

MEDICATION REGIMEN COMPLEXITY INDEX AMONG SOLID ORGAN TRANSPLANT PATIENTS

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BACKGROUND AND IMPORTANCE

Complex medication regimens (MR) are associated with worse treatment adherence. The Medication Regimen Complexity Index (MRCI) is a validated tool used to quantify complexity of MR and it is the sum of the score in three sections: Dosage forms (A), dosing frequency (B) and additional directions (C).

AIM AND OBJECTIVES

To assess the relative MR complexity among solid organ transplant patients (SOT; kidney, heart, lung and liver) in a tertiary hospital through the validated MRCI Spanish version.

MATERIALS AND METHODS

Transplant patients who collected medication in the Outpatient Pharmaceutical Care Unit of our hospital between January and March 2021 were selected. A total of 40 patients (ten per transplant) were chosen randomly through Excel[®], and a macro with a template of MRCI was created.

The qualitative variables were age, sex and type of transplant; the quantitative ones were months from transplant, total amount of medications, sections A, B, C and total MRCI. All prescribed medications documented in medical records at the hospital ambulatory clinics and the electronic medication list were included. Patients were excluded if they were followed-up in other hospitals, were exitus or MR dosage or frequency was missed/unclear.

Subgroup analyses was made to assess MRCI among type of transplants through ANOVA. All data analysis were made with SPSS[®] version 23, with a <0,05 significance level and a confidence interval of 95%.

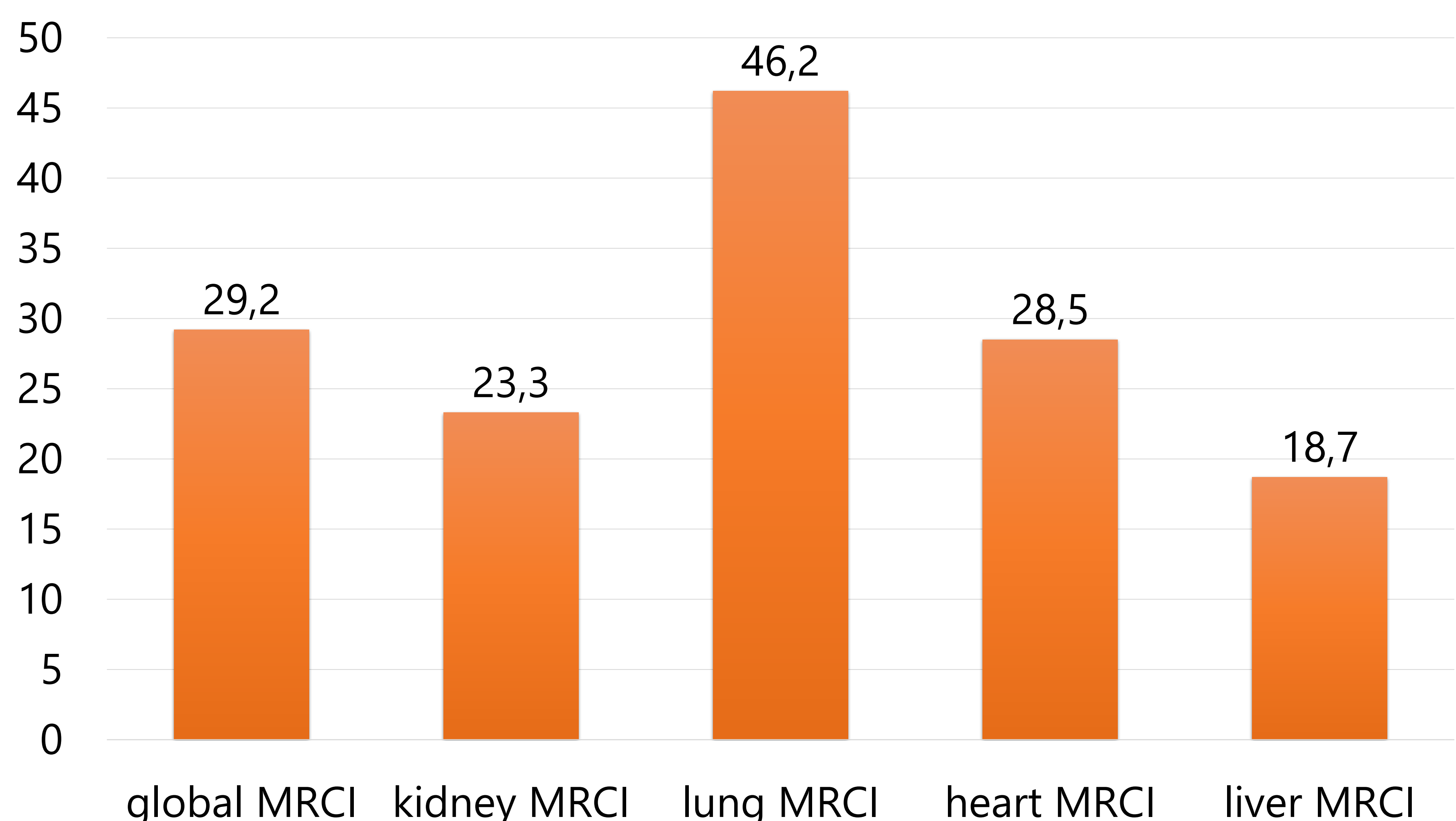
RESULTS

A 40%(16/40) of patients were women.

Tukey test showed a statistically significant MRCI in lung transplant with $p < 0,001$ when compared to kidney and liver transplants, and $p = 0,002$ compared to heart transplant.

Variable	Mean	95% CI
Age (y.o.)	56,6±14,7	51,9-61,3
Months from trasplant	92,7±69,9	70,4-115,0
Total medications	11,1±4,6	9,6-12,6
Contribution to MRCI (score)		
Section A	5,7±3,7	4,5-6,9
Section B	16,6±8,2	14,0-19,2
Section C	6,6±4,3	5,2-7,9

MEAN MRCI SCORE



CONCLUSION AND RELEVANCE

Medication regimen of our sample was more complex in lung transplant patients than in any other SOT, therefore these patients probably should benefit more from pharmaceutical interventions. Further studies with bigger samples are required to confirm differences among kidney, liver and heart transplants.

REFERENCES

1. Johnson George, Yee-Teng Phun, Michael J Bailey, David CM Kong, and Kay Stewart. Development and Validation of the Medication Regimen Complexity Index. Ann Pharmacother. 2004 Sep;38(9):1369-76.