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The effectiveness of problem-solving training program on problem-solving ability and disease control for diabetics with hypoglycemia

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Objective

The aim of this study is to develop the problem-solving training program based on the theories of social problem solving and to evaluate the longitudinal effects on problem-solving orientation, problem-solving ability, emotional adaptation and glycated hemoglobin for diabetics with hypoglycemia. Methods: This study employed a quasi-experimental study design. Sixty-two people with type 2 diabetes from the metabolic clinics of medical center and regional hospitals in northern Taiwan were convenience sampling divided into an experimental and control group of thirty and thirty-two participants, respectively. Both groups were assessed at four separate times periods, including the pre-test, post-test 1 (1rd month), post-test 2 (3th month) and post-test 3 (6th month). The experimental group received a 12-week problem-solving training program, which included: problem-solving brochure education, problem-solving skills guidance, teaching blood glucose self-monitoring and 6-12 phone call follow ups (of 10-20 minutes each). The control group received a self-regulation manual only. Hypoglycemia Problem Solving Scale, Disease-Associated Negative Mood Scale and HbA_{1c} were used in this study to measure differences between pre- and posttest values. The statistical analysis included frequency, percentage, mean, one-way ANOVA, pair-t test and repeated-measures two-way ANOVA. Results: The result showed that problem-solving ability, emotional adaptation and glycated hemoglobin scores were significantly improved by after the problem-solving training program group intervention. On the 3th month after intervention, we found a significant difference between the two groups in terms of problem-solving ability and HbA_{1c}.

Conclusion

Applying problem-solving skills, patients take initiative to identify and seek possible strategies to solve their problems, alleviate diabetic issues and achieving self-management.

Recent Publications

1. Agema P & Sherifali D. (2012) **Determining the Impact of an Intervention to Increase Problem-Solving Skills in Diabetes Self-Management: The Diabetes Problem-Solving Passport Pilot Study.** Canadian Journal of Diabetes, 36: 199-203.
2. American Association of Diabetes Educators. (2014) **AADE7 Self-care Behaviors TM.** Retrieved from <https://www.diabeteseducator.org/patient-resources/aade7-self-care-behaviors>.

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Biography

Fei Ling Wu has her expertise in evaluation and passion in improving the diabetic care. She constructed a hypoglycemia problem-solving scale based on the theory of social problem solving. At the same time, the concept of problem solving is also applied to topics related to diabetes care. In the future, she will also actively improve her effectiveness in helping people with diabetes manage their hypoglycemia-related problems.

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