COST-EFFECTIVENESS OF A PRESURGICAL PHARMACEUTICAL CARE CONSULTATION

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BACKGROUND AND IMPORTANCE

AIM AND OBJECTIVES: To analyse the economic impact of implementing this consultation based on the presurgical medication errors avoided with pharmaceutical interventions.

MATERIALS AND METHODS

1. Creation of Multidisciplinary team

Two clinical pharmacists + two anesthesiologists.

2. Retrospective analysis of interventions

All the interventions performed by Presurgical Pharmaceutical Care Consultation (2016 and 2020) in Traumatology, General Surgery, Cardiac Surgery and Thoracic Surgery Services.

3. Classification of errors

According to its probability of causing an AE (literature + clinical judgment). Conservative approach, without “1” probability. 5 groups:

- 0 – 0.01
- 0.1 – 0.4
- 0.6

Cost of one AE: “AE probability * €6,924”

Sensitive analysis: AE cost 20% higher or lower

€6,924 adjusted cost of an AE (Spanish literature)

RESULTS

Table 1. Avoided costs.

<table>
<thead>
<tr>
<th></th>
<th>AE cost</th>
<th>Total</th>
<th>Ratio Savings/Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated cost</td>
<td>6,924 €</td>
<td>2,076,785 €</td>
<td>9.1:1</td>
</tr>
<tr>
<td>20 % higher</td>
<td>8,309 €</td>
<td>2,486,385 €</td>
<td>10.9:1</td>
</tr>
<tr>
<td>20 % lower</td>
<td>5,539 €</td>
<td>1,657,490 €</td>
<td>7.3:1</td>
</tr>
</tbody>
</table>

CONCLUSION AND RELEVANCE

- Implementation of our Pre-surgical Pharmaceutical Care Consultation was cost-effective, preventing medication errors and reducing health spending.
- It could be extrapolated to other hospitals in order to improve surgical patient safety in a cost-effective way.

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