Ekpebegh and colleagues studied the prevalence of hypernatremia defined as a serum sodium concentration above 145 mmol/L in patients admitted for hyperglycemic crisis. The research question is clear and adequately addressed and so are the methods. The results section is short and only little data is given to the reader. Especially the lack of information on the degree of hypernatremia and outcome of the two groups is apparent. Furthermore, data on urine output and urinalysis would be interesting in order to get more detailed information on the mechanisms leading to hypernatremia in these patients. The authors did not list any limitation of their work. The main findings of the study are obvious since they are linked to dehydration itself: an increase in heart rate, hypotension and older age. All of these can be explained by basic physiology.

Major compulsory revisions:

Why did the authors give no information on the degree of hypernatremia in the studied patients? Information on urine output and urinalysis would give further insight. Correction of the serum sodium for the degree of hyperglycemia would be interesting. It can be suspected that the proportion of patients with hypernatremia would increase dramatically.

Minor essential revisions:

Abstract: “Age #0 years” must be changed to age #60 years.

Background: “Serum sodium estimation is useful in the management of hyperglycaemic crisis as it enables the determination of serum osmolality and anion gap.” Serum sodium must be measured, not estimated. Additionally, calculated osmolality is unreliable since a presence of unmeasured osmotically active substances (e.g. alcohol) can not be excluded. Thus, a measurement of serum osmolality should be performed.

Results: It is not surprising that hypernatremia, a consequence of massive free water loss through osmotic diuresis in the setting of hyperglycemia, is associated with an increased heart rate and hypotension compared to the non-hypernatremic patients. The difference lies in the degree of dehydration, which is more pronounced in hypernatremic patients and can be explained by basic physiology.
The finding that age above 60 years was associated with the presence of hypernatremia supports findings from previous studies in the area.

Discussion: Studies on the origin of hypernatremia in the intensive care unit have been published, a to some degree similar collective as the one studied in the present manuscript. A comparison of these findings with your results is warranted.

“The independent association of age #60 years with hypernatraemia may be partly explained by a reduced threshold for thirst and vasopressin deficiency that is associated with ageing.” The threshold for thirst is increased, not reduced.

“Altered level of consciousness, regardless of aetiology may result in hypernatraemic dehydration because the patient is unable to replenish renal fluids loss orally due to impairment of the mental state.” It can not be excluded in your studied patients, that the altered mental status was caused by the increasing dehydration on consequent hypernatremia.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.