 a janeiro de 2017, em busca de artigos publicados nos últimos dez anos, em português, que versassem sobre os pacientes diabéticos na Atenção Primária. Foi realizada a análise bibliográfica, além de leitura exploratória e crítica das 14 pesquisas selecionadas. **Resultados:** evidenciaram-se problemas como dificuldade em conseguir consultas, falta de medicamentos nas Unidades de Saúde e exame físico/anamnese insatisfatório, além de relato do aumento da incidência da doença conforme progressão da idade e risco aumentado para doenças cardiovasculares em pacientes diabéticos. **Conclusão:** é evidente a necessidade de investimento e desenvolvimento da Saúde Pública no Brasil. Percebe-se a importância da capacitação dos profissionais, a fim de fortalecer a assistência e as ações educativas na Estratégia de Saúde da Família, visando à maior qualidade de vida dos pacientes. Desse modo, o estudo contribui para as áreas de ensino, pesquisa e assistência ampliando o conhecimento na área e estimulando investimentos e estudos nesse cenário. **Descritores:** Diabetes Mellitus; Atenção Primária à Saúde; Prevenção Primária; Promoção da Saúde; Estratégia Saúde da Família; Saúde da Família.

RESUMEN

Objetivo: analizar las producciones científicas sobre pacientes diabéticos en la Atención Primaria. **Método:** una revisión integradora realizada en las bases de datos LILACS, MEDLINE y BDNF, de agosto 2016 a enero 2017, en busca de artículos publicados en los últimos diez años en portugués, que aborasen sobre pacientes diabéticos en Atención Primaria. Se realizó el análisis bibliográfico, además de lectura exploratoria y crítica de las 14 encuestas seleccionadas. **Resultados:** se evidenciaron problemas como dificultad en conseguir consultas, falta de medicamentos en las Unidades de Salud y examen físico / anamnesis insatisfactorio, además de relato del aumento de la incidencia de la enfermedad conforme progresión de la edad y riesgo aumentado para enfermedades cardiovasculares en pacientes diabéticos. **Conclusión:** es evidente la necesidad de inversión y desarrollo de la Salud Pública en Brasil. Se percibe la importancia de la capacitación de los profesionales, a fin de fortalecer la asistencia y las acciones educativas en la Estrategia de Salud de la Familia, buscando la mayor calidad de vida de los pacientes. De este modo, el estudio contribuye a las áreas de enseñanza, investigación y asistencia, ampliando el conocimiento en el área y estimulando inversiones y estudios en ese escenario. **Descriptores:** Diabetes Mellitus; Atención Primaria de Salud; Prevención Primaria; Promoción de la Salud; Estrategia de Salud Familiar.

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INTRODUCTION

Diabetes Mellitus (DM) is a disease that has been growing epidemiologically over the years and is now considered a public health problem.¹⁻² It is a non-transmissible chronic disease that has been increasing its importance due to its increasing prevalence. The treatment is carried out through pharmacological and non-pharmacological measures to control glycemic levels in order to avoid acute and chronic complications, promote quality of life and reduce mortality.³⁻⁴

Diabetes Mellitus is a serious chronic disease characterized by high blood glucose level, hyperglycemia, resulting from the defect in insulin secretion and / or its action.⁵ Rigorous metabolic control, combined with preventive and curative measures, can prevent or delay the chronic complications of the disease by improving the quality of life of the individual. These measures involve changes in the patient's lifestyle and the primary level of health is the precursor base of this care.⁶

The Family Health Program (FHP) was implemented in Brazil in 1994 by the Ministry of Health, with the objective of reorganizing care practice, starting with basic care, replacing the traditional model of curative assistance for health promotion and prevention. Over the years, this program has undergone several modifications and today is called the Family Health Strategy.⁶

Non-communicable diseases and grievances (NCDG) are now considered by the United Nations (UN), a growing epidemic around the world. In 2010, they were responsible for 58.5% of all deaths. One can mention cardiovascular diseases, cancer, diabetes and chronic respiratory diseases.⁷⁻⁸

