Does using a ‘Sepsis-Six’ form improve adherence to ‘Sepsis Six’?

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INTRODUCTION

- Sepsis is common & a leading cause of mortality (36%) 1,2
- Surviving Sepsis Campaign recommends ‘Sepsis Six’ : 6 interventions to be achieved within an hour
- Audit had revealed our unit did not adhere to the sepsis 6 well

AIMS

- Assess compliance to ‘Sepsis Six’
- Assess compliance of ‘Sepsis Six’ form completion
- Evaluate whether completing the ‘Sepsis Six’ form improves adherence to Sepsis-Six

METHODOLOGY

- Audit was carried out over a 5 week-period (March 2014)
- Patients with a Scottish Early Warning Score (SEWS) of ≥ 3 meeting sepsis criteria \(^1\) were included
- Data was collected prospectively in terms of
  (a) Form completion
  (b) Compliance with ‘Sepsis Six’
  (c) Duration of stay in hospital & 30/7 mortality

RESULTS

- Total Patients : 89 - (Male: 44 ; Female 45)
- Sepsis 73%, Severe sepsis 27%, Septic shock: 0%
- 52% patients had a sepsis form in place
- Mortality rate :11.2%; Median length of stay (LOS) : 5 days

CONCLUSION

- Our unit has shown a significantly better compliance to the Sepsis Six protocol compared to audit findings elsewhere
- Form completion seemed to positively correlate with increased compliance to the “Sepsis Six” and a subsequent reduced mortality rate & LOS

Severity subgroups: Sepsis vs Severe Sepsis

<table>
<thead>
<tr>
<th></th>
<th>Sepsis</th>
<th>Severe Sepsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>10.8%</td>
<td>12.5%</td>
</tr>
<tr>
<td>LOS (hr)</td>
<td>117</td>
<td>120</td>
</tr>
<tr>
<td>Compliance to Sepsis 6</td>
<td>60%</td>
<td>79.2%</td>
</tr>
</tbody>
</table>

Form analysis: Completed forms vs No forms

<table>
<thead>
<tr>
<th></th>
<th>Completed form</th>
<th>No Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>4.3%</td>
<td>18.6%</td>
</tr>
<tr>
<td>LOS (hr)</td>
<td>105</td>
<td>170</td>
</tr>
<tr>
<td>Compliance to Sepsis 6</td>
<td>78.3%</td>
<td>53.5%</td>
</tr>
</tbody>
</table>

Distribution of sepsis severity relative to form adherence

Compliance to the Sepsis Six Protocol (Fig 1)

Compliance of Individual Components of Sepsis Six (Fig 2)

REFERENCES