NEED FOR KNOWLEDGE AND SKILLS UPDATE AMONG PAEDIATRIC NURSES REGARDING TYPE 1 DIABETES IN CHILDREN. A PILOT STUDY.

Kobos E.^{1,2}, Szewczyk A.^{2,3}, Czarnecka J.⁴, Sienkiewicz Z.¹

Background

In Poland, approximately 15,000 children aged 0–19 have type 1 diabetes. In general, nurses are aware of the fact that the knowledge of diabetes is important to ensure the right care for affected children. However, there are few studies conducted among paediatric nurses regarding their knowledge of this type of diabetes.

Aim

The aim of the study was to assess the need for knowledge update among paediatric nurses regarding type 1 diabetes.

Method

The study included 114 nurses who work with children. Among the respondents, 72.8% were employed at hospitals and 25.5% at clinics. A 31-question test on type 1 diabetes, a 21-point self-rating scale regarding skills and knowledge related to diabetes and a demographic data sheet were used to collect the study material. The correlations between the variables were tested using Mann-Whitney U test, Kruskal-Wallis test and Spearman's rank correlation coefficient. The research tool was assessed for reliability.

Result

In total, 55.9% of answers to the knowledge test were correct. The highest rate of correct answers was recorded for the topic of diabetes complications (70.2%). In 5 out of 7 subject areas in the test, higher self-rating values corresponded with greater knowledge test scores. Nurses with higher master's degree education rated their knowledge and skills higher than those with secondary vocational education. Nurses working at hospitals scored more points on both the knowledge test and the self-rating scale. Lower self-rating scores, but higher knowledge levels were found among more senior nurses.

Conclusion

In the study group, knowledge deficits were demonstrated regarding insulin pump use, insulin action and storage, administration and storage of glucagon and nutrition guidelines for children with type 1 diabetes. The subjects rate their level of knowledge and skills higher than it actually is. Due to an increase in the number of cases of type 1 diabetes in children, nurses working at primary care clinics and at various hospital departments should receive support from their employers in terms of training to update their knowledge on diabetes.

¹ Department of Development of Nursing, Social and Medical Sciences, Faculty of Health Sciences, Medical University of Warsaw, Poland

² Polish Federation for Diabetes Education, Warsaw, Poland

³ Children's Memorial Health Institute, Warsaw, Poland

⁴ Department of Development of Nursing, Faculty of Health Sciences, Medical University of Warsaw, Poland