The Brazilian population has experienced a rapid demographic, epidemiological and nutritional transition. The nutritional transition is characterized by the current predominance of a low-fiber diet and high levels of sugar and saturated fatty acid consumption, associated with the high prevalence of sedentary lifestyle. These factors contribute to the increased incidence of type II diabetes. In the last two decades, diabetes mortality in the Brazilian population, aged between 30 and 70 years, increased by 8%. Among the elderly (60 years or older), this increase was higher, corresponding to 18%. The Ministry of Health considers that "healthy living habits are the basis of diabetes treatment, on which pharmacological treatment may or may not be added." These

habits include regular physical activity, healthy eating and weight control, as well as avoiding smoking and excessive consumption of alcoholic beverages.⁷

After initiating research on the health and care of diabetic patients in the Family Health Strategy (FHS) to develop the master's thesis, the researcher noticed the existence of few studies that address such content. Therefore, this integrative review will focus on an analysis of the existing studies that address the diabetic patients of the FHS in Brazil in the last decade.

Thus, the justification for this study is due to the low number of studies that address the health and care provided to these patients in the FHS. It is necessary to deepen the knowledge and studies in this scope to guide interventions that improve the care related to these patients and, consequently, their quality of life.

OBJECTIVE

- To analyze the studies on diabetic patients in Primary Care.

METHOD

It is an integrative review⁹ carried out in the databases: LILACS (Latin American and Caribbean Literature in Sciences and Health); Medline (Online System of Search and Analysis of Medical Literature) and BDENF (Database of Nursing). The following descriptors were used: Diabetes Mellitus; Primary Health Care; Primary Prevention; Health promotion; Family Health and Family Health Strategy. It was developed, from August 2016 to January 2017, based on the guiding question: What did the studies on diabetic patients assisted in the Family Health Strategy in the last decade in Brazil show?

The integrative review allows the use of evidence present in numerous studies through the analysis of relevant research within the subject of interest. This method allows the elaboration of a conclusion from results found in several studies that investigated equivalent problems. In this way, it provides the production of knowledge that can be applied in several practical fields, making it possible to solve problems and carry out new studies.⁹⁻¹⁰

The integrative review method is divided into six stages, the first step being the identification of the theme and the elaboration of the guiding question, defining the subject for the discussion of the study. The second step is to elaborate the inclusion and exclusion criteria. The inclusion criteria

used were: studies carried out in the last ten years; texts in Portuguese; scientific articles addressing the descriptors searched in the Virtual Health Library (VHL) inserted in the DeSC and studies carried out in Brazil. The exclusion criteria used were: review articles and experience reports; articles published more than ten years ago and do not correspond to the evidenced descriptors and articles of studies carried out outside Brazil.¹⁰

It should be noted that, for the search, the PICO strategy was used. However, in this study, since there was no comparison, IOP was used: P - patient / problem; I - intervention; O - result / outcome. The PICO strategy represents an acronym for Patient, Intervention, Comparison, and Outcomes. Within the EBP (Evidence Based Practice), these four components are the fundamental elements of the research question and the construction of the question for the bibliographic search of evidence. In this

research, we used, for P, diabetic patients; for I, Analysis of the studies performed on these patients in the Family Health Strategy and, for O, analysis and understanding of the main results found.¹¹

In the third stage, the articles were selected according to the previously defined concepts. The bibliographic analysis and the exploratory and critical reading of the selected studies were carried out, defining the information that should be extracted from each article and categorized in a synoptic table. The information is organized and summarized forming a database of easy access to present the characteristics and the main conclusions of each study. In the fourth step, the articles included in the integrative review are critically evaluated and correlated. In the fifth stage, the interpretation and discussion of the results occurs. And in the sixth and final stage, the review and synthesis of the knowledge produced about the theme.

Database	Descriptors						Associated Descriptors
	Diabetes Mellitus	Primary Health Care	Family Health Strategy	Primary Prevention	Health Promotion	Family Health	DM/APS/ESF/PP /PS/SF
LILACS	12097	9527	3576	3952	18001	16850	15
MEDLINE	36092	6723	5164	3198	12303	10826	10
BDENF	66	126	839	43	201	351	8
Total	48255	16376	9579	7193	30505	28027	33

Figure 1. Quantitative of bibliographic productions in relation to databases with associated descriptors. Niterói (RJ), 2016-2017.

