

# ASSESSMENT OF DEPENDENCE OF THE HYPOGLYCEMIC EPISODES FREQUENCY ON GENDER FACTOR

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## OBJECTIVES

Assessment of the frequency of hypoglycemic episodes during daily monitoring of glucose in the subcutaneous water of women and men with type 1 diabetes mellitus.

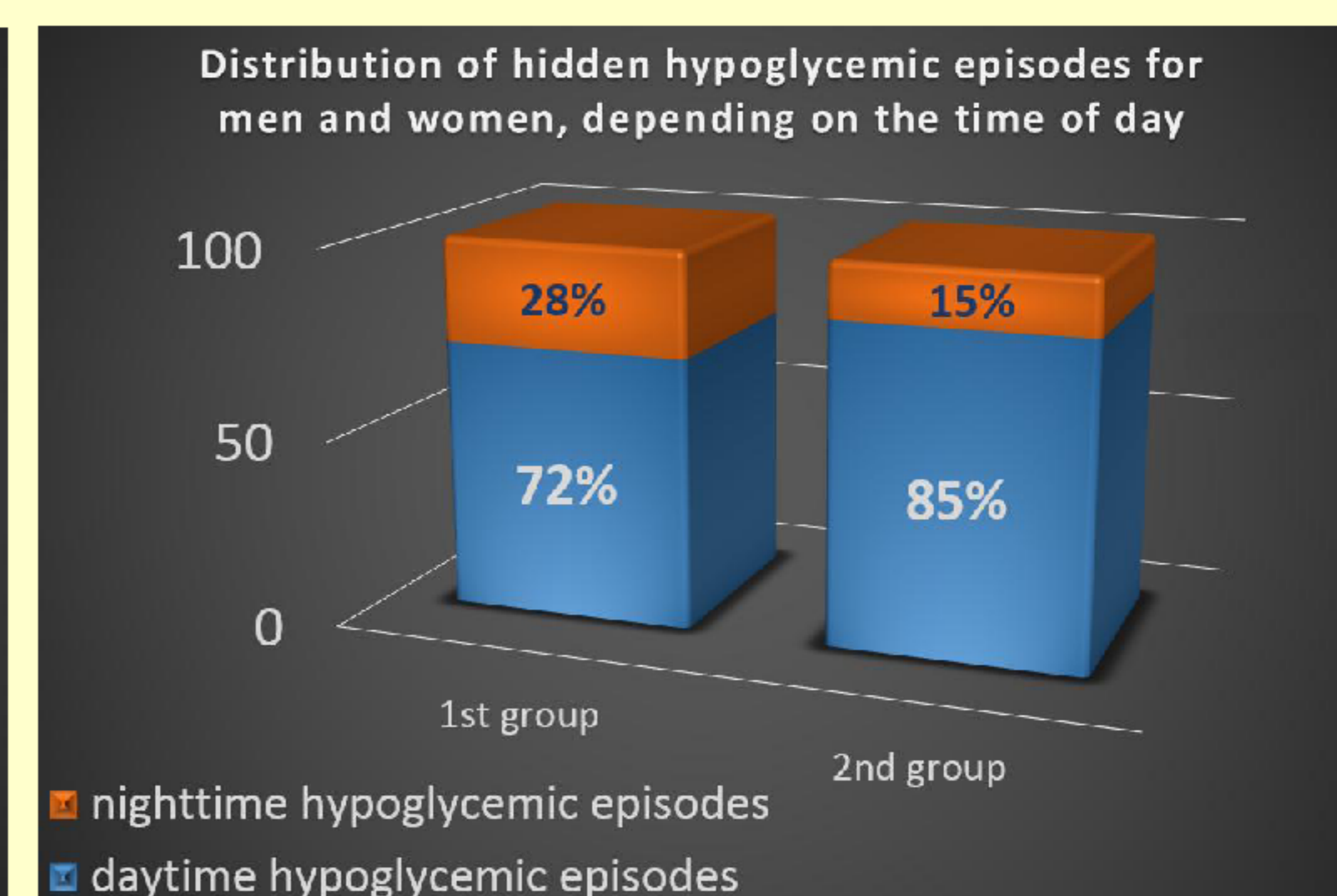
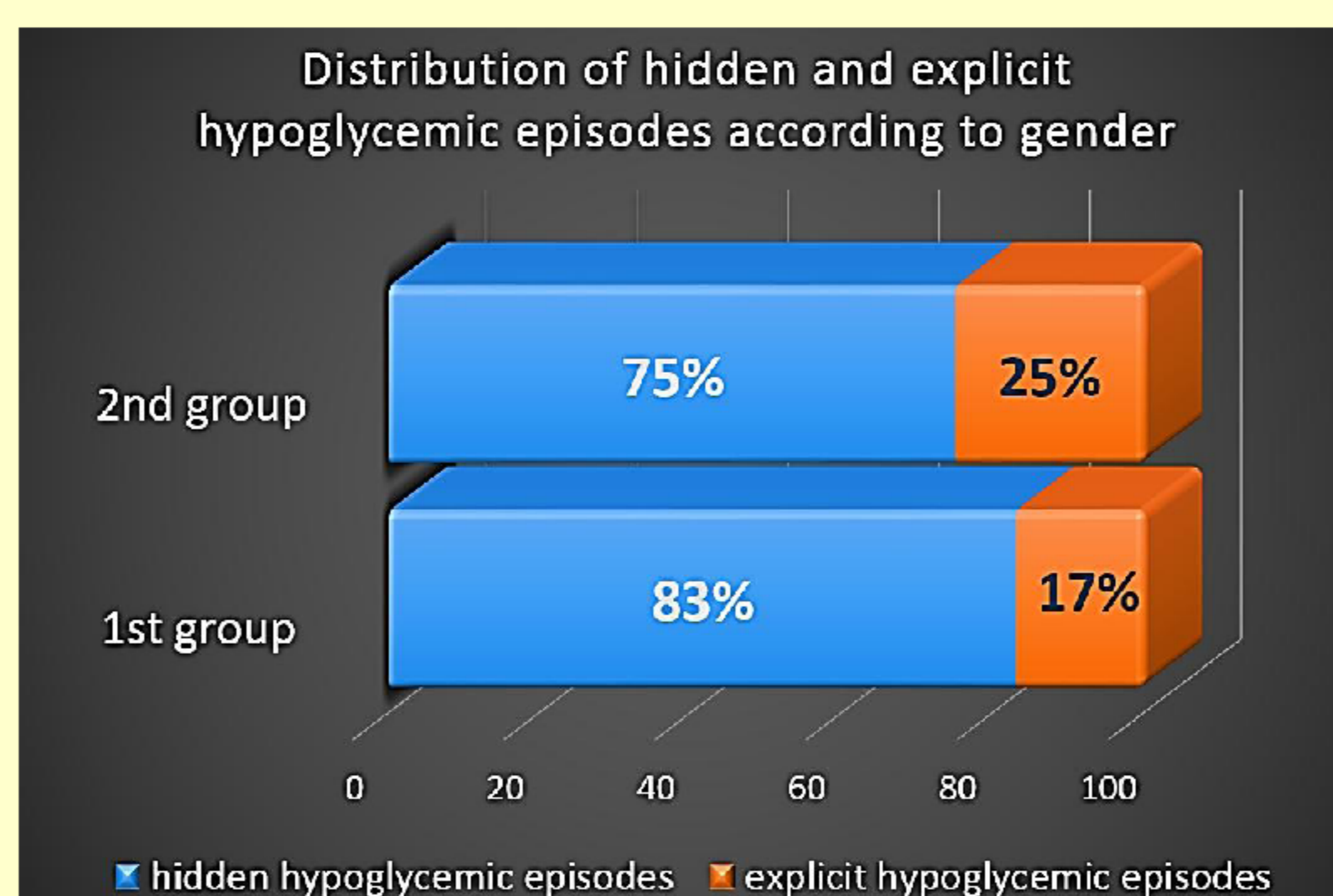
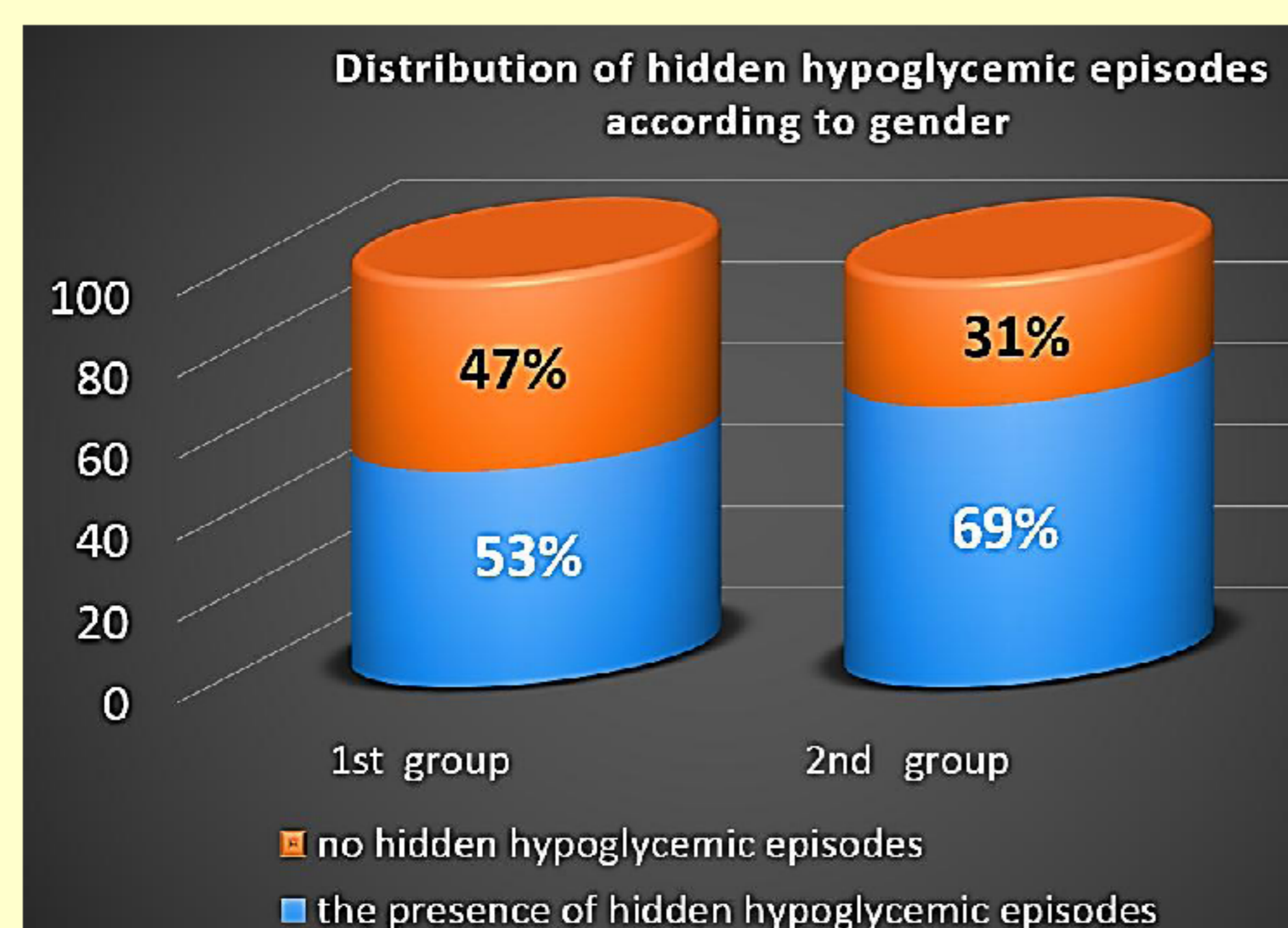
## METHODS

The study of daily dynamics of glucose has been performed with continuous glucose monitoring system (CGMS) Medtronic MINIMED company, the USA. The study involved 162 patients with type 1 diabetes mellitus. The patients were divided into 2 groups: group 1 - women with regular menstrual cycle (n = 117), group 2 - men (n = 45). The groups were compared in mean age ( $29,14 \pm 7,56$  years) and duration of type 1 diabetes mellitus ( $10,74 \pm 7,67$  years).

### Graphs and tables

Clinical and laboratory characteristics of examined patients, Me [25;75]

	1 <sup>st</sup> group (n = 117)	2 <sup>nd</sup> group (n = 45)	p
Age, years	28,23 [22,76;34,93]	33,30 [24,24;38,76]	0,131
HbA1c, %	8,80 [7,60;10,40]	9,00 [7,40;10,10]	0,666
Duration of T1DM, years	8,81 [3,96;14,24]	8,00 [5,00;11,96]	0,311
Body mass index, kg/m <sup>2</sup>	23,43 [21,56;26,02]	24,80 [22,20;26,56]	0,200
Weight, kg	63,00 [57,00;70,00]	77,50 [70,50;83,50]	0,001
Number of SU per day	16,00(14,00;19,00)	17,00(15,00;21,00)	0,072
Day dose of insulin, IU/day	0,69 [0,59;0,87]	0,68 [0,52;0,88]	0,382



## RESULTS

In the first group of women 53%, registered hidden hypoglycemic episodes, and 47% were not observed ( $p < 0.05$ ). In the second group of men 69% has been registered hidden hypoglycemic episodes, and 31% were not observed ( $p < 0.01$ ). As for the incidence of hidden hypoglycemic episodes between the groups, the significant differences were not observed (in the first group - 53%, in the second group - 69%)  $p > 0.05$ .

Depending on the time of day, the incidence of hidden hypoglycemic episodes (in the first group, 83% in the second group, 75%) prevailed in comparison with explicit (in the first group, 17%, in the second group, 25%)  $p < 0.001$ . The daytime incidence of hypoglycemic episodes in the first group was 72%, in the second group was 85% in comparison with the incidence of night hypoglycemic episodes (in the first group 28%, in the second group 15%),  $p < 0,05$ .

## CONCLUSIONS

1. Regardless of gender, the bulk of the cases occurred in hidden hypoglycemic episodes compared with explicit ones.
2. The incidence of hidden day-time hypoglycemic episodes was prevailed over the night incidence of hypoglycemic episodes, regardless of gender.
3. The incidence of hidden hypoglycemic episodes does not depend on gender.

