## 741. Influence of Medication Risks and Benefits on Patient and Clinician Preferences for Treatment in Multimorbidity: A Discrete- Choice Experiment

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**Background:** Consideration of patient preferences and priorities for treatment and outcomes is fundamental to providing patient centered- care. This is especially pertinent in the older population where multimorbidity and treatment conflicts are common. Little is known about how patients with multimorbidity or clinicians balance the benefits and harms associated with medications in the presence of competing health outcomes.

**Objectives:** To examine the influence of risks and benefits of medications on patient and clinician preferences for treatment in multimorbidity.

Methods: A discrete choice study was conducted to examine patient and clinician preferences of medication risks and benefits consistent with non- steroidal anti-inflammatory drugs following diagnosis of osteoarthritis (OA). Community- based patients aged ≥65 years old with at least one chronic condition and general practitioners (GPs) were recruited. Benefits presented included reduction in pain or stiffness and improvement in quality of life. Risks included mild side effects such as daily nausea, heartburn, diarrhea, dizziness and more severe adverse effects of GI ulcer / bleeding, myocardial infarct, stroke or renal failure. Each participant answered six choice tasks comparing different treatment attributes. Multinominal logistic regression models were used to estimate preferences for treatment attributes.

**Results:** A total of 101 patients and 102 GPs were included in the study. Overt two thirds of patients (69%) had two or more conditions, 9.9% were aged 75 years and older and 63% were male. When presented with the treatment options, 38% of patients chose to not take the medicine, regardless of benefits or harms. Reduction in pain was the only treatment benefit to significantly influence patients' preference to take the medicine (p = 0.026). Risk of daily nausea (p = 0.047), myocardial infarct (p = 0.014) and stroke (p = 0.024) were drivers of patient preferences to not commence the medication. By contrast for GPs, treatment benefits did not significantly influence prescribing but the risks of mild and severe adverse effects did.

**Conclusions:** Both patients and GPs willingness to commence a new medication in patients is largely driven by adverse effects. These results suggest clinical guidelines need to place a greater emphasis on both benefits and harms of medicines, in addition to strategies for eliciting patient preferences.

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