

## RE: Pattern of presentation in type 1 diabetic patients at the diabetes center of a university hospital

**To the Editor:** The frequency of diabetic ketoacidosis (DKA) at diagnosis (49.9%) reported by Al Rashed<sup>1</sup> is still unacceptably high compared to the usual frequency of 20% to 25%. Al Rashed<sup>1</sup> did not address factors contributing to that high frequency. However, I presume that the following three points might be contributory: 1) The consequence of the overall increased incidence of childhood diabetes mellitus in Saudi Arabia over the past 18 years,<sup>2</sup> 2) since Al Rashed<sup>1</sup> did not address other demographic variables in his study like parental education and socioeconomic status, I presume that these factors might influence the frequency of DKA in his population as it was found that DKA at diagnosis was associated with lower family income and lower parental education,<sup>3</sup> and 3) though children under the age of 5 years constituted only 3.5% of the studied population in the Al Rashed study,<sup>1</sup> increasing evidence has emerged that difficulties in diagnosing type 1 diabetes mellitus (T1DM) are a significant cause of DKA development in children with new-onset T1DM. Patient age at presentation was found to be the main risk factor for delayed diagnosis, especially in children younger than 2 years.<sup>4</sup> Moreover, diabetic children overall had more medical encounters before diagnosis than control subjects. Children with DKA were found to be less likely to have had relevant laboratory testing before diagnosis than children with diabetes without DKA.<sup>5</sup> Increasing public awareness and greater pediatrician alertness are solicited to decrease the high rates of DKA in new onset type 1 diabetic children.

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