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Multiprofessional caution in health of children and teenagers with diabetes: literature study

ABSTRACT | Objective: to describe the multidisciplinary health care for children and adolescents with Diabetes Mellitus. Method: integrative review, descriptive and qualitative. Carried out at: Scientific Electronic Library Online (SciELO) and academic Google, with data collection in June 2021. Through inclusion and exclusion criteria and crossing of descriptors, 8 publications on the subject were selected. The results were displayed in two tables. Results and discussions: Articles from the 2020s on the subject prevailed. Most journals published are in the field of nursing. Health education becomes essential in monitoring and maintaining diabetes. The illness of children and adolescents with DM affects the whole family. Conclusion: The multidisciplinary approach is extremely important, as it takes care of the child/adolescent, but of all those involved, guiding interventions and enhancing home care.

Keywords: Multiprofessional; Kid; Health; Diabetes; Caution; Teenagers.

RESUMEN | Objetivo: describir la atención de salud multidisciplinaria para niños y adolescentes con Diabetes Mellitus. Método: revisión integradora, descriptiva y cualitativa. Realizado en: Scientific Electronic Library Online (SciELO) y Google académico, con recolección de datos en junio de 2021. Mediante criterios de inclusión y exclusión y cruce de descriptores, se seleccionaron 8 publicaciones sobre el tema. Los resultados se muestran en dos tablas. Resultados y discusiones: prevalecieron los artículos de la década de 2020 sobre el tema. La mayoría de las revistas publicadas pertenecen al campo de la enfermería. La educación sanitaria se vuelve fundamental para controlar y mantener la diabetes. La enfermedad de los niños y adolescentes con DM afecta a toda la familia. Conclusión: El abordaje multidisciplinario es de suma importancia, ya que se ocupa del niño / adolescente, pero de todos los involucrados, orientando las intervenciones y potenciando la atención domiciliaria.

Palabras claves: Multiprofessional; Niño; Salud; Diabetes; Precaución; Adolescente.

RESUMO | Objetivo: descrever o cuidado multiprofissional em saúde para as crianças e adolescentes com Diabetes Mellitus. Método: revisão integrativa, de caráter descritivo e qualitativo. Realizado na Scientific Electronic Library Online (SciELO) e Google acadêmico, com a coleta de dados em junho de 2021. Mediante critérios de inclusão e exclusão e cruzamento dos descritores, foram selecionadas 8 publicações sobre o tema. Os resultados foram expostos em dois quadros. Resultados e discussões: Prevaleceram artigos dos anos de 2020 sobre o tema. A maioria das revistas publicadas são da área da enfermagem. Educar em saúde, torna-se essencial no acompanhamento e manutenção da diabetes. O adoecimento das crianças e adolescentes com DM, repercute em toda a família. Conclusão: A abordagem multiprofissional é extremamente importante, por cuidar da criança/adolescente, mas de todos os envolvidos, orientando as intervenções e potencializando o cuidado no domicílio.

Palavras-chaves: Multiprofissional; Criança; Saúde; Diabetes; Cuidado; Adolescente.

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INTRODUCTION

Diabetes Mellitus (DM) is a metabolic disorder that is classified by the complete or partial absence of insulin production. There are three types of DM in the world: type I DM, type II DM and gestational DM, each with some different peculiarities, the first being more frequent in children and adolescents. In type I DM, there is an absolute absence of insulin production by the pancreas, on the other hand, in type II DM there is a production, but in a smaller amount, differentiating one from the other. In gestational DM, blood glucose levels are altered during pregnancy, and also return to

normal after this pregnancy period, however, in some cases, they can remain and become type II DM, in a chronic form. ⁽¹⁾

Children and adolescents need control and monitoring, care is provided from diagnosis, when DM is screened in childhood or adolescence, in order to minimize health problems and complications for this population. Faced with the diagnosis, children and adolescents need to be monitored by a multidisciplinary team, which takes care and advises on the use of insulin and its administration, perception of signs of hypo and hyperglycemia, ideal nutrition, routine organization, physical activity, self-care and therapies. ⁽¹⁻²⁾

Family members must also be oriented about care, and need to be part of the multidisciplinary monitoring, according to the guidelines

provided. The multidisciplinary team needs to prepare the family as well, exercising comprehensive care and sharing actions. ⁽¹⁻²⁾

Thus, studies have shown that mothers of children with DM1 feel incompetent in face of the diagnosis and unprepared to deal with the complex situation of the disease, manifesting feelings of anxiety, stress and social isolation. ⁽¹⁻²⁾ Children who have DM need support, which requires the creativity of the health team, offering care in a playful way, using therapeutic toys, theater, music and stories to alleviate the fear and insecurities of the family with the child. ⁽²⁾

The continuity of care is something essential to discuss when the theme refers to chronic diseases, as these children and adolescents need to be cared for in all health services, from primary to tertiary, and at outpatient levels as well. ⁽³⁾ Thus, it was possible to construct the research question of this study: How is multidisciplinary health care for children/adolescents with diabetes mellitus in the literature? Its objective is: to describe the multidisciplinary health care for children and adolescents with Diabetes Mellitus.

