

**Conclusion and relevance** According to our results, the cost of management of secondary events related to cytotoxic drugs is considerable, so it is necessary to focus on other studies to evaluate the pharmacoeconomic impact of the indirect costs of these diseases.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

#### 4CPS-077 GENETIC VARIANTS AFFECTING BISOPROLOL RESPONSE IN CARDIOVASCULAR DISEASES

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**Background and importance**  $\beta$ -Blockers are commonly prescribed to treat multiple cardiovascular (CV) diseases, but, frequently, adverse drug reactions and intolerance limit their use in clinical practice. Interindividual variability in response to  $\beta$ -blockers may be explained by genetic differences. In fact, pharmacogenetic interactions for some of these drugs have been widely studied, such as metoprolol. But studies that explore genetic variants affecting bisoprolol response are inconclusive, limited or confusing because of mixed results with other  $\beta$ -blockers, different genetic polymorphisms observed, endpoint studied, and so on.

**Aim and objectives** The aim of this study was to perform a systematic review in order to find relevant genetic variants affecting bisoprolol response and to perform a meta-analysis.

**Material and methods** Systematic review of genetic variants affecting bisoprolol. We performed a search in Pubmed on 15 January 2021 using MESH terms in the following argument: ('Bisoprolol' OR 'Metoprolol' OR 'Adrenergic Beta antagonist') AND ('Pharmacogenetic' OR 'Single Nucleotide Polymorphism (SNP)' OR 'Polymorphism'). We included 'metoprolol' and 'adrenergic beta antagonist' to detect research with combined results of various  $\beta$ -blockers.

We conducted a random-effects meta-analysis in recessive, dominant, codominant and overdominant models for the G risk allele in order to assess the association between *ADRB1* A389G (rs1801253) and bisoprolol.

We used R statistics software, version 3.6.2, package 'meta' to conduct the meta-analysis (<https://CRAN.R-project.org/package=meta>) and Harbord's test in order to quantitatively assess publication bias, considering a p value < 0.1 as significant statistical publication bias.

**Results** We found 13 publications studying the association of genetic polymorphisms with patients' response to bisoprolol (Figure 1). Most of them focused on *ADRB* variants, and even though the *ADRB1* Arg389Gly variant seems to have an influence on bisoprolol efficacy, the results are inconclusive and our meta-analysis did not find any statistically significant results in this regard.

**Conclusion and relevance** Many genetic polymorphisms have been assessed with respect to their influence on patients' response to bisoprolol and *ADRB1* Arg389Gly (rs1801253) seems the most relevant genetic polymorphism in this regard but the results have not been confirmed with a meta-analysis.

Our results support the need of further studies about the impact of genetic variants on bisoprolol response, considering

different genetic polymorphisms, conducting single and multiple single nucleotide polymorphisms (SNPs) analysis, including other clinical parameters in a multivariate study.

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#### 4CPS-078 MOTIVATIONAL INTERVIEWING IN CLINICAL PHARMACIST INTERVENTIONS: A SYSTEMATIC REVIEW OF RANDOMISED CONTROLLED TRIALS

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**Background and importance** The role of clinical pharmacists in delivering services with patient-focused care is growing. Motivational interviewing (MI) is an effective intervention for changing patient behaviour; however, the role of MI in clinical pharmacist interventions has not yet been well established.

**Aim and objectives** The aim of this systematic review was to investigate the existing evidence on the effect of MI in clinical pharmacist interventions in hospitals, primary care practices and specialised outpatient clinics. The types of MI interventions, their characteristics and outcomes were examined.

**Material and methods** A systematic literature search using the databases PubMed, PsycINFO, EMBASE and The Cochrane Library was conducted. Randomised controlled trials (RCTs) about MI interventions performed by clinical pharmacists in hospitals, primary care practices and specialised outpatient clinics working in close collaboration with physicians were included. Studies performed in community pharmacies were excluded. No restriction criteria were applied for the population type, delivery mode of the intervention, the comparator, or outcome. A bias assessment was performed by two reviewers according to the Cochrane collaboration risk of bias tool.

**Results** The literature search yielded eight RCT studies. More than 10 different outcome variables were reported across the studies. Four of eight studies showed a statistically significant effect on primary outcomes like medication adherence, hospital readmissions, and emergency department visits. Five studies reported training of pharmacists in MI, and three studies reported fidelity assessment.

**Conclusion and relevance** The main limitation of the study was the small number of studies and their heterogeneity. Beneficial effects of MI were found in some clinical pharmacist interventions. These interventions could have a positive impact on medication adherence and other health outcomes; however, more trials are needed to establish the effects of MI and determine MI characteristics and training associated with the success of the intervention.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

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#### 4CPS-079 ANALYSIS OF CURRENT RESEARCH IN WEARABLES: TOWARDS GREATER DIGITAL HEALTH

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