



14th SINGAPORE PUBLIC HEALTH & OCCUPATIONAL MEDICINE CONFERENCE

15-16 October 2019 · Equarius Hotel

PREVENTIVE HEALTH IN A CHANGING WORLD

PATIENT PREFERENCES FOR SECOND-LINE MEDICATIONS TO MANAGE TYPE 2 DIABETES MELLITUS

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Background

The appropriate treatment choice depends on how patients value the risks and benefits of relevant treatments when one treatment is not clearly better than others. Our aim was to quantify patients' willingness to accept urinary and genital tract infections (UGTI) risk in exchange for benefits associated with treatments in managing type 2 diabetes mellitus (T2DM) via a discrete choice experiment.

Methods

Adult patients (N=159) with T2DM and currently on Metformin/Metformin plus sulphonylurea were asked to choose between two hypothetical medications defined by six attributes: years of medication effectiveness in controlling blood glucose, weight reduction, UGTI risk, risk of hospitalisation from heart failure, mortality risk, and out-of-pocket medication cost. We used latent class logistic regression to estimate willingness to accept UGTI risk.

Results

After excluding those who failed an attention test (N=12), a 2-class latent class model was identified as the best fit (N=147). The first class (54%), termed "survival-conscious", were willing to accept 42% and 14% increase in UGTI risk in exchange for a reduction from 6% to 1% in mortality ($p=0.02$) and hospitalization risks ($p=0.07$), respectively. The second class (46%), termed "cost/UGTI-conscious" were willing to accept significantly lower (5% and 6%) UGTI risk increase in exchange for the same reductions in mortality ($p=0.04$) and hospitalization risks ($p=0.002$), respectively.

Conclusions

Many patients were willing to trade off higher UGTI risk for a more effective medication. Physicians should present the benefits and potential side effects of all available treatments and consider patient preferences in their treatment recommendations.

Financial disclosure: The study is funded by AstraZeneca (Singapore) Pte Ltd.