METHOD

Integrative review study, descriptive and qualitative. Conducted in electronic media: Scientific Electronic Library Online (SciELO) and academic Google, with the data collection period in June 2021. For the selection of articles, the inclusion and exclusion criteria were organized, as the inclusion criteria were: publications in Portuguese, complete, free and directed to the objective, in addition to being published between the years 2016 and 2021. And as exclusion criteria: publications in other languages, outside the established period, incomplete and that cover access fees to the material.

To select the publications, an instrument was developed, prepared by the authors of the articles, which sought to collect important information, such as: authors, title, year of publication, journal, level of evidence and the main multidisciplinary care offered to children and adolescents with DM. To carry out the search, some Health Sciences Descriptors (DeCS) were defined: Multiprofessional; Criança; Saúde; Diabetes; Cuidado and Ado-

lescente, as the crossing of the Boolean AND operator.

The search took place from the encounter of 105 publications on the subject, at first. Then, the publication period was inserted, leaving 58 publications to follow in the analysis. The titles of 58 publications were read, in which only 08 were in the perspective of this study. The abstracts of the 08 publications were read, and all of them responded to the objective of the study. Finally, the full reading of the materials was carried out, verifying that the 08 publications could really be included in this study. In the end, 97 publications were excluded and 08 publications were included. The entire process was validated by two researchers related to the study theme.

RESULTS

The publications were organized into two tables, with the help of the Microsoft Word program, in which the information that best characterizes the materials found was displayed.

Articles from the years 2020 prevailed, and in 2016, 2017, 2018 and 2019, they published only one arti-

CHART 1 – Presentation of publications related to multidisciplinary care for children and adolescents with DM:

Authors	Title	Year of publication	Journal
QUEIROZ, M.V.O. et al. ⁽⁴⁾ .	Sensitizing children with diabetes for self-care: Contribution to educational practice.	2016.	Escola de Enfermagem Anna Nery.
WOLKERS, P.C.B. et al. ⁽³⁾ .	Children with Type 1 Diabetes Mellitus: Vulnerability, Care and Access to Health.	2019.	Texto e Contexto Enfermagem.
WOLKERS, P.C.B. et al. ⁽⁵⁾ .	Children with type I Diabetes Mellitus: access to special immunobiologicals and childcare.	2017.	Revista da Escola de Enfermagem da USP.
SOUZA, R.R. et al. ⁽⁶⁾ .	Home care for children and adolescents with type 1 diabetes mellitus from the caregiver's perspective.	2020.	Revista de Enfermagem da UERJ.
ALMEIDA, K.O. et al. ⁽⁷⁾ .	Care directed to School Physical Education Practices for Children with Type I Diabetes.	2020.	Brazilian Journal of Technology.
DIXE, M.A.C.R. et al. ⁽⁸⁾ .	Effects of an education program on the knowledge and self-perception of school educators in preparing to care for type 1 diabetic children.	2020.	Einstein.

SILVA, L.C.S. de. et al. ⁽⁹⁾ .	Hypertriglyceridemic Waist and Associated Factors in Children and Adolescents with Type 1 Diabetes Mellitus	2020.	Revista Paulista de Pediatria.
HERMES, T.S.V. et al. ⁽¹⁰⁾ .	Child with type 1 diabetes and family life: repercussions on the management of the disease.	2018.	Saúde e Debate.
Source: Data research, 2021.			

cle on the subject. Most journals published are in the field of nursing, in which it is pertinent to explain that nurses are one of the most active professionals in the care of children and adolescents with DM. The titles of the publications state the grandeur of the theme, in which it is clear that several important points are listed in each approach to titles.

DISCUSSION

Health education, as seen in one of the studies, becomes essential in monitoring and maintaining diabetes. Therefore, it is essential that health professionals know the reality of patients

with DM, prioritize their needs, aiming to broaden the vision of multidisciplinary therapeutic approaches. ⁽⁴⁾

Based on what is known about DM, professionals can help the family and caregivers, shaping what is needed to achieve success in care. The family's previous experiences cannot be devalued, there are problems surrounding the care of children and adolescents, such as: self-care, family habits, deficit in monitoring by the multidisciplinary team, non-adherence to treatment and other problems. ⁽⁴⁻¹¹⁻¹²⁾

Taking into account the reality of the child/adolescent, social determinants are included, which include health care, analyzing the care of the

family with the child, the day-to-day, social and economic factors that intertwine the child, family structure, biological factors, etc. Access to medications for the treatment of DM is still a challenge in Brazil, given the inequality in health, some children and adolescents do not continue treatment due to barriers in accessing health, violating the principle of universality. For this reason, multidisciplinary and inter-institutional health care is important to reduce the weaknesses of the system and ensure access to the continued treatment of DM. ⁽³⁾

