Application of NNN Taxonomy and Clinical Decision Support System to Malignant Neuroleptic Syndrome Nursing Care: A Case Report

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Introduction

PROCEnf-USP® is a Clinical Decision Support System (CDSS) structured according to NNN taxonomy and developed to support the decision of nurses and students in the clinical judgment of nursing diagnoses, outcomes and interventions.

Purpose

To report the use of PROCEnf-USP® to guide nursing students in decision-making about diagnoses, outcomes and interventions related to Malignant Neuroleptic Syndrome patients.

Method

✓ A case report conducted with undergraduate nursing students during the internship at the adult Intensive Care Unit of a University Hospital, from November to December 2019.

✓ A malignant neuroleptic syndrome case provided the students with clinical data to fill out the assessment forms in PROCEnt-UPS® and to define the diagnosis, outcomes, interventions and activities.

Results

✓ Eight undergraduate students in the third year of the nursing course used PROCEnf-USP®.

✓ The nursing diagnoses, outcomes and interventions related to malignant neuroleptic syndrome patients, according to the NNN taxonomy, integrated with a CDSS are described in table 1.

Table 1: Malignant Neuroleptic Syndrome Nursing Care.

<table>
<thead>
<tr>
<th>NANDA-I</th>
<th>NOC</th>
<th>NIC</th>
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</thead>
<tbody>
<tr>
<td>Ineffective cerebral tissue perfusion (00024)</td>
<td>Neurological status (0909)</td>
<td>Neurological monitoring (2680)</td>
</tr>
<tr>
<td></td>
<td>Seizure self-control (1620)</td>
<td>Seizure management (2680)</td>
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<tr>
<td></td>
<td></td>
<td>Vital signs monitoring (6680)</td>
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<tr>
<td>Decreased cardiac output (00029)</td>
<td>Cardiac pump effectiveness (0400)</td>
<td>Hemodynamic regulation (4150)</td>
</tr>
<tr>
<td>Risk for infection (00004)</td>
<td>Infection Severity (0703)</td>
<td>Infection Protection (6550)</td>
</tr>
</tbody>
</table>

Reference: Johnson M et al., 2012

Impact

The use of CDSSs supported students when making clinical decisions and may be an important resource for teaching in clinical rotations. This study contributes to discussions on teaching strategies and clinical reasoning practice in nursing education.

✓ 23 nursing activities belonging to the above-mentioned Interventions were defined.