Project Title: Malnutrition in patients with pancreatic cancer. Impact of an oncology nursing consultation in their evolution and the level of patient’s satisfaction

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Institution: Hospital Universitario Ramon y Cajal, Madrid – Spain.

Date: April 8th, 2019.
Medical oncology service:
- 21 oncologists divided in 3 sections
- 15 residents (3 per year)

Oncology unit:
- 30 beds

Oncology outpatient facilities:
- 6 beds + 30 sites with perfusion bombs.

Phase I unit:
- 1 bed + 8 sites
Team Members

- Sponsor: Dr. Alfredo Carrato
- Doctor: Mercedes Rodríguez
- Nurse: Mª Teresa Sanchez
Pancreatic cancer is an aggressive disease, which occurs with high rates of malnutrition throughout its evolution.

Preliminary analysis: population of 25 patients (88%)
- Albumin < 3mg/dL (52%)
- BMI < 16m2 (36%)
- Weight loss > 10% in previous 6 months (76%)
## Diagnostic Data

<table>
<thead>
<tr>
<th>Diagnostic Data</th>
<th>Patients (%) – Nov.2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>25 (100%)</td>
</tr>
<tr>
<td>Nutritional Deficiency</td>
<td>22 (88%)</td>
</tr>
<tr>
<td>Dissatisfaction</td>
<td>16 (64%)</td>
</tr>
<tr>
<td>Inappropriate intervention</td>
<td>19 (76%)</td>
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To achieve a better quality of life and nutritional knowledge of the patients through a nurse consultancy.
Process Map

1. **PANCREATIC CANCER PATIENTS IN ACTIVE TREATMENT**
   - **MEDICAL ONCOLOGY CONSULT**
   - **HIGH RISK DESNUTRITION**
     - **MEDICAL CONSULTANT**
     - **EVALUATION EVERY 15 DAYS BMC/WEIGHT**
       - **MEDICAL CONSULTANT**

2. **YES**
   - **NURSE CONSULTANT**
   - **ADEQUATE NUTRITION?**
     - **NO**
       - **EDUCATION/WEEKLY BMC CONTROL/NUTRITIONAL DESIGN**
     - **YES**
       - **MEDICAL CONSULTANT**
       - **IMPROVEMENT**
**Cause & Effect Diagram**

**COMUNICATION**
- Patient: Less compression
- Doctor: Overloaded work
- Increase energy level
- Depression
- Other complications

**DISEASE ASPECTS**
- Intestinal alteration

**PATIENT’S EDUCATION**
- Patient: Doesn’t know how to identify symptoms
- Deficiency nurse consult
- Sickness
- Enteritis
- Vomiting
- Diarrhea
- Mucositis
- Steatorrhea

**TREATMENT ASPECTS**

**malnutrition**
Measures

- Measure: Anthropometric, analytical and relating to their oncology disease data collection, nutritional habits, ways of action under the occurrence of events/toxicities and perception of quality of life/satisfaction.

- Patient population: Patients diagnosed with pancreatic cancer, receiving active treatment with chemotherapy, either in the adjuvant or metastatic setting.

- Data source: Medical records, satisfaction and nutritional questionnaires.

- Data collection frequency: weekly

- Data quality (any limitations): Income and complications during the process that will interfere with the results. Lost of patients.
## Prioritized List of Changes (Priority/Pay –Off Matrix)

<table>
<thead>
<tr>
<th>High Impact</th>
<th>Easy</th>
<th>Difficult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient education by oncologist</td>
<td>• Dinner recommendations</td>
<td>• Satisfaction questionnaire follow-up</td>
</tr>
<tr>
<td>Patient education by nurse</td>
<td>• Patient nutrition control questionnaire</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Impact</td>
<td>Easy</td>
<td>Difficult</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>
## PDSA Plan (Test of Change)

<table>
<thead>
<tr>
<th>Date of PDSA Cycle</th>
<th>Description of Intervention</th>
<th>Results</th>
<th>Action Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>15/01/2019</td>
<td>Prepare patient data</td>
<td>Overview before patient’s questionnaire</td>
<td></td>
</tr>
<tr>
<td>15/02/2019</td>
<td>Create questionnaire and patients interviews</td>
<td>Increase quality of data</td>
<td></td>
</tr>
<tr>
<td>15/03/2019</td>
<td>Modify questionnaire</td>
<td>Adding patient satisfaction</td>
<td></td>
</tr>
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<td>Diagnostic Data</td>
<td>Patients (%) – Nov.2018</td>
<td>Patients (%)- Mar. 2019</td>
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<td>10(43%)</td>
<td></td>
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<td>Inappropriate intervention</td>
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<td>12 (52%)</td>
<td></td>
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</tbody>
</table>
Materials Developed (optional)

• Patient’s nutritional questionnaire
• Patient’s satisfaction questionnaire
Conclusions

• The preliminary results indicate the need to continue further quality improvement projects in healthcare.
• There is a change in Patient’s satisfaction related with the program.
• The nutrition knowledge increases with the implement of a nurse consultant.
• Not enough time to analyse the nutritional impact.
Next Steps/Plan for Sustainability

• Continue with a regular nursing consultant.
• Adding a nutricionist consultant in order to help us to improve the patient’s care
• Continue collecting patient’s data and analyzing the evolution, to support the project’s aim