

Self-Reported Hypoglycemic Rates among 2594 Insulin-Treated Adult Patients with Diabetes: Results from IO HAT Study

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Objective

IO HAT study assessed incidence of hypoglycemia in insulin treated patients with T1D and T2D in 9 countries (Bangladesh, Colombia, Egypt, Indonesia, Philippines, Singapore, South Africa, Turkey and UAE). Here we report the results of the South East Asia cohort of IO HAT study.

Methods

The incidence of any, severe and nocturnal hypoglycemia was assessed using two part self-assessment questionnaires (SAQs) and patient diaries. In SAQ1, retrospective hypoglycemic events were recorded (severe events were reported for the 6 months before baseline and any event for 4 weeks before baseline). Prospective events, both severe and any (4 weeks from baseline) were reported in SAQ2 and patient diaries. Differences in incidence of hypoglycemia reported were assessed using two-sided tests.

Results

Of the 7289 patients assessed in the IO HAT study, 2594 (T1D, n=154; T2D, n=2440) were from the four countries viz., Bangladesh, Indonesia, Philippines and Singapore. Any hypoglycemia rates, per patient-year (PPY), during retrospective and prospective period were 33.9 and 57.1 PPY in patients with T1D (RR 1.68, $p<0.001$). Any hypoglycemia rates, during retrospective and prospective period were 12.2 and 22.6 PPY in patients with T2D (RR 1.85, $p<0.001$). Rates of any and nocturnal hypoglycemia were lowest in patients with T2D on short-acting regimens during prospective period (Any, 19.4 ; Nocturnal, 1.4 PPY).

Conclusion

With use of the IO HAT tool and patient diaries in South East Asian cohort, a higher prospective incidence of any and severe hypoglycaemia was reported. These results indicate that hypoglycaemia may be retrospectively underestimated by patients.