Level of Glycemic Control in Different Care Settings

Sir,

Glycated hemoglobin (HbA1c or A1c) is the most standardized tool for monitoring of glycemic status for past few months in patients with diabetes mellitus. Though not recommended for diagnosis of diabetes, it is customary to assess control of diabetes for outcome assessment, pharmacological intervention as well as epidemiological studies, in terms of A1c. It is regarded as an efficient measure of control in the population setting, and it is mandatory to report the same in some regions.

We have compared A1c level in three different subsets of diabetic population (superspeciality clinic, urban diabetic camp and a rural diabetic camp) to find the difference in control of diabetes amongst them.

We have evaluated records of 499 consecutive patients of diagnosed diabetes of some duration and on active treatment schedule attending IPGME and R, Kolkata (excluding those suffering from significant renal failure, GDM, foot ulcer and other critically ill patients, etc.), 175 apparently uncomplicated patients with diabetes attending the camp during a Insulin Discovery Day celebration at Kolkata and 112 patients attending a rural diabetic awareness camp at the outskirts of Kolkata. The mean duration of diabetes amongst the groups was comparable. HbA1c was measured by Boronate Affinity Chromatography (GDX Analyser), a NGSP certified method. Between groups comparison was done by ANOVA and Z test.

The mean (± SD) A1c of the clinic patients was 7.06 (± 1.43), of the urban camp and rural camp were 8.01 (± 1.41) and 7.31 (± 1.24) respectively. This difference was statistically significant (ANOVA, p < 0.01). There was statistically significant difference between the rural camp and clinic patients as well (p < 0.05).

The glycemic control was significantly better among the clinic patients, probably due to an aggressive target driven diabetes care delivery in the tertiary care centre under the guidance of a qualified diabetes specialist. This is not with standing the fact that people with diabetes attending a tertiary care centre are likely to have more complications to deal with and thereby an element of bias is involved in the study. This difference is also otherwise reflected in other studies as well. The mean A1c at the urban population attending the camp was suboptimal, which may reflect the effect of urbanization (e.g. physical inactivity, ingestion of fast foods). In addition, the population screened at the urban camp was quite heterogeneous in terms of control as they were attracted by newspaper advertisement. In contrast, the mean A1c was not substantially poor in the rural camp.

This was probably because the patients attending the rural camp are more attuned to the physical exercise and less intake of fast foods. It is also likely that they are less noncompliant to medical advice compared to their peers in the urban areas. It is evident from this observational study that aggressive goal directed diabetes care delivery may yield significant salutary results. Though the A1c of the urban clinic in comparison to the rural and urban camps, were significantly better, it is still suboptimal and there is scope of further improvement.

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