Assessing diabetes-specific knowledge in people with diabetes living in India

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Background Diabetes management can involve complex and challenging self-care regimens with diet being the most difficult aspect for many. Knowledge of diabetes and its treatment is essential if diabetes is to be well controlled and the risk of complications reduced.

Method The Audit of Diabetes Knowledge (ADKnowl) (© Bradley) is designed to identify the nature and extent of diabetes knowledge deficits in people with Type 1 and Type 2 diabetes. The ADKnowl was linguistically validated in Hindi and Punjabi and culturally adapted for use in India. These new language versions along with other patient reported outcome measures were used as part of a study conducted in a government hospital in Northern India. Participants were 210 people with diabetes (men=140, women=70; Type 1=4, Type 2=205). Treatment: 40 patients used insulin with, or without tablets, 143 used tablets and 27 patients had no medication.

Results Patient knowledge regarding certain areas of diabetes management was fairly good, e.g., management during illness items were correctly answered by >70%. However, substantial knowledge deficits were also highlighted. For example: only 48% of patients recognised the inaccuracy of the statement “a little glucose in the urine is a good thing”; 32% of patients did not realise that blood glucose levels could affect their chances of developing complications. Diet and food items showed similar deficits, for example: 45% of patients incorrectly thought that fresh fruit could be eaten freely with little effect on blood glucose levels while 24% erroneously believed that ‘gur’ (traditional unrefined sugar) or honey could be used in place of sugar without increasing blood sugar levels. Knowledge of harmful effects of smoking on complications was also limited in the present sample.

Conclusion Using the ADKnowl enabled detection of specific knowledge deficits likely to damage specific diabetes outcomes pointing to the need for targeted educational interventions.