INTRODUCTION

- This is a follow-up of Audit done at Good Hope Hospital where a retrospective study of documentation and management of Acute Hyponatremia involving 50 patients was carried out comparing practice standards of hospital with hyponatremia guidelines. The Audit showed poor documentation of patients admitted with Acute hyponatremia in nearly all areas.
- On the basis of its findings, a management checklist sticker was devised which was included in the documentation of 50 patients admitted with Acute hyponatraemia.

AIM

1. Improve the documentation and management of hyponatremia as per Trust Guidelines.
2. To determine whether these measures lead to early correction of hyponatraemia to desired levels.

METHODS

A prospective study was carried out involving randomized sample of 50 patients admitted with acute hyponatremia between March and May 2017. Documentation Checklist Sticker was used on admission as an assessment tool (shown on RIGHT) and the study group included patients from Diabetes/Endocrinology Ward, Acute Medical Unit/AMU and some from Elderly Care Ward. Sodium level on admission was noted and categorized into mild, moderate or severe hyponatremia. Time taken for acceptable level of sodium to be achieved was then analyzed and mean calculated.

RESULTS

1. Improvement in documentation and management of hyponatremia was observed as demonstrated below:

2. Early correction of sodium to desired levels was observed as reflected in the reduction in the Mean time taken for acceptable sodium level to be achieved outlined in the table below:

<table>
<thead>
<tr>
<th>DEGREE OF HYponATREMIA</th>
<th>MEAN TIME TAKEN FOR ACCEPTABLE LEVELS OF SODIUM TO BE ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILD (130-135)</td>
<td>FIRST AUDIT: 6.8 Days  SECOND AUDIT: 5.3 Days</td>
</tr>
<tr>
<td>MODERATE (121-129)</td>
<td>7.2 Days</td>
</tr>
<tr>
<td>SEVERE (&lt;120)</td>
<td>11.4 Days</td>
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</table>

CONCLUSIONS

1. Improvement in documentation and management of Acute Hyponatremia can be done by introduction of a small checklist sticker.
2. Improvement in documentation and management leads to early correction of sodium to desired levels with facilitation of early specialist input, clarity of management plan and making patients suitable for discharge from the hospital earlier, leading to cost effectiveness.

REFERENCES

Clinical practice guidelines on diagnosis and treatment of hyponatraemia, developed by a collaboration between the European Society of Intensive Care Medicine, the European Society of Endocrinology and the European Renal Association-European Dialysis and Transplant Association represented by European Renal Association [Spasovski et al, 2014]; Hyponatraemia in adults (on or after 16th birthday), published by the Guideline and Audit Implementation Network (GAIN) for the Northern Ireland Department of Health [GAIN, 2010a]; Expert opinion in the US guidelines of Diagnosis, evaluation, and treatment of hyponatraemia, Expert Panel Recommendations[Verbalis et al, 2013].

NEXT STEPS

1. Update of Trust guidelines to comply with the current NICE guidelines is needed, particularly with regards to use of hypertonic saline in patients with hyponatremia and CNS symptoms.
2. Lab electronic alert/referral for hyponatraemia should be introduced.
3. Management Checklist Sticker should be part of documentation for all patients admitted with acute hyponatremia.