



Improving healthcare decisions

Drug Therapy Problems and Contributing Factors in Ethiopia: A Systematic Review and Meta-Analysis

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Objective: To systematically analyze the burden of DTP and its predictors in Ethiopia.

Method: A systematic review of literature search with PubMed/Medline and Google Scholar databases was performed in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline. A protocol was primarily registered with the Open Science Framework (OSF). All English language studies reporting DTP in Ethiopia between 2010 and 2019 were considered with no limitation on the type of study. Two reviewers carried out the data extraction and quality assessment. A random effect model was used to estimate the incidence of DTP. Heterogeneity level and publication bias was also analyzed. Sub-group analysis was done by age and type of the disease.

Results: A total of 17,951 records were identified; 18 studies were eligible for the Systematic Review and Meta-analysis. Among 4,175 included participants, 2,629 patients had faced one or more DTP. The random pooled prevalence of DTP was found to be 67.4% (95% CI, 58.4%-75.2%) at heterogeneity level I^2 of 96.8% (df= 17 and p -value <0.001). Multiple medication use, co-morbidities, age, marital status, stage of disease, length of hospital stay, negative beliefs about medications and poor patient involvement in therapeutic decision making were identified as key predictors for DTP.

Conclusion: Our review showed a high burden of DTP in Ethiopia and this has been attributed to several patient and practitioner related factors. This calls for the ministry to promote comprehensive multidisciplinary health services delivery approaches at all levels.