

TYPE 1 DIABETES AND EXERCISE:

Literature Review

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Type 1 Diabetes and Exercise

“The benefits of exercise are wide ranging. Regular physical activity can help people manage their weight, sleep better, reduce the risk of some diseases...” (“Don’t Sweat It! Exercise and Type 1 Diabetes”, 2014). Worldwide, exercise is used to improve the lives of anyone who participates. But together exercise and diabetes can be intimidating especially for those who are just diagnosed with type one diabetes. Type one diabetes is a disease that has to be managed 24/7. Diabetes management can be difficult without the addition of exercise, but with it, it can add stress to the diabetic and lead to hyperglycemia.

Attitudes and Barriers to Exercise in Adults with a Recent Diagnosis of Type 1 Diabetes: A Qualitative Study of Participants in the Exercise for Type 1 Diabetes (EXTOD) Study

This article looks at the effects that exercise has on patients with Type 1 Diabetes. 15 patients from the UK were asked about their activity levels before their diagnosis and were then compared to the amount after their diagnosis. The study found a similarity between these participants. These include: “existing attitudes to exercise, feelings about diagnosis, perceptions about exercise consequences, barriers to increasing exercise and confidence in managing blood glucose” (Carter, Pallin, Mandel, Sinnette & Schuur, 2016, p. 1). A decline is seen in the amount of current exercise versus exercise prior to diabetes. Many have a big fear over hypoglycemia, which is a low blood sugar that be treated with usually 15 grams of carbohydrates. Overall, patients are nervous to begin exercising with the addition of diabetes to their lives.

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Key Points

There are many key points in this article. Many of which involve the blood sugars of the participant. “Some participants were concerned about blood glucose levels and many were anxious to get optimal glycaemic control” (Carter, Pallin, Mandel, Sinnette & Schuur, 2016, p. 4). Diabetes are given a glucose range to stay between and can cause stress when numbers veer outside those limits. This definitely impacts whether or not a patient will exercise if there’s a chance of hypoglycemia. The purpose of exercise is to improve ones health. With diabetes it can definitely can bring blood sugars down to normal levels but it may cause hypoglycemia, therefore, some participants viewed physical activity as pointless and creating the opposite effects (Carter, Pallin, Mandel, Sinnette & Schuur, 2016). The different type of exercise and either increase or drop glucose levels which is scary for most participants. Physical activity effects on blood sugar is strictly individually based and is based on trial and error over a period of time. A negative part is patients planning their exercise around their diabetes which can be annoying since they are newly diagnosed and use to their prior ways.

Assumptions

This article explains that some doctors don’t encourage their patients to exercise which can ultimately have a negative effect on the blood sugar. One participant stated that a doctor told him he shouldn’t be going to the gym because he had diabetes (Carter, Pallin, Mandel, Sinnette & Schuur, 2016). Once again, this is related to the lack of knowledge leading to little education to the patient about the benefits and management of exercise. These participants should feel encouraged by their doctors in the choices they make.

Deficit/Conclusion

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Including exercise into the lives of diabetes can play major role in the control of their diabetes in a positive manner. Although this was the very first study to look at the attitudes of the newly diagnosed diabetics, it does an excellent job of explaining how the participants feel in relation to exercise and diabetes. Diabetes is a misunderstood disease with very little public knowledge let alone diabetes and exercise. This causes the participants and other patients with diabetes to be very timid when thinking about exercising because glucose control is very important. Primary care providers should advise and encourage patients to do the recommended amount of physical exercise.

References

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