

Supplementary material 2

Synthesis of included studies. Fortaleza, CE, Brazil, 2022

Authors, journal,	Study design and	Objectives	Main findings
country, and year	level of evidence		
Wicaksana et al., Diabetes & Metabolic Syndrome: Clinical Research & Reviews, Indonesia, 2020	Scoping review, 4.a	To review current evidence on diabetes control and specific considerations during the COVID-19 pandemic for people living with diabetes.	The study presents dietary guidelines (low carbohydrate intake, low fat intake and optimal protein intake, without skipping meals). It is also recommended that the daily diet must be divided into three meals and a snack. Recommendations for home exercise such as treadmill, stationary bike or running and resistance training were also given, as well as guidelines for the advance purchase of blood glucose monitoring supplies and medications on the Internet. Adherence to medication regimen must be assessed through teleconsultation. An assessment of the previous history of complaints, allergy, and hypoglycemia must be carried out and proper orientations must be provided. Finally, the study covers guidelines for healthy coping during the pandemic, measures to prevent COVID-19, and remote
			tracking for diabetes control amid the pandemic.
Banerjee et al., Diabetes & Metabolic Syndrome: Clinical Research & Reviews, India, 2020	Narrative review, 4.a	To review the various aspects of patient-centered care through diabetes self-management education based on the available literature.	The study covers guidelines for self-care focusing on diet, exercise, glycemic monitoring, medication adherence, hypoglycemia management, complications screening, and psychosocial support. The study also recognizes the importance of remote consultations.
Ranscombe, Lancet Diabetes & Endocrinology, Scotland, 2020	Report, 5.b	To provide information on how people with diabetes can seek counseling and manage their condition.	Remote assistance for diabetes self-management can be accomplished through technology-mediated programs, focusing on adherence to dietary guidelines, physical exercise, and stress reduction.
Bhaskar et al., Frontiers in Cardiovascular Medicine, Australia, 2020	Perspective, 5.b	To propose a screening and management protocol for patients with cardiovascular disease and diabetes in COVID-19 settings to minimize harm to patients, healthcare systems, and healthcare professionals	The study covers virtual guidelines concerning the practice of physical exercises, guidelines for better coping during the pandemic, measures to prevent COVID-19, and remote management of patients with diabetes and cardiovascular diseases during the pandemic.



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Murphy, Diabetes Technology & Therapeutics, UK, 2020	Cross-sectional, 4.b	To review the management of diabetes in pregnancy before and during the block.	The study reinforces the use of remote guidance to support pregnant women with type 1 diabetes concerning glucose monitoring and insulin administration.
Taheri et al., Lancet Diabetes & Endocrinology, Qatar, 2020	Letter, 5.b	To describe diabetes management in Qatar during the COVID-19 pandemic.	The study reinforces the use of remote strategies to control diabetes amid the pandemic, focusing on adherence to dietary guidelines, physical exercise, blood glucose monitoring, medication usage, prevention of diabetes-related complications, mental care, and reduction of anxiety and depression.
Garg et al., Diabetes Technology & Therapeutics, USA, 2020	Case report, 4.c	To present two cases of treatment for recent type 1 diabetes mellitus (T1DM) via telehealth.	The study shows that telemedicine can be used safely and effectively for new-onset T1DM training and education for pediatric and adult patients and their families, focusing on insulin regimen adherence and emotional support.
Bornstein et al., Lancet Diabetes & Endocrinology, Germany, 2020	Literature review, 4.a	To provide practical management recommendations on the differentiated needs in managing patients with diabetes at risk for or with COVID-19.	The study presents guidelines and practical recommendations for managing diabetes during the pandemic. The guidelines cover blood glucose monitoring, medication usage, drug interactions, and hyperglycemia management.
Isip-Tan et al., Journal of the ASEAN Federation of Endocrine Societies, Philippines, 2020	Cross-sectional, 4.b	To present educational media about diabetes and its management in times of COVID-19.	The study reinforces the use of social media to provide health information to patients with diabetes to maximize their compromise to the therapeutic regimen amid the pandemic.
Morris, Independent Nurse, England, 2020	Opinion, 5.c	To explore the special risk that COVID-19 can pose for people with diabetes.	The study covers remote guidelines for healthy eating amid the pandemic and the proper management of acute complications such as diabetic ketoacidosis. Besides, guidelines for preventing COVID-19 infection are discussed.
Puig-Domingo et al., Endocrine, Spain, 2020	Opinion, 5.b	To provide endocrinologist statement in response to diabetes treatment during the COVID-19 pandemic.	The study presents guidelines on managing patients with diabetes amid the pandemic, such as dietary recommendations, strict glycemic control, prevention measures, COVID-19 screening, avoiding unnecessary exposure, use of remote strategies to manage the disease, and specific measures related to COVID-19 management.
American Association of Clinical Endocrinologists (AACE), USA, 2020	Guideline, 5.b	To monitor developments around COVID-19 and provide up-to-date	The study covers recommendations for helping patients with diabetes to be prepared to manage their conditions during the COVID-19 pandemic. The guidelines include



information on steps needed to help recommendations about the continuous use of drugs, prescription refill management, and having drugs stored for prevent infection. 14 days. Opinion, 5.b To provide clinical considerations for The study presents recommendations for healthy eating Gupta et al., Diabetes & Metabolic Syndrome: patients with diabetes during the (especially about nutrition and adequate protein intake), Clinical Research & COVID-19 pandemic. guidance on prevention measures against COVID-19, and management of COVID-19 in patients with diabetes. Among Reviews, India, 2020 the recommendations on physical exercise, the authors state that this practice improves immunity and must be performed with caution, avoiding being careful and avoiding The study also presents recommendations for alvcemic monitoring, medication adjustments (antihyperglycemic agents that can cause volume depletion or hypoglycemia should be avoided), and reinforces that may be necessary to reduce the dosage of oral antidiabetic medications. Hartmann-Boyce et al., То provide considerations The study presents recommendations for managing diabetes Literature review, in The Centre for Evidence-4.a managing patients with diabetes amid the COVID-19 pandemic suggesting that people follow their current routine, adopt a healthy diet, stay active, Based Medicine, UK, 2020 during the COVID-19 pandemic. perform more frequent blood glucose monitoring, and properly manage acute complications (such as diabetic ketoacidosis). The study presents recommendations concerning adherence Sinclair et al., Touch Opinion, 5.b provide То considerations in Endocrinology, UK, 2020 managing frail older adults with to a nutritional plan and an exercise plan, recommendations diabetes living in nursing homes on glycemic monitoring and medication adherence, during the COVID-19 pandemic. recommendations on adherence to a plan that improves general health and the mental status, and recommendations for the care of older adults with diabetes. Ghosh et al., Diabetes & The study reinforces telemedicine for diabetes management Literature review, To explore data on the practice of Metabolic Syndrome, telemedicine for patients with during the pandemic. It shows that this approach can be 4.a Netherlands, 2020 diabetes in times of restricted mobility used to educate patients remotely, increase adherence to due to the COVID-19 pandemic. healthy eating, exercise, glycemic control, medication usage, therapeutic adjustments, and management of acute complications. The study covers telenursing actions for the care of Lim et al., Journal of Observational To present a nurse-led telehealth initiative for adolescents with diabetes adolescents with diabetes, focusing on glycemic monitoring, Adolescent Health, study, 5.b Singapore, 2020 mellitus. insulin therapy, and anxiety control.



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Sy et al., JAMA Internal Opinion, 5.b To present the challenges that older The study reinforces the use of remote monitoring to Medicine, USA, 2020 people with diabetes may face and manage diabetes in older adults during the pandemic, offer practical recommendations for focusing on dietary guidelines, exercise, blood glucose caring for them during the COVID-19 monitoring, adherence to drug therapy, healthy coping, and stress reduction. pandemic. Scott et al., The Medical To provide perspective on diabetes The study covers telehealth for diabetes management during Opinion, 5.b control challenges during the COVID-Journal of Australia, the COVID-19 pandemic. The strategies discussed include Australia, 2020 19 pandemic. analysis of blood glucose monitoring using diabetes data management software, remote guidelines for adherence to drug therapy, and recommends that patients with T1DM must have ketone monitoring strips at home for early identification of diabetic ketoacidosis. Abdi et al., Diabetes Systematic review, To summarize the evidence on The study presents recommendations for managing diabetes Research and Clinical diabetes and COVID-19 outbreak amid the COVID-19 pandemic and reinforces that additional 4.a Practice, Iran, 2020 through a systematic review and attention should be given to nutrition, adequate protein meta-analysis approach. intake, exercise, and blood glucose monitoring. Hartmann-Boyce et al., Literature review, To summarize the evidence identified The study summarize evidence on remote support for Diabetes Care, UK, 2020 4.a through rapid reviews on the direct patients with diabetes and reinforces recommendations for and indirect risks for people with maintaining a good nutritional status, blood glucose diabetes from COVID-19. monitoring, adherence to drug therapy, regular drug dispensing, and mental health promotion. The study also presents recommendations for remote assistance (telephone counseling, web or computer-based interventions, and text messaging). Wake et al., European The study reinforces the use of remote strategies for Expert consensus, To present expert consensus on the Journal of Endocrinology, 5.b management of endocrine conditions diabetes care, focusing on healthy eating, exercise, blood at the time of COVID-19. glucose monitoring, and medication usage. The authors state UK, 2020 that the restructuring of care services for people with diabetes amid the COVID-19 pandemic is needed. Tao et al., Diabetes Cross-sectional, 4.b To investigate risk factors and The study provides information on remote support for effective measures for blood glucose patients with diabetes focusing on healthy eating, exercise, Research and Clinical Practice, China, 2020 control in diabetic patients isolated at blood glucose monitoring, use of medications, and guidance home during the COVID-19 pandemic on factors interfering with glycemic control during the through telephone follow-up. pandemic.



Pal et al., Diabetes Cross-sectional, 4.b To assess the knowledge, attitude and Throughout the assessment of the patients' knowledge, Research and Clinical practices of young adults with type 1 attitude and practices, the authors evidenced the importance diabetes mellitus towards COVID-19 of adhering to routine dietary plans, exercise, blood glucose Practice, India, 2020 amid a national blockade in India. monitoring, and therapeutic regimen amid the ongoing pandemic. Jethwani et al., To list the challenges faced by children The study discusses challenges and recommendations for the Expert consensus, management of T1DM during the COVID-19 pandemic. The International Journal of 5.b and adolescents with type 1 diabetes Diabetes in Developing and some solutions that have been authors provide advice on maintaining a healthy diet, regular Countries, India, 2020 proposed and developed. practice of physical activity, blood glucose monitoring, and insulin therapy. The study also covers guidelines for the prevention and management of diabetes-related complications such as hypoglycemia and diabetic ketoacidosis. Kiran et al., Canadian Praxis, 5.b The authors provide recommendations on healthy diet, To create virtual recommendations to Family Physician, Canada, support family physicians and other regular practice of physical activities, blood glucose 2020 primary care professionals in monitoring, and insulin therapy. The authors recommend managing their patients with type 2 that patients with T2DM manage their condition during the diabetes mellitus (T2DM) during pandemic using remote strategies. COVID-19. Editorial, 5.b To discuss the care proposals for The authors provide and discuss guidelines for the Cerqueira et al., Acta Paulista de Enfermagem, individuals with diabetic foot during prevention of COVID-19 and the management of diabetic Brazil, 2020 the COVID-19 pandemic in Brazil. foot ulcers, remotely, during the pandemic. Self-care recommendations are also provided and discussed. To document a culturally appropriate The authors provide a synthesis of evidence on health Mukona et al., Narrative review, **Diabetology & Metabolic** self-management plan for people with education strategies to promote diabetes self-management 4.a during the COVID-19 pandemic, with an approach to Syndrome, Zimbabwe, diabetes mellitus in resource-2020 constrained settings during the nutrition, exercise, glycemic monitoring, adherence to drug ongoing COVID-19 pandemic. therapy, COVID-19 prevention, and management of hypoglycemia, foot care and other complications. Stress management and general preventive measures are also discussed, with an emphasis on remote strategies. Rose & Scibilia, Diabetes Expert consensus, To discuss the extent of the impact of The authors present perspectives for managing diabetes Research and Clinical 5.b the COVID-19 pandemic on the lives amid the COVID-19 pandemic, and guidelines on the supply Practice, Belgium, 2020 of people with diabetes. of diabetes medications, healthy coping, and anxiety reduction.



Grabia et al., Nutrients, Poland, 2020	Cross-sectional, 4.b	To assess the impact of the COVID-19 pandemic on diabetes patients and their nutrition and health behaviors.	The authors provide advice on healthy diet, regular practice of physical activity, stress control, and anxiety reduction. Besides, the effects of the COVID-19 pandemic on the nutrition and health of people with diabetes are discussed.
Quinn et al., Journal of	Literature review,	To explore evidence of the role of	The authors synthesize evidence on remote counseling that
Medical Internet	4.a	telemedicine in supporting people	includes dietary recommendations, regular practice of
Research, UK, 2020		with diabetes during the COVID-19	physical activities, blood glucose monitoring, drug therapy,
		pandemic.	and management of psychosocial aspects.

Source: Elaborated by the authors, 2022.