HEALTH RESOURCES AND DIRECT COSTS IN PATIENTS WITH RHEUMATOID ARTHRITIS UNDER BIOLOGICAL THERAPY: DATA FROM BRAZILIAN NATIONAL PUBLIC HEALTH SYSTEM (SISTEMA ÚNICO DE SAÚDE – SUS)

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BACKGROUND

The care of patients with rheumatoid arthritis (RA) has changed significantly with the incorporation of new therapies. Treatment with conventional synthetic disease-modifying drugs (csDMARD) and biological DMARD (bDMARD) for RA are provided by the Brazilian National Public Health System (SUS). Finding out the economic costs associated with AR is of great importance for defining public policies. The aim of this study was to evaluate the use of health resources and costs by SUS through mapping the trajectory of patients with RA using bDMARD from the state of Espírito Santo.

METHODS

It was analyzed a RA cohort in order to estimate health resource use and costs by mapping the trajectory of all RA patients under bDMARD. A linkage was used to join public pharmacies database and national databases in the period 2009 to 2017. Costs were stratified by year through sensitivity analysis to understand different scenarios of expenses for procedure and medicines.

RESULTS

Of the 902 patients treated with RA using bDMARD, 783 were identified, after record linkage. After linkage with 3 SUS-databases (BPAB, SIH and APAC), it was possible to match 386 (42.8%) patients. Of these, 83.9% were women, aged 56 ± 12.2 years. During the period, 1,147 outpatient and inpatient procedures were performed, where 77.41% were outpatients and 22.59% inpatients. It was observed that despite fewer inpatient procedures they represented 88.8% of the resources (BPAB-R\$ 96,556.08; SIH-R\$ 765,644.00). The average cost per patient per year with medicines (bDMARD + csDMARD), considering the maximum, average and minimum scenarios was R\$ 3,548,775.00, R\$ 2,753,441.00 and R\$ 2,090,033.00. The bDMARD costs represent 94.27% of drug costs and 91.4% of all costs.

CONCLUSION

The linkage of SUS banks enabled the (re)construction of the trajectory of patients with RA on a large scale and the estimation of the use of resources and costs with the treatment of RA in Brazil. The total cost per patient/year with RA using bDMARD ranged from R\$ 2,952,233.22 to R\$ 4,410,975.22. Spending on biological therapy is progressive and represents 91.4% of all costs. These economic-epidemiological indicators found can contribute to improve public policies in Brazil.

KEYWORDS

Biological therapy, Rheumatic diseases, Epidemiology, Rheumatoid arthritis.