The child/adolescent with DM 1 needs regular assessments, and the entire support network involved in

CHART 2 – Description of multidisciplinary care for children and adolescents with DM found in publications:	
Authors	Multiprofessional Care for Children and Adolescents with Diabetes Mellitus
QUEIROZ, M.V.O. et al. ⁽⁴⁾ .	- Health education for the family and caregivers is a multidisciplinary practice.
WOLKERS, P.C.B. et al. ⁽⁹⁾ .	- Health professionals who take care of children with this chronic condition take into account the social determinants, vulnerabilities and the entire context in which the child lives.
WOLKERS, P.C.B. et al. ⁽⁵⁾ .	- The study pointed out several problems regarding the vaccination of children with DM: incomplete vaccination schedules, delayed annual boosters, absence of vaccination card in appointments, misinformation about the special nature of vaccination, as well as the emphasis on the need to present a specific form to obtain vaccination. These problems are multi-professional guidelines, as the follow-up appointment should guide family members to carry out vaccination.
SOUZA, R.R. et al. ⁽⁶⁾ .	- Family members and caregivers demonstrated some difficulties in this study, regarding care with: correct application of insulin, dietary restrictions and lack of support from the school, in food control and drug treatment.
ALMEIDA, K.O. et al. ⁽⁷⁾ .	- In physical education, children need to be continually oriented and evaluated for the practice of physical exercise. - It is important to look for signs of hypoglycemia, and to observe the specifics of the child/adolescent.
DIXE, M.A.C.R. et al. ⁽⁸⁾ .	- School educators are also part of the multiprofessional monitoring of children and adolescents with DM, therefore, they need to know about the disease and assist in caring for the child in the school environment.
SILVA, L.C.S. de. et al. ⁽⁹⁾ .	- The nutritionist is also an active part of the care of children and adolescents with DM, in this article, with regard to the hypertriglyceridemic waistline. Which is a tool to help diagnose metabolic syndrome, making it an important tracker.
HERMES, T.S.V. et al. ⁽¹⁰⁾ .	- One of the important results of the article is that health professionals need to help family members in the management and routine of children and adolescents with DM, so that they can adhere to treatment.
Source: Data research, 2021.	

caring for them is important. Unfortunately, this is not always possible in health services, access to primary care is a major problem, generating large-scale hospitalizations and DM complications easily, which could be avoided with correct follow-up. ⁽⁵⁾ As seen in the results, the vaccination of these children and adolescents is also a problem to be reconsidered, there are deficits in the immunization indicators of these children, making them susceptible to the involvement of other diseases, in addition to DM. ⁽⁵⁾

The illness of children and adolescents with DM affects the whole family, it is not only the child/adolescent who becomes ill, the family is also concerned, and as a support network it needs to be strengthened, so as not to cause suffering for each other. ⁽¹⁰⁻¹²⁾ In this sense, the multidisciplinary approach is extremely important, as it takes care of the child/adolescent, but of all those involved, guiding interventions and enhancing care at home. It is important to encourage the child/adolescent with DM regarding lifestyle, changes in routine, handling the insula, performing physical exercises, checking capillary blood glucose and other care. ⁽⁶⁾

As seen in this article, physical activity is important, and has been continuously implemented in the care of

DM patients, along with insulin therapy and medication, helping to significantly prevent and control DM, increasing the quality of life of patients. ⁽⁷⁾



It is not easy to control the blood glucose levels of patients with DM, at all times the multidisciplinary team needs to be close to the family, evaluating risks and problems.



It is not easy to control the blood glucose levels of patients with DM, at all times the multidisciplinary team needs to be close to the family, evaluating risks and problems. Thus, the nutritionist is also important, as he helps with metabolic control in an individualized way. ⁽⁹⁾ It was seen that

the school is also important, as it is one of the environments most visited by children/adolescents in their daily lives, and it is interesting that educators know about the disease and talk about care in the school process, helping family and the health team. ⁽⁸⁾

CONCLUSION

The study achieved its objective, and managed to expose about the multidisciplinary care for children and adolescents with DM. It was noticed that DM 1 is predominant in children and adolescents, who need care from all health professionals, such as: physical educators, nurses, doctors, dentists, nutritionists, psychologists and teachers at the school they attend.

This study is recommended for health academics, health professionals, family members and anyone interested in understanding more about the disease and multidisciplinary care. Further research on the subject is needed so that the subject is expanded in the academic community. Health professionals play a key role, taking care from prevention to injuries and complications that can occur in DM. It was understood that the family is a support network, and that it needs to be part of health care, being inserted in what is relevant. 🐣

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