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Dear Sir:

We read with interest the recently published article by Woodward and colleagues entitled 'Diagnosis and management of hyponatraemia in the older patient'.¹ Of interest you discuss the importance of correct investigation and management of hyponatraemia in older people. We observed in our recent audit of inpatient hyponatraemia investigation and management that it was most prevalent in older people, with 50% of inpatients identified with hyponatraemia being over 80 years old. With such a large proportion of older patients, we agree with the importance of improving the understanding of the correct investigation and management of this frequent electrolyte disorder.

We undertook three retrospective audits of the investigations and management of inpatients with hyponatraemia (serum sodium <130 mmol/l) for over 3 days (2017) or 7 days (2011, 2014) in a University teaching hospital. We measured our standards against the European clinical practice guidelines for the diagnosis and management of hyponatraemia.²

In 2017 we audited 20 inpatients, 50% were female (2011; 47%, 2014; 47%) and 50% were over 80 years old (2011; 30%, 2014; 53%). Patients had been admitted for a range of medical problems, with the commonest being a fall or social admission. This highlights the importance of considering frailty, which as discussed by Woodward et al, adds to the burden of illness in the elderly. Only 15% of patients had serum and urine osmolality and urinary sodium measured, lower than previous audits in 2011 (30%) and 2014 (27%). In 2017, thyroid function tests were measured in 50% patients (2011; 30%, 2014; 40%) and a random cortisol in 30% (2011; 23%, 2014; 17%). The assessment of fluid status was documented in 55% of patients (2011; not measured, 2014; 30%). Woodward et al, discuss that hyponatraemia associated with severe hyperglycaemia and pseudo hyponatraemia with severe

dyslipidaemia should be excluded at the outset, however we found in 2017 that only 10% and 40% of patients had these investigations despite a serum sodium <130mmol/l. Contributing medications were identified in 18 patients and stopped in 44% of cases (2011; 19%, 2014; 36%). The most common medication prescribed that may have contributed were ACE inhibitors/ARBs, diuretics and proton pump inhibitors.

Over 6 years there were improvements in most areas including measurement of thyroid function tests, random cortisol, assessment of fluid status and stopping offending medication, although the percentage of patients having these investigations remained low. A reduced proportion of patients had serum and urine osmolality measured. These results show that despite some improvement in the investigation and management of hyponatraemia, there is opportunity for further improvement. These results underline the need to increase the awareness and importance of investigating and managing hyponatraemia correctly.

In conclusion our findings support the importance of increasing the awareness and management of hyponatraemia in hospitalised people and this is most common in the elderly population.

Author Contributor Statement

LO collected the data presented and wrote the manuscript. DW and MG collected the audit data and critically edited this manuscript. DP and JS supervised each of the audits presented, and critically appraised the writing of this manuscript. All authors give approval of the version to be published.

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