

WILLINGNESS TO PAY IN PATIENTS WITH PAINFUL-IRRITABLE BLADDER SYNDROMES

I. Budhiarso¹, D.M. Bushnell¹, S.D. Ramsey²

¹Health Research Associates, Inc, Seattle, WA, USA, ²Department of Medicine, University of Washington

Background

Willingness to pay (WTP) has gained popularity despite the fact that the use of the technique has been limited by concerns regarding the accuracy of the estimates and the reluctance of many decision makers in the medical field to accept measures that are expressed in monetary terms. Several studies using a variety of health care interventions have been conducted to address the technical concerns of WTP. In addition people are beginning to pay more attention in current studies to how willingness to pay can provide important information about patient perspectives and values.

Objective

To address the effects of key demographic variables and patient perception on willingness to pay (WTP) in patients with painful-irritable bladder syndromes (PIBS).

Methods

At the baseline appointment, participants were given the self-administered study measures including WTP, symptomatology, and demographic variables including disease severity characteristics, income and education. A month after the baseline, participants were mailed a follow-up battery which included instructions and a self-addressed stamped envelope to return the completed retest battery. All complete data were then analyzed, and a regression model was developed.

To estimate the willingness to pay, an Ordinary Least Squares (OLS) regression was utilized:

