ABSTRACT

Objective: To report the experience of nursing students in carrying out consultations for people with diabetes, at home and in the office, in the context of primary health care. Methods: This is an experience report, based on theoretical and practical activities at a family health center, during the sixth period of the Nursing Graduation course at a Federal University of Southern Brazil, in the second half of 2018. Results: The nursing consultations provided the family health team with an analysis of the current health conditions of these patients and the opportunity to develop multidisciplinary team work for greater effectiveness in care. The experience made it possible for academics to correlate theory and practice and intensified learning for the performance of the profession. For users, it provided greater knowledge about diabetes, reflection on the complications of the disease and ways to promote health, encouraging self-care. Conclusion: The experience allowed to verify the importance of establishing the integration between the university and the health services, in order to improve and strengthen health care in primary care.

Keywords: Diabetes mellitus. Home visit. Health promotion. Primary health care. Community health nursing.

INTRODUCTION

Brazil has a demographic transition movement resulting from the population aging process, which accompanied by sedentary lifestyle, accelerated urbanization and lifestyle changes related to industrialized food, are triggering an increase in chronic non-communicable diseases, among them Diabetes Mellitus (DM)(1).

DM refers to a metabolic disorder of heterogeneous etiologies, characterized by hyperglycemia and disturbances in the metabolism of carbohydrates, proteins and fats, which result from defects in secretion and/or the action of insulin(2), that is, the organism becomes deficient in the production of insulin or its effective use for the uptake of glucose in the blood.

Among the multiple classification of DM, type 1, type 2 and gestational predominate. Diabetes (DM1) is an autoimmune disease, which can affect different age groups, it starts in childhood, making people dependent on insulin treatment. DM2 can develop in any age group, mainly affecting the elderly, in which insulin cannot capture the glucose molecule in the bloodstream for the production of necessary energy. People with DM2 are not necessarily dependent on insulin, and most use oral hypoglycemic agents. Gestational Diabetes is characterized by any index of glucose intolerance detected during pregnancy and which can only last during this period(3).

It is important to highlight that chronic diseases have been a worldwide concern and the
outlook is not favorable. According to the 2019 edition of the International Diabetes Federation, about 463 million adults between 20 and 79 years of age live with DM and the estimate for 2045 is that this number will reach 700 million people. It was identified that the rate of people with DM is increasing worldwide and that 79% of diagnosed people live in low and middle income countries. Around 1.1 million children and adolescents were diagnosed with DM1 and one in six births confirmed the presence of gestational diabetes(4).

It is believed that the growth of DM occurs due to geographical changes, the aging of the population, the increase in risk factors (obesity and physical inactivity) and the lack of development and fragility of actions in health services involving DM. Approximately 4.2 million deaths were caused by DM and approximately 374 million people are at risk of developing DM2, and this growing number demonstrates the need to implement health education actions and implement public policies that provide promotion, prevention and control of the disease, in addition to the person's awareness of their health and the importance of their self-care(2,4).

In this perspective, there is an urgent need to promote the health of people with DM, as the disease can remain asymptomatic for a long time and its detection, in most cases, is done by risk factors (lifestyle and family history) and/or when the person has some complication in the body, such as vision problems, microvascular and macrovascular complications and kidney changes. This chronic condition will require continuous and multiprofessional monitoring of health services and require good management by professionals in Primary Health Care (PHC), in order to prevent hospitalizations and morbidity and mortality(2).

The Family Health Strategy (FHS) emerged with the objective of strengthening assistance in PHC, carrying out actions such as health promotion and protection, disease prevention, diagnosis, treatment, rehabilitation, harm reduction and maintenance of health(5). It is in this scenario that the nursing professional finds himself, participating in programs that promote health and practices for the control of chronic diseases, with a holistic, integral and equitable look at the care of individuals(5). The nursing professional, within the FHS, performs the screening of people living with DM and makes consultations in order to achieve glycemic level control, stimulate awareness about the disease and the continuity of self-care, thus promoting the health of this public(2).