In figure 1, it can be observed that the quantitative of bibliographic productions related to the study database. In the first column, the database in which the search was carried out and the number of files related to the search descriptors in the following columns are observed. In the last column, the quantitative by magazine of the research is observed, by associated descriptors, totaling 33 articles. In the flowchart below, the

quantitative of the associated descriptors after the analysis is inferred, according to the inclusion and exclusion criteria mentioned above, in addition to the exclusion of three articles repeated in the selected journals, totaling 14 articles that make up the integrative review. In the flowchart figure 2, these steps can be visualized, since it represents the path taken when searching the study material.

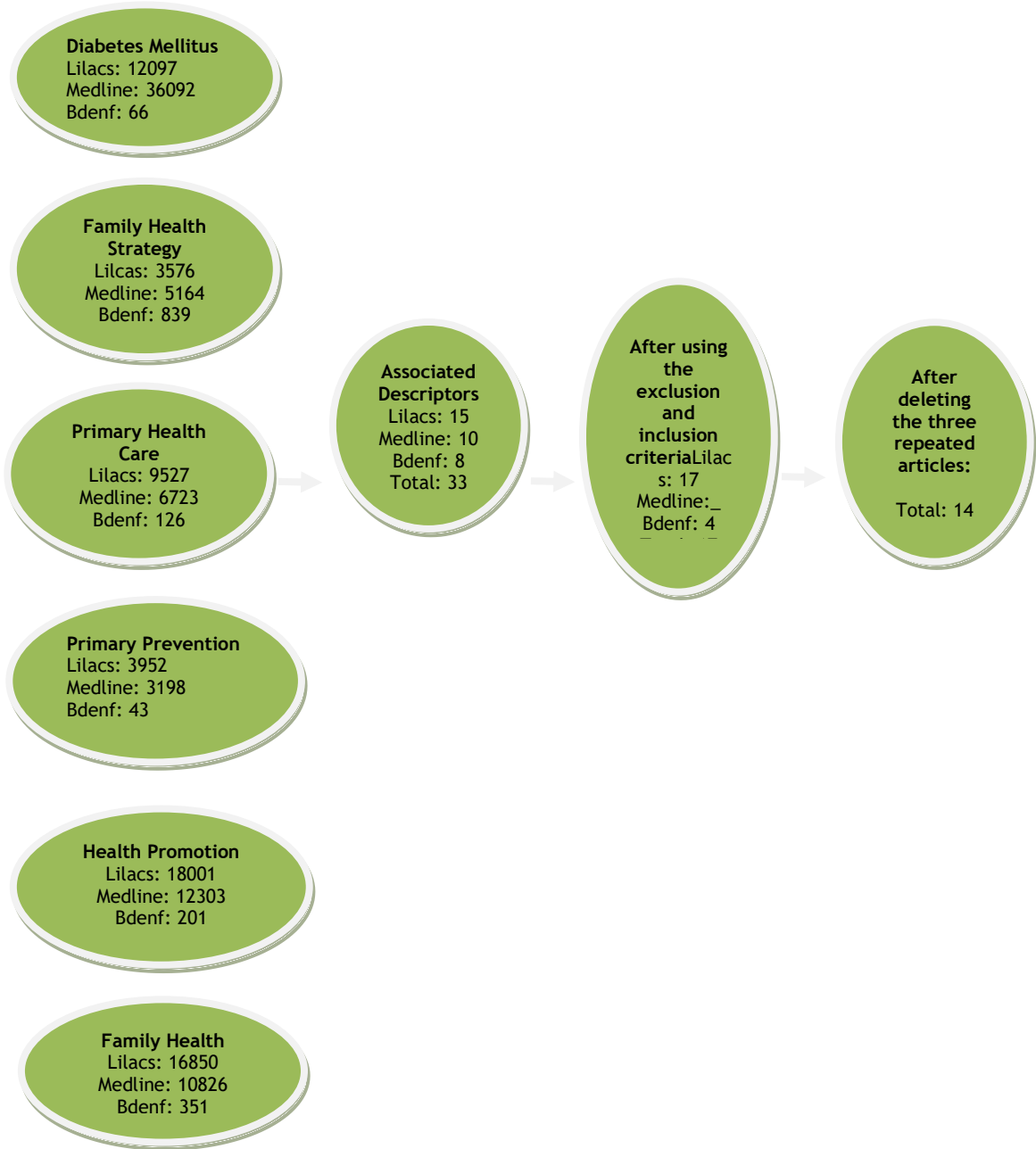


Figure 2. Flowchart of the methodological path taken to choose the articles to be analyzed. Niterói (RJ), 2016-2017.

In figure 2, one can observe the classification of level of evidence, according to the University of Oxford, of 2001.

Oxford	A	Level	Treatment/Prevention - Etiology/Damage
Degree of recommendation	1A	1A	Meta-analysis (with homogeneity) of randomized controlled clinical trials.
		1B	Controlled, randomized clinical trial with narrow confidence interval.
		1C	Therapeutic results of the "all or none" type
	2A	2A	Systematic review (with homogeneity) of cohort studies
		2B	Cohort study
		2C	Observational study
		3A	Systematic review (with homogeneity) of case-control studies
	C	4	Case report, Case series: descriptive report
		5	Subjective opinion, devoid of critical evaluation, based on consensus, physiological studies, with biological materials or animal models, and, especially, on specialty and clinical experience.
	D		

Figure 3. Classification of level of evidence according to Oxford. Niterói (RJ), 2016-2017.

RESULTS

The organization of the data was made from the elaboration of a structured instrument (synoptic table) containing: title of the article; kind of study; year of

publication; authorship; newspapers; level of evidence and main results. The process of analysis of the 14 selected articles occurred through an exploratory and critical reading of the same.

Work title	Study type	Year	Authors	Published Journa	NE	Main Results	Comprehension and sugestion
Evaluation of care for the patient with diabetes and / or hypertension by the Family Health Program of the Municipality of Francisco Morato, São Paulo, Brazil	Evaluative research / descriptive study	2006	Daniela Cristina Profitti de Paiva, Ana Aparecida Sanches Bersusa, Maria Mercedes L. Escuder	Public Health Notebook	3	The study evaluated the assistance to the FHP user population of the municipality with Diabetes mellitus and Systemic arterial hypertension. It was detected that the FHP increased the population's access to health, and the satisfaction of the users was positive, but there was a complaint of lack of medication, besides incomplete anamnesis and unsatisfactory physical exams.	It is perceived that there should be more attention to the quality of health care, since the improvement of the same brings important consequences for the success of the treatment and to reduce damages.
Chronic complications of type 2 diabetic patients attended at the Family Health Units, Recife, Pernambuco, Brazil	Epidemiological study, descriptive cross-sectional.	2008	Isabel Cristina Ramos Vieira Santos, Eduardo Freese de Carvalho, Wayner Vieira de Souza, Maria Carolina Wanderley Costa de Medeiros, Mika Gabrielle de Lira Nóbrega, Patrícia Michelly Santos Lima	Brazilian Journal of Epidemiology	3	This study analyzes the complications associated with Type 2 Diabetes mellitus in patients attended at the Basic Health Units in Recife. 58.9% of the patients had at least one complication and 95.6% were macrovascular complications. There was an increase in the prevalence of complications in patients aged 66 and over.	The study highlights the low rate of records on diabetic patients in medical records limiting analysis. A much larger sample of women than men is not relevant to the gender analysis, in addition to showing the greater demand of women for health services than men. It is important to reinforce measures of actions in health services aimed at reducing risk factors and the impact of complications on the quality of life of patients with DM.
Frequency of cutaneous manifestations in diabetics of the family health program of Frutal, Minas Gerais	Quantitative research / descriptive study	2009	Adriana Novaes Rodrigues	Brasilia med	3	The present study aims to identify the profile of patients with DM and cutaneous lesion of the family health program groups of the municipality of Frutal, Minas Gerais. Half of the sample were patients compensated and the other half decompensated. Of the 569 identified lesions 437 were observed in decompensated patients. The most	The study contributes to the reassessment of the service of the public service. It is necessary to guide prevention to promote disease control and avoid complications, since it has been shown that decompensated patients, that is, those who do not have control of the disease, are the most affected by their complications.

							frequent lesions observed were: keratosis, seborrheic dermatitis, xerosis, and polycythemia versicolore.	
Diabetes and its comorbidities in the Vila Davi Family Health Program in Bragança Paulista, SP	Epidemiological research / descriptive study	2010	Carolina de Toledo Lima, Danilo Toshio Kanno, Marcus Cezar Recco Gonsalles, Débora Magrini Baratella Assis, Estela Márcia Flores Giancesella	Brazilian Journal of Clinical Medicine	of	3	The study characterized the patients registered and identified their comorbidities comparing the data with the state and national reality. The study detected 30% overweight and obesity, 13% retinopathy, 10% diabetic foot and 11.5% nephropathy. There was a prevalence of females in the sample and a deficiency was observed in the data contained in the medical records.	The data obtained in this study refer to only one PSF, probably because of this, they present some differences of national and state data. It is important to highlight the large number of women in the sample, 75%, showing that this gender is more affected by the disease. Attention should be paid to the lack of data contained in the medical records, which may result in the discrepant results of the literature surveys.
Prevalence of Diabetes mellitus in individuals served by the Family Health Strategy in the city of Ubá-MG	Observational cross-sectional epidemiological survey	2012	Diogo Santos Silva, Mateus Camaroti Laterza, Osvaldo Costa Moreira, Miguel Araújo Carneiro Júnior, Paulo Roberto Santos Amorim	Brazilian Journal of Physical Activity and Health		3	The objective of the study was to identify the prevalence of DM in patients of the FHS of the municipality, as well as the practice of physical exercises according to gender and age group. The prevalence of DM was 2.5%, in men 1.6% and in women 3.5%. Women are 2.2 times more likely to have the disease than men. The practice of physical exercises indicated a greater adhesion of the men than of the women and had a low prevalence in general. The prevalence increased proportionally to the age with a higher index being observed after age 50.	The higher female prevalence in the study can be justified by the time of home interviews, where men are normally in working hours. This fact was the major limitation of the study and may perhaps justify the greater demand of women in health services. The fact that aging intensifies the manifestation of the syndrome may be justified by the fact that insulin resistance increases over the years. Therefore, it is necessary to elaborate and plan public health intervention programs that act in the prevention and treatment of DM combating its risk factors, focusing mainly on the practice of physical exercises.
Diabetes nursing consultation using the Staged Diabetes Management Protocol	Descriptive and cross-sectional study	2014	Jéssica Sâmia Silva Torres, Lonara Holanda de Moura, Layla Gonçalves Macedo, Ana Roberta da Silva, Paulo César de Almeida	Journal of Nursing UERJ	of	3	An analysis of the nursing consultation was performed applying the protocol in the FHPs of Picos-PI. The results showed increased waist circumference in 67.4% of the sample, 36.3% with stage 1 SAH and 85% used hypoglycemic agents.	The complexity of the treatment of Diabetes mellitus requires that the health team is qualified for care. The protocol helps in characterizing the sample. 61.3% of the sample was female. The research also shows the importance of nurses to work continuously with these patients on a day-to-day basis and also shows the need for continuous guidance and monitoring of diabetic patients. It is

									fundamental a protocol of diabetic care aimed at the standardization of the service so that it is humanized and of quality, seeking the strengthening of health education to reduce the complications of Diabetes to these patients increasing their quality of life and the reduction of public expenses.
Clinical and social profile and reasons for absences in consultations of hypertensive and / or diabetic patients	Descriptive study	case	2013	Fernanda Teixeira Trindade, Haline Souza Antunes, Neyandra dos Santos de Souza, Tânia Maria de Oliva Menezes, Constança Margarida Sampaio Cruz	Electronic Nursing Journal	3	The study sought to know the clinical and social profile of hypertensive and diabetic patients who lacked the consultations and to identify the reasons for the absence. The profile detected was 87.8% women, but the sample had 43 women and six men, so it does not allow to affirm that they lack more than men. Schooling and social and economic situation presented were low. The reasons detected were: appointments at the day, forgetting the date and other reasons not specified.	The worsening of SAH and DM and its complications is related to the lack of adherence to the treatment. Admission to the consultations is positive adherence to treatment. The gender gap can be justified because of the greater demand of women for health services and their greater concern with health. Low schooling may represent difficulties in the understanding of the orientations made by the professionals, compromising the follow-up of the treatment. These patients need continuous follow-up of a multiprofessional team to prevent complications and the evolution of the disease.	
Quality of life in the perception of the severity of the disease in patients with Diabetes mellitus	Cross-sectional, quantitative, descriptive-exploratory study		2012	Geisa Mara Cardoso, Luciana Mendonça de Arruda Valoes, Onislene Alves Evangelista de Almeida, Carlos Kusano Bucalen Ferrari	Nursing in focus	3	The study evaluated the quality of life and the perception of the disease in patients with Diabetes mellitus attended at the ESF of Aragarças-GO. The study concluded that the perception of severity of DM is related to the impairment of quality of life. Most are unaware of the severity of the disease.	In the study the frequency of association between diabetes and hypertension was high, as well as all domains of quality of life were affected by the disease, especially in diabetic patients with the perception about the disease involved. The patient's perception of the disease as severe, the awareness of its chronicity, the possible complications, experiencing this reality reflects in the physical, social and psychoemotional affecting the quality of life of the individual.	
Family Health Strategy in the treatment of chronic degenerative diseases: advances and challenges	Retrospective, exploratory, quantitative study		2010	Márcia Adriana Zavatini , Paulo Roque Obreli Neto , Roberto Kenji Nakamura Cuman	Gaúcha Nursing Journal, Porto Alegre	3	The study aims to evaluate the effectiveness of FHT in the treatment of chronic-degenerative diseases. A total of 94 patients with hypertension and / or DM were analyzed by means of the	The characterization of the patients of this study allowed to verify the existence of factors that can interfere negatively in the adherence to the treatment, such as: advanced age, low education and a high	

						analysis of the hypertensive and diabetic follow-up system and medical records. A small increase in the number of individuals with adequate blood pressure and fasting blood glucose levels was observed in the analyzed period; despite changes in the pharmacotherapy of these patients and home follow-up. There was a higher prevalence of female individuals (76.6%).	number of comorbidities. The nurse must be trained and encouraged to develop actions and strategies in the ESF where he / she works. It is essential that the units develop population characterization studies in order to plan more effective interventions. It is important that the health team develops a bond with the patient's family, as it assists in patient adherence to treatment..
Use of health services by diabetics covered by private plan in comparison to users of the Unified Health System in the city of Belo Horizonte, Minas Gerais, Brazil	Descriptive cross-sectional study	2016	Sara de Souza Silva, Juliana Vaz de Melo Mambrini, Maria Aparecida Turci, James Macinko, Maria Fernanda Lima Costa	Public Health Notebook, RJ	3	The study compared the use of health services, drug use, testing coverage, and health behavior of individuals with diabetes enrolled in private health plans covered and covered by the FHT, according to health care sources. The use of health and medicine services, coverage of exams and alcohol and smoking consumption did not differ among the sources of attention. The prevalence of insufficient practice of physical activity and sedentary lifestyle were twice as high in patients covered by FHS. The study also indicated that SUS exclusive users are more likely to have difficulties in obtaining consultations.	In this study there was also a predominance of females in the sample. It is necessary to strengthen the educational process in primary health care to improve the behavior of individuals with diabetes. The study suggests that actions within the FHS are not enough to promote physical activity, more effective actions should be taken to stimulate this practice and better reorganize the performance of primary care to improve access to these patients' consultations.
Analysis of access to drug treatment for hypertension and diabetes in the Family Health Strategy in the State of Pernambuco, Brazil	Quantitative research / sectional study	2015	Maria Nelly Sobreira de Carvalho Barreto, Eduarda Ângela Pessoa Cessel , Rodrigo Fonseca Limal , Michelly Geórgia da Silva Marinho , Yuri da Silva Spechtl , Eduardo Maia Freese de Carvalhol , Annick Fontbonne	Brazilian Journal of Epidemiology	3	The study evaluates the access to medicines for hypertension and diabetes and the direct expenditure related to the acquisition of these inputs among the users of the Family Health Strategy (ESF), in the state of Pernambuco. Of the 785 hypertensive patients, 91.2% reported antihypertensive use and 823 diabetics, 85.6% used oral antidiabetics (ADO), and 15.4% used insulin. Antihypertensives were provided by the ESF teams to 69.0% of hypertensive patients, ADO, to 75.0% of diabetics, and insulin and supplies to 65.4%. The hypertensive patients (36.9%) and diabetics (29.8%) who needed to buy the drugs reported a median monthly	There was medium to low access, and the difficulty for some users to buy the drugs. In addition, the results lead to a reflection on the potentialities and difficulties resulting from decentralization for small municipalities, considering that despite the decentralization avoid large displacements of the population, it generates difficulties in organizing and updating the knowledge of health professionals. Given these facts, the study points to the need to strengthen strategies to favor access to medicines in the municipalities of the State of

				expenditure of R \$ 18.30, R \$ 14.00 and R \$ 27.61 for antihypertensive drugs, ADO and insulin respectively.		Pernambuco.
Implementation of physiotherapeutic actions in the prevention of complications of Diabetes in the Family Health Strategy	Quantitative / descriptive study	2015	Ana Paula Coelho Figueira Freire, Mariana Romanholi Palma, João Carlos Aranha Lacombe, Rodolpho Maurício Leonardo Martins, Renata Aparecida de Oliveira Lima, Francis Lopes Pacagnelli	Physiotherapy in motion	3	The study evaluates and guides patients with type 2 DM for diabetic foot and regular physical exercise to control the disease and prevent complications. Deformities, dry skin, calluses, dehydration, ulceration, cracks and brittle nails were found. The tactile sensitivity was mainly affected in the heel region and the vibratory sensitivity was absent in 5% of individuals. There was a decrease in functionality in ankle movements. Of the participants, 76% were sedentary and 24% were aware of the benefits of regular physical exercise. The implementation of physiotherapeutic actions in diabetics of a SAI was important to highlight the presence of risk factors for diabetes complications. It was found that FHS individuals need more information and programs to prevent complications of DM and present predisposing alterations to amputations. The educational process of DM in relation to hyperglycemia, diabetic foot and its complications is paramount in the prevention of morbidity and mortality. Such actions significantly reduce the onset of ulcers and possible amputations after the development of educational programs. Thus, the work of the health team is fundamental to achieve reductions in the prevalence of these complications.
Health beliefs: influence on the attitudes of patients with chronic-degenerative diseases in relation to health care.	Qualitative descriptive study	2008	Heloísa Beatriz Machado, Cláudia Regina	Baiana Journal of Nursing	3	The objective of the study is to know the beliefs of patients with chronic-degenerative diseases on health and their influence on health care. In the study, a greater prevalence of hypertensive than diabetics was observed. The categories identified showed values: health, family and faith. And as beliefs: "health is everything", "illness is something bad" and "living with the disease for the rest of life." Beliefs about health care involved drug and food care. Health care involved: following the diet, performing physical activity and following the therapeutic regimen. It is important that the professional when approaching and accompanying the patient is aware of their beliefs, so the importance of the link between the professional and the patient. This allows the nurse or any other professional to draw peculiar goals and according to the particularities of each patient.

Effect of dietary intervention on risk factors associated with diabetes mellitus and hypertension in sedentary elderly	Observational, crosssectional and descriptive-analytical	2010	Maria Souza, Antônio Luiz Dantas	Martins, Filho, Mattos, Gomes, Danielli	Manoel Marco André	Brasília Med	3	The study evaluates the effect of dietary intervention on risk factors associated with DM and SAH in the elderly of two teams of Teresina FHP. In the control group, no improvement was observed in the presence of increased glycated hemoglobin. In the dietary intervention group, there was a significant reduction in fasting glycemia and percentage of glycated hemoglobin. In addition to reducing body weight, cholesterol and systolic and diastolic blood pressure.	The study confirms the importance of changing eating habits in the prevention of risk factors and complications of chronic diseases such as hypertension and DM. It is important to strengthen educational activities and guidelines that address this issue to reinforce the importance of the changes and benefits of healthy eating in disease control.
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Figure 4. Fourteen references found in the integrative review. Niterói (RJ), 2016-2017.

DISCUSSION

Studies show that, since the implementation of the Family Health Program in Brazil in 1994, the population's access to health services increased. The family became the object of attention, in the environment in which it lives, allowing an extended understanding of the health / illness process. The program includes actions to promote health, prevention, recovery, rehabilitation of diseases and more frequent injuries.⁶

However, despite the expanded access, there are still many reports of complaints related to lack of medication, difficulty in obtaining consultations in the Health Units, in addition to unsatisfactory physical examination and anamnesis, showing that there are still many aspects to be improved in this field of Family Health.^{6,7,12} Another problem is the low index of medical records, which impairs and limits the conclusions of the research carried out and the veracity of the epidemiological data.⁵⁻⁸ It is important to point out that all these problems are found, still in the present day, in Public Health in Brazil.

In all the studies selected, the female sample was prevalent over the male, which allows us to infer that women seek health services more than men.^{5,13,14} It is important to act in the promotion of human health and increase the access to health services. Many of these men may be diabetic and unaware that they have the disease because they do not seek health professionals, nor do they perform routine tests to detect it.

In addition, studies have shown that the older the disease, the greater the prevalence of the disease, which may be justified by the increase in insulin resistance. Women have a longer life expectancy than men, that is, they live longer than men, and may be more affected by Diabetes, as their prevalence is higher according to age.^{5,13-4} Women diabetics tend to have a higher percentage of body fat and BMI, lower cardiorespiratory fitness and level of physical activity, causing overweight and obesity, risk factors for the disease.¹⁴ Low education and low income present in the sample members justify the difficulty in understanding of the guidelines carried out by the team, as well as the follow-up of the treatment.^{6,13,15} Chronic diseases have a correlation with these variables, since the higher the educational level and economic capacity, the lower the incidence of complications due to the higher level of education. health care. Old age, low

schooling, and a high number of comorbidities undermine the treatment of the disease.¹⁵

In the studies that evaluated the complications of the disease, it was observed that most of the patients presented alterations and complications.^{5,8} In a study carried out, 58.9% of the sample presented at least one complication of the disease, and the prevalence of complications increases with age. This shows the importance of acting in the prevention of the disease to prevent it from establishing itself. The author cites some studies reporting that patients with type 2 DM have a four-fold increased risk of having peripheral vascular disease compared to non-diabetic patients.⁵

In addition to prevention, it is very important to guide those who are already diabetic about the importance of changing eating habits, practicing physical exercise and medication adherence to avoid complications and decrease quality of life. Studies have shown that patients who have control over the disease are less affected by the complications of the disease than the decompensated patients. DM directly affects the patient's quality of life at all levels, and most of these patients are unaware of the severity of the disease.¹⁶⁻⁷

Patients who underwent dietary changes had a reduction in fasting glycemia, glycated hemoglobin, cholesterol, and systolic and diastolic blood pressure, demonstrating the importance of diet and its efficacy. Physical exercise, diet and pharmacological treatment are considered the three main measures in the treatment of DM.^{18,19}

CONCLUSION

After analyzing the evidenced studies, it is possible to conclude that the assistance to diabetic patients in the Family Health Strategy still has many aspects and aspects to be improved. The problems due to lack of public sector investment are chronic and deserve greater attention from the responsible authorities.

There should also be greater attention to the quality of health care, both by professionals and patients. Discipline and attention to care reduces harm by generating a successful treatment. It is important to reinforce measures of actions in the health services that aim to reduce the risk factors and the impact of complications on the quality of life of the patients with DM, since the improvement of the health brings important consequences for the success of the treatment and reduction of damages and complications of the disease.

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The complexity of the treatment of DM requires that the health team is qualified for care, therefore it is necessary and primordial to carry out training programs and ongoing education with professionals to carry out quality care.

It is believed that this study will contribute in the areas of teaching, research and care, increasing the professionals' knowledge about DM in the FHT, besides increasing the knowledge of the patients about their pathology and stimulating educational actions in this scenario. Their understanding of the reality they have experienced and the assistance they have received in the last few years allows them to increase the interest of health professionals and the government in improving the quality of the service provided, providing care, raising awareness and training and qualifying professionals.

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