CALCULATION OF THE THERAPEUTIC COMPLEXITY OF THE INSTITUTIONALIZED PATIENT IN A TERTIARY HOSPITAL

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INTRODUCTION

Therapeutic complexity

↑ Hospital admissions
↓ Patients' quality of life
↑ Mortality rates

50% of patients do not follow their medication regimen

The Medication Regimen Complexity Index (MRCI)

MRCI-E

1. Pharmaceutical form
2. Dosing regimen
3. Additional dosing instructions

AIMS

1. **Estimate the therapeutic complexity** of institutionalized patients upon admission to the Institutionalized Patient Care Unit (UAPI), and to assess the **potential reduction in complexity following pharmaceutical interventions** on chronic treatment at discharge.
2. Evaluate whether there is a **relationship between therapeutic complexity** and the **number of hospital visits or readmissions.**

MATERIALS AND METHODS

UAPI´s patients

1. A **database** was created to collect information from electronic medical records and prescription systems, nursing home reports

2. **Excel® sheet:** automatically calculated the complexity scores

3. **Wilcoxon test** → evaluate differences in the MRCI-E score before and after pharmaceutical validation.

- Linear regression → analyze the association between therapeutic complexity and the number of UAPI visits.

RESULTS

88 PATIENTS

66% women

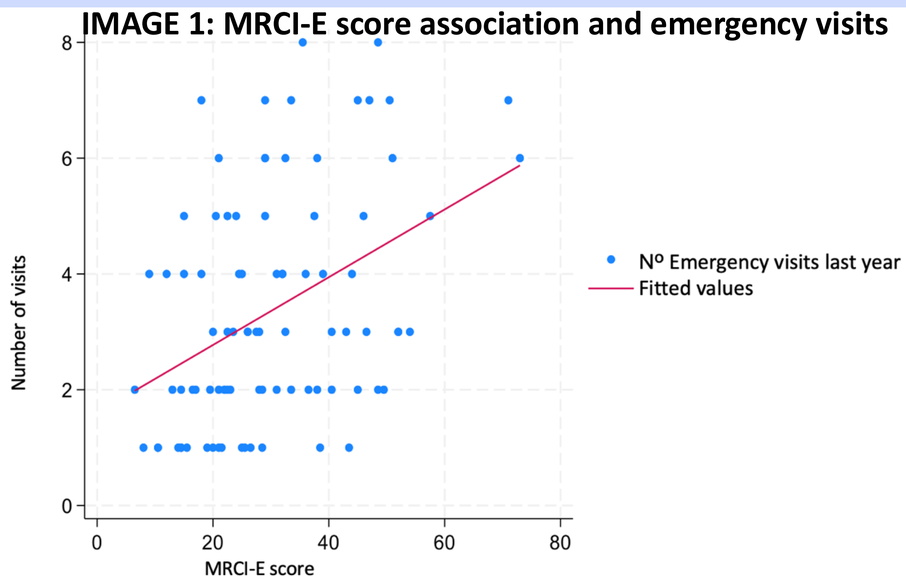
Mean age of 86 years (65-99)

Average of 11 prescribed medications

The mean **MRCI-E score was 30 points** which, **reduced to 28 after pharmaceutical intervention**, with a statistically significant difference **(p<0.001)**.

The regression analysis showed that for every **additional 20 points in the MRCI-E**, there was an **increase of 1.17 emergency visits** (95%CI 0.61; 1.73, p-value<0.001).

IMAGE 1: MRCI-E score association and emergency visits



CONCLUSIONS

The results demonstrate that **pharmaceutical intervention can reduce the therapeutic complexity** of patients and, therefore, decreasing their associated risk. Additionally, **higher MRCI-E scores are found associated with an increased number of emergency hospital visits.**

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