When performing Practical Theoretical Activities (PTA) in the sixth period, in the curricular component of Nursing Care in the Human Living Process I (which focuses on nursing care for adults and the elderly), of the graduation nursing course at a Federal University of the South from Brazil, the need and opportunity arose to carry out nursing consultations in the office, as well as in the home space for people with DM. The development of the nursing consultation aimed at people with diabetes, requires from academics, scientific deepening on the theme and methodology of consultation in different scenarios. Therefore, the purpose of this communication is to report the experience of nursing students in carrying out consultations for people with diabetes, at home and in the office, in the context of primary health care. This report may contribute to the various possibilities of providing nursing care for people who experience DM.

METHODOLOGY

This is an experience report, based on the PTAs, at a Family Health Center (FHC), during the sixth period of the Nursing Graduation course at a Federal University of Southern Brazil, in the second half of 2018. The PTAs are carried out as a practical part in all periods of graduation, with the aim of promoting the insertion of the academic in the health service to expand their knowledge about nursing in practice. In the sixth period, the class is divided into groups of 4 to 5 students who rotate in different scenarios for the development of practical activities aimed at the health of adults and the elderly. The practice in the FHC is guided by Public Health Policies aimed mainly at people with diabetes and hypertension and uses nursing consultation as a methodology for assistance in home visits and in consultations held at the unit.
During the discussion of work routines with the FHS team, it was found that people with DM in the assigned area were not being adequately accompanied by the lack of time to offer more specific assistance to this public. From then on, the nurse responsible for the ESF team organized a report of indicators, which was extracted from the data of the electronic medical record of the FHC, verifying the presence of 107 patients with DM registered by the Community Health Agents (CHA).

In the electronic medical record of people with DM, a survey was carried out, observing when and what the value of the last fasting glucose test was. It was found that, of the 117, only 47 had exams performed in 2018, another 54 had exams in 2017 and 16 of them had undergone laboratory exams in 2016 or previous years. Based on these data, it was decided to provide initial care for all 117 people with diabetes.

Thus, all people registered with DM, regardless of being accompanied by the ESF team, were scheduled for nursing consultation during the development period of the PTAs. The consultations were scheduled to be held at the FHC office and also at home, for people with mobility impairments.

The CHAs were responsible for delivering invitations to the consultation at the homes of people with DM or communicating them the day when the team would perform the consultation at home. The nursing technician from the ESF team who worked at the FHC reception was informed about the schedules and the need to welcome users. The nursing technician who worked in the vaccine room was informed about the planned actions on behalf of people with DM and informed that users with delayed vaccines would be referred for vaccination update. The doctor, dentist and oral health technician of the ESF team became aware of the actions that would be developed and their support was sought, when necessary, in the entire process of conducting consultations with people with DM, involving and integrating all team members in a common action: assisting people with DM in the community and FHC.

RESULTS AND DISCUSSION

When carrying out the nursing consultation, it becomes possible to achieve holistic and comprehensive care, as well as the creation of a bond between the professional nurse and the user(6,7). In addition, the nursing consultation provides a qualified listening, which allows the mutual exchange of information between the dialogues, such as life habits, how much he knows about his clinical condition, important care, disease prophylaxis, treatments and possible complications(8).

The experience of academics in the FHC, and, especially, in the community, provides a reliable knowledge of the current reality and expands the link between the service, university and community, generating the dissemination of information, enabling the population to know about their health problems and emphasizing the importance of lifestyle changes for the control of chronic non-communicable diseases(9), such as DM.

Nursing consultations carried out by academics during PTAs made it possible to verify, among other aspects, the need for eye health care for people with DM, since the ophthalmic follow-up index was low, showing the need to refer them to the ophthalmologist and to check the current status of those who were already waiting in line for the Sistema Nacional de Regulação (SISREG, National Regulation System). It is important to highlight that in the place where the reported experience occurred, the annual eye health care of people with DM is ensured by the municipality's protocol, since diabetic retinopathy is a microvascular complication with high incidence in people with diabetes. This is exemplified by the study by Hirakawa (2019), in which he says that in approximately 15 years after the diagnosis of the disease, about 80% of people with DM2 and 97% of people with DM1 will have some optical change due to retinopathy(10).

The consultations revealed that a considerable portion of people with DM stored the prescribed medication incorrectly and were disoriented about the scheduling of medications, evidencing the lack of effective monitoring by the health team. Other weaknesses were identified, such as physical inactivity and lack of glycemic control in food, which constitute the greatest difficulty in treating people with DM
and the lack of adherence to treatment\textsuperscript{11}.

During the nursing consultation, people were given a moment to clarify their doubts about the necessary tests to be done, the results of the tests they had already carried out and the correct use of the medication. For those using insulin, the need to rotate the application regions (in the subcutaneous tissue of the arms, abdomen, thighs and buttocks), the correct angulation of the front needle was addressed and reviewed. to the fabric and instructions on dosage and correct storage\textsuperscript{12}.

Among the observations made during the activities, the deficient knowledge about the DM disease was intensely demonstrated. Thus, academics organized themselves to provide further clarifications, based on the verification of diagnoses commonly evidenced in nursing for people with DM\textsuperscript{5}, enabling them to expand their knowledge, encouraging them to perform self-care, such as, foot care.

People with DM were instructed on the benefits of physical activity, and the options to adapt according to each person's condition. The recommended intake of water and the practice of a balanced, healthy, low-sodium, low-fat and low-fat diet, in addition to being advised on the availability of the nutritionist at the Extended Family Health Center (EFHC) for specific schedules and guidelines.

The execution of the nursing consultation enabled the general analysis of the current health conditions of people with DM, including the verification of the vaccination situation. In this sense, academics checked everyone's vaccination card and directed, when necessary, to complement the missing vaccines. Vaccine control of people in each area is monitored by the respective nurse responsible, and this monitoring contributes to the management of diseases that have a vaccine available in the \textit{Sistema Único de Saúde} (SUS, Unified Health System) such as Hepatitis B and Double Adult\textsuperscript{13}. On this occasion, there was a need to request special immunobiologics, such as the Pneumo 23 vaccine, which is offered to people with DM, by filling out the application form, which must be signed by the doctor. The completed forms were sent for evaluation of the municipality's epidemiological surveillance and, when approved, immunobiologicals were administered, as released by the sector.

At the end of each nursing consultation, many people thanked the way they were welcomed by the students. The possible factor that may have contributed to people's satisfaction was the use of the strategy of not blaming and being positive in view of the successes of the care they were already performing, because, when acting in such a way, the nurse professional develops alongside with users the practice of self-care, which provides better adherence to treatment and improved quality of life for people living with DM\textsuperscript{11}.

In the meantime, academics were able to develop nursing consultations at the FHC and during the Home Visit (HV). In the consultations carried out at home, academics had the opportunity to experience the daily life of the territory, the existing social, economic and cultural differences, they verified the need to establish the bond with people in order to obtain results. It is noteworthy that the HV is one of the main light technologies used for assistance and care in Primary Health Care (PHC) and therefore should be widely used as a strategy for access to users\textsuperscript{14}.

In addition to establishing a greater bond with people, academics were able to develop the stages of the HV, generating, as a result, the construction of the nursing process, which is one of the essential instruments for assistance\textsuperscript{6}.

During the realization of people's genogram, the presence of DM was identified in family members, which made it possible to demonstrate to users one of the predisposing factors of DM, heredity, in a concrete way. The main challenge of the nursing consultation carried out in the HV was the displacement in the territory on rainy and intense sun days, but, it provided the perception of the different realities existing in the same territory.

Another challenge for the academics was the time allocated for carrying out the nursing consultations at the FHC, which lasted around 30 minutes, as there were always other people scheduled, having the need to comply exactly with the stipulated time, so that all people could be met. After the orientations and physical examination, the records of the actions developed were carried out. Despite the short time, it was possible to carry out the nursing
consultation in a welcoming manner, with a comprehensive view, offering humanized care and meeting the priority needs of people, remembering that time is a constant that will depend on the specific care for each user, according to with their priorities (15).

The first nursing consultation held triggered great expectations and fears for academics, as it is a new experience in graduation. However, during the course of the PTA, students were able to improve their performance, presenting gradual improvements in the approach of people who experience DM, in addition to intensifying the correlation between theoretical and practical knowledge.

In nursing consultations, students had the opportunity to improve their writing, while taking notes and nursing developments in users’ electronic medical records. When accessing the medical records, it was possible to observe that there is a lack of records of the FHS professionals. The act of recording data is considered relevant so that the entire multiprofessional team has knowledge of the actions performed and the needs that the user presents, pointing out their latest exams, consultations with dentists, ophthalmologists, possible complications resulting from their disease, among other factors.

Therefore, it is pointed out that the consultations carried out in the FHC and the consultations carried out during the HV have differences and particularities in relation to the time allocated, the knowledge of the reality experienced, the environment that may be favorable for broader conversations or limited due to participation of other family members who intimidate the placements of people with DM. Thus, it is understood that the determinant of the best place for the nursing consultation will be the profile of the person with DM. The nurse, knowing the reality, must plan and alternate the consultation places in order to broaden their approach.

In the consultations, the date of the last dental appointment was monitored, verifying that some users had never received dental care at the UBS, and educational activities were organized with the team for all people with DM. The activity was carried out by nursing students at the FHC, lasting approximately thirty minutes, with five different groups. The CHA invited people with DM to attend the FHC and participate in the educational activity at different times, with a view to enabling the realization of the five groups in a single day.

After each educational activity, people were evaluated by the dentist and an oral evaluation was carried out and according to the need, referred to specialists, as in the case of dental prostheses. On the same occasion, a visual screening with the Snellen test was organized by members of the ESF team, in order to observe people with greater visual difficulties and seek to refer them to the ophthalmologist, since many had been waiting for several months for the consultation with the specialist and others, they had never consulted. On this day, they were invited to participate in an educational activity with the EFHC nutritionist, in the following month, at the FHC itself, as it was evident that the ESF team was willing to continue assisting people with DM, even without the presence of academics.

The educational proposal was developed and carried out with the collaboration of all members of the ESF team, with the support of nursing students, under the supervision of a teacher. The entire team was involved and helped to restructure the physical space of the FHC and to adapt the service, enabling the successful execution of the educational activity.

The association of theory with practice was exercised daily and was stimulated, at the end of each day, by moments of discussion between academics and teachers responsible for the activities. This period was reserved for sharing the actions developed by the group of academics, for planning and orienting the activities of the next day and for providing feedback on the current resourcefulness of each academic. The daily reflections made it possible for the anxieties and anxieties presented by the academics to be cherished and the enthusiasm balanced, providing security and willingness to make the necessary improvements.

Some limitations in the teaching-service process were evidenced, such as the inadequacy of the physical space of the FHC. This mismatch in the structure becomes a significant difficulty in the development of educational activities and in the articulation of learning in the health
service, since the interaction and dialogue between users, professionals, academics and teachers can be compromised\(^{(16)}\). However, the success of the proposed activities was a combination of the pro-activity of those involved with teamwork. Despite the difficulties that a multidisciplinary team, including health, faces daily in the face of hierarchy and other factors\(^{(17)}\), the experience was extremely positive, since the integration of FHS professionals, EFHC and academics enabled continuous progress planned interventions, resulting in wide coverage and effective assistance to people with diabetes.

**CONCLUSION**

The insertion of academics in the context of PHC allowed the association of theory with practice and intensified learning, offering more meaning to multiprofessional work in health. The nursing consultation, whether in an office or in HV, provided the visualization of the conditions of the service and the territory, as well as its limitations and possibilities, which facilitated the planning and implementation of users’ health care.

The study presents as a limitation the short period of performance of the activity and the performance in a single FHC, which suggests that new activities like this one be replicated in other semesters and that other health units are included.

The lived experience contributed to the strengthening of the link between the university and the service, giving rise to new ideas to be developed in the coming semesters. For the health service, it made possible the integration between the members of the FHS and the academics, developing the teamwork that they learned intensely throughout the process, with the opportunity to provide humanized and resolute care to people with DM.

It is concluded that activities like this should be encouraged in Higher Education, in academic and professional training in the field of health, providing closer service and academic community, to increase the efficiency of the care provided and exercise the humanized view of the future nursing professional.

**CONSULTA DE ENFERMAGEM: RELATO DE EXPERIÊNCIA SOBRE PROMOÇÃO DA SAÚDE DE PESSOAS COM DIABETES MELLITUS**

**RESUMO**

**Objetivo:** Relatar a experiência de acadêmicos de enfermagem na realização de consultas para pessoas com diabetes, no espaço domiciliar e no consultório, no contexto da atenção primária à saúde. **Métodos:** Trata-se de um relato de experiência, embasado nas atividades teórico-práticas em um centro de saúde da família, durante o sexto período do curso de Graduação em Enfermagem de uma Universidade Federal do Sul do Brasil, no segundo semestre de 2018. **Resultados:** As consultas de enfermagem proporcionaram ao equipe de saúde da família a análise das condições de saúde atuais dos pacientes e a oportunidade de desenvolver o trabalho em equipe multiprofissional para maior efetividade no atendimento. A experiência possibilitou aos acadêmicos a correlação entre teoria e prática, bem como intensificou o aprendizado para o desempenho da profissão. Para os usuários, oportunizou maior conhecimento sobre a diabetes, reflexão sobre as complicações da doença e maneiras de promover a saúde, estimulando o autocuidado. **Conclusão:** A experiência permitiu verificar a importância em estabelecer a integração entre a universidade e os serviços de saúde a fim de aprimorar e fortalecer a assistência de saúde na atenção primária.

**Palavras-chave:** Diabetes Mellitus; Visita Domiciliar; Promoção da Saúde; Atenção Primária à Saúde; Enfermagem em Saúde Comunitária.

**CONSULTA DE ENFERMERÍA: RELATO DE EXPERIENCIA SOBRE PROMOCIÓN DE LA SALUD DE LAS PERSONAS CON DIABETES MELLITUS**

**RESUMEN**

**Objetivo:** Relatando la experiencia de alumnos de enfermería en la realización de consultas para personas con diabetes, en el espacio domiciliario y en el consultorio, en el contexto de la atención primaria y a la salud. **Métodos:** se trata de un relato de experiencia basado en las actividades teórico-prácticas en un centro de salud de la familia, durante el sexto periodo del curso de Pregrado en Enfermería de una Universidad Federal del Sur de Brasil, en el segundo semestre de 2018. **Resultados:** Las consultas de enfermería ofrecieron al equipo de salud de la familia el análisis de las condiciones de salud actuales de los pacientes y la oportunidad de desarrollar el trabajo en equipo multiprofesional para mayor eficacia en la atención. La experiencia posibilitó a los alumnos la correlación entre teoría y práctica, así como intensificó
el aprendizaje para el desempeño de la profesión. Para los usuarios, posibilitó un mayor conocimiento sobre la diabetes, una reflexión sobre las complicaciones de la enfermedad y maneras de promover la salud, fomentando el autocuidado. **Conclusión:** La experiencia permitió verificar la importancia en establecer la integración entre la universidad y los servicios de salud a fin de perfeccionar y fortalecer la asistencia de salud en la atención primaria.

**Palabras clave:** Diabetes mellitus. Visita domiciliaria. Promoción de la salud. Atención primaria a la salud. Enfermería en salud comunitaria.

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