

Correspondence

Precipitating factors for diabetic ketoacidosis

Sir,

I read with interest the article of Dr. Qari on the precipitation factors of diabetic ketoacidosis (DKA) in a group of patients admitted to King Abdul-Aziz University Hospital (KAUH) in Jeddah, Kingdom of Saudi Arabia.¹ However, I have some comments. The author stated financial deficit as a reason for failure to secure the insulin requirements. This point may need to be clarified as we know that both the Saudis and expatriates enjoy one of the highest incomes in the world. It also seems strange that diabetic patients in Jeddah could have a problem in obtaining a refrigerator, bearing in mind that 38% of the study group have home glucometers!¹ What is more reasonable is the reasons stated in previous Saudi studies such as that the patients do not like to have injections or desire to try local medicines.^{2,3} The author omitted the classification of diabetes in her patients. The classical linkage of DKA to type 1 diabetes has greatly changed in recent years.⁴ In a previous Saudi study up to 45% of a DKA population were type 2. According to the wide range of the ages of the study group one expects a large number of type 2 patients among the adult patients. A missing point in the study is an effort to assess the status of the patients knowledge about diabetes. This will determine what type of education is needed for each patient, for example, basic knowledge of diabetes, corrections of wrong beliefs, and so forth. The author stated that KAUH has a high level of medical care, so the causes of high episodes of DKA among the patients may need further investigation. One of the aims of the study was to discuss the role of social and cultural factors in precipitating or modifying the DKA among the patients. I wonder how much the data in the patients files helped the author to serve this purpose? In such emergency cases and even in many cold cases the data highlighting the cultural and social aspects of the patients' life is lacking. It could be more appropriate if the author could have planned to catch some of the same patients from the referred clinics when they come to the regular follow-up.

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Reply from the author

I would like to thank Dr. Ahmed for his comments on my paper. The financial deficit was a reason for failure to secure the insulin requirement as our patients, either Saudi or expatriate, came from very poor social class with very low income, it is also a reasonable explanation that patients do not like to have injections or desire to try local medicine. Our study reported mostly cases of type 1 diabetes mellitus (DM), however a previous Saudi study shows that there are up to 45% DKA in type 2 DM. This explains why most of our patients were young. King Abdul-Aziz University Hospital has a high level of medical care, which explains the good management and low mortality rate of DKA. In spite of good diabetic education in our center many patients need several admissions. They are mostly teen-aged patients with brittle diabetic mellitus and with many social and culture problems. We need further prospective studies to investigate social and culture factors in precipitating or modifying the DKA among the patients, as our data in the medical notes was deficient. We could carry this out, as you advise, by catching some of the patients referred from the clinic when they attend regular follow-up and give them questionnaires by diabetic educators.

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References

1. Qari FA. Precipitating factors for diabetic ketoacidosis. *Saudi Med J* 2002; 23: 173-176
2. Mira SA, Fatani HH, Elzubier AG, Elsabbagh S. Diabetic Ketoacidosis: A report of 123 Saudi diabetics. *Saudi Med J* 1987; 8: 364-368.
3. Yousuf M, Chaudhry S. Diabetic ketoacidosis in Saudi Arabia. *Saudi Med J* 1994; 15: 295-297.
4. Ahmed AM. High occurrence of diabetic ketoacidosis among African patients. *Saudi Med J* 2002; 23: 247.