

The ADKnowl

Audit of Diabetes Knowledge

The measure

Following a major update in 2009, the ADKnowl now includes 33 item-sets (138 items) designed to measure knowledge of:

- diabetes treatment & testing (including separate item for urine glucose monitoring)
- management of diabetes when ill – separate item-sets for respondents using:
 - tablets
 - premixed insulin
 - basal bolus insulin, i.e. at least 4 injections a day
 - combined insulin & tablet treatment)
- general management of insulin and insulin use
- the causes of, symptoms of and action to be taken during hypoglycaemia
- effects of physical activity
- diet & food
- effects of alcohol (opt-out option for people who don't drink)
- reducing the risk of developing diabetes complications
- effects of smoking
- footcare
- blood glucose levels (BGLs) & HbA_{1c}

Respondents are asked to read each statement carefully and indicate whether they believe it to be 'true' or 'false'. A 'don't know' option is provided to discourage guessing. 'False' statements are common or serious misconceptions.

The ADKnowl was designed in consultation with diabetes specialists from many disciplines including medicine, nursing, podiatry, dietetics, ophthalmology and psychology. Translations are linguistically validated in consultation with clinicians and dieticians and people with diabetes in the country concerned. The number and content of items in different translations may vary somewhat as a result of cultural adaptations made.

The ADKnowl is a long instrument recommended for analysis item-by-item. This means that each item is designed to be analysed individually for correct and incorrect responses and can be considered separately from other items. As the ADKnowl is developed item-by-item, those items that are not relevant for particular purposes can be removed without affecting the validity of the instrument.

Design, Development & Updates

The ADKnowl was designed and developed for use with adults (aged 18+) with Type 1 or Type 2 diabetes. It may also be a useful tool for health professionals to use to check the extent of their own diabetes knowledge and/or to achieve consensus amongst clinic staff. It was updated for the DAFNE (Dose Adjustment For Normal Eating) trial in 2000-2001 and subsequently during linguistic validation of Hindi and Punjabi versions for India. The ADKnowl most recently underwent a major update in 2009 to reflect current diabetes management, including recent changes in treatment regimens with latest insulins, other injectables and tablets. This has been done in parallel in the UK, Germany and Spain in consultation with clinicians, specialist diabetes nurses and dieticians, and a (UK) podiatrist. Mapi Research Institute, Lyon, specialists in linguistic validation of

questionnaires, assisted with the linguistic validation, including the cultural validation for Germany and Spain.

Availability

Development of the ADKnowl is an ongoing process due to the fact that the body of diabetes-related knowledge is constantly changing. For permission to use the ADKnowl, and to ensure that you use the most up-to-date version, please go to our website

www.healthpsychologyresearch.com.

References

Speight J and Bradley C (2001) The ADKnowl: identifying knowledge deficits in diabetes care. *Diabetic Medicine* **18**, 626-639.

Singh H and Bradley C (2006) Assessing diabetes-specific knowledge in people with diabetes living in India. *Diabetic Medicine*, 23(Suppl. 4): 471. [Oral presentation at *The International Diabetes Federation Conference*, Cape Town, South Africa, December 2006]