Introduction

PRISMA statement was developed in order set standards in the reporting of systematic reviews and meta-analyses. The aim of this study was to evaluate the impact of PRISMA endorsement on the methodological quality and the quality of reporting of systematic reviews and meta-analyses, published in scientific journals in the field of gastroenterology and hepatology (GH).

Methods

After identifying the GH journals which endorsed PRISMA in instructions for authors (IA), we appraised: 15 papers published in 2012 explicitly adopting PRISMA in full text, in journals whose IA suggested PRISMA use 1 (Group A); 15 papers from the same journals not explicitly reporting PRISMA in the full text (Group B); 30 papers from the same journals published in the year preceding PRISMA endorsement (Group C); 30 papers published in 2012 from 10 higher impact factor journals which did not endorse PRISMA. Papers were evaluated by estimating compliance to AMSTAR and adherence to PRISMA checklists.

Results

PRISMA statement was referred in the IA in 9 out of 70 GH journals (12.9%). We found significant difference in the overall compliance to AMSTAR checklist, with higher mean compliance recorded in groups A (85.0%) and B (85.6%), respect to C (74.6%) and D (76.9%) (p = 0.022). Overall adherence to PRISMA checklist was significantly higher in groups A (90.1%) and B (91.1%) compared to C (83.1%) and D (85.3%) (p = 0.001).

Conclusions

The endorsement of PRISMA resulted in increase of both methodological quality and quality of reporting. It is advised that an increasing number of scientific medical journals include PRISMA in instructions for authors.

Key messages

- The endorsement of PRISMA resulted in increase of both methodological quality and quality of reporting.
- It is advised that an increasing number of scientific medical journals include PRISMA in instructions for authors.