Malnutrition is a common problem for hospitalised patients and is associated with adverse clinical outcomes and increased healthcare costs.

A recent study in the UK National Spinal Cord Injury Centre (NSCIC) found that 1 in 3 of those admitted to the centre was at risk of malnutrition.

International and national guidelines stress the importance of screening patients to identify those at risk, and subsequently to offer treatment and monitoring.

Recent audits (Wong et al, 2008; Wong et al, 2009) suggested that the compliance with nutrition screening in the NSCIC was poor, and that this may be due to poor knowledge of nutrition among NSCIC staff.

Only 1 in 5 were referred for further dietetic assessment and intervention.

Aims and Objectives

We wanted to test the knowledge of malnutrition amongst doctors, nurses and dietitians working in the SCI centre to see if this was a cause of under-diagnosing malnutrition.

A questionnaire consisting of 15 MCQs was devised to test:

1. awareness of nutrition screening tools and use of nutritional care plans
2. knowledge of doctors, nurses and dietitians working in the SCI centre.

Methods

Staff were surveyed between January and March 2010. A questionnaire about nutrition was produced (See Table) This was sent to all doctors and nurses in NSCIC (102 nurses and 15 doctors.) 53 questionnaires were returned. This represents a response rate of 45%.

Results

Awareness of the nutrition screening tool is good: 83 %;

Overall scores (median)

<table>
<thead>
<tr>
<th>Staff Group</th>
<th>Number of questionnaires returned</th>
<th>Range of scores</th>
<th>Average (mean) score out of 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultant</td>
<td>2</td>
<td>6 to 9</td>
<td>7.5</td>
</tr>
<tr>
<td>SHO (CT1)</td>
<td>5</td>
<td>4 to 9</td>
<td>6.8</td>
</tr>
<tr>
<td>All doctors</td>
<td>7</td>
<td>4 to 9</td>
<td>7</td>
</tr>
<tr>
<td>Nurses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 8b</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Grade 7</td>
<td>3</td>
<td>4 to 6</td>
<td>5</td>
</tr>
<tr>
<td>Grade 6</td>
<td>13</td>
<td>0 to 9</td>
<td>5.2</td>
</tr>
<tr>
<td>Grade 5</td>
<td>13</td>
<td>1 to 8</td>
<td>5</td>
</tr>
<tr>
<td>Grade 4</td>
<td>6</td>
<td>2 to 9</td>
<td>5</td>
</tr>
<tr>
<td>Unknown</td>
<td>10</td>
<td>1 to 10</td>
<td>4.9</td>
</tr>
<tr>
<td>All nurses</td>
<td>46</td>
<td>0 to 10</td>
<td>5</td>
</tr>
<tr>
<td>Dietitian</td>
<td>9</td>
<td>10 to 13</td>
<td>12.3</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>0 to 13</td>
<td>6.3</td>
</tr>
</tbody>
</table>

Several specific areas of poor knowledge were identified:

- Calorific content of IV fluids;
- Indicators of malnutrition;
- Choices for nutrition support

Calculation of Body Mass Index (BMI)

Nearly half of the participants thought that weight loss of 20% or more was required to indicate malnutrition

This high perceived cut-off points suggests that malnutrition is likely to continue to be undetected and unmanaged.

Conclusion

This highlights the need for further education in SCI medicine in order to improve the quality of care delivered to SCI patients.

Recommendations

Simplified BMI chart – now on intranet
Nutrition screening tool and care plans now available on intranet
Monthly monitoring of nutrition screening tool in each ward
Re-audit next year

Education / Training is needed for AHPs

Acknowledgements

We would like to thank the staff working at the National Spinal Injuries Centre at Stoke Mandeville Hospital for filling in the questionnaire.

An audit to assess knowledge about malnutrition amongst staff working in the UK spinal cord injuries centres. By S.S Wong1,2, F. Derry3, G.K.Grimble1, A. Forbes1

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(Tables)

Return questionnaire result (by staff group)

![Image of table showing return questionnaire result by staff group]

![Image of table showing return questionnaire result by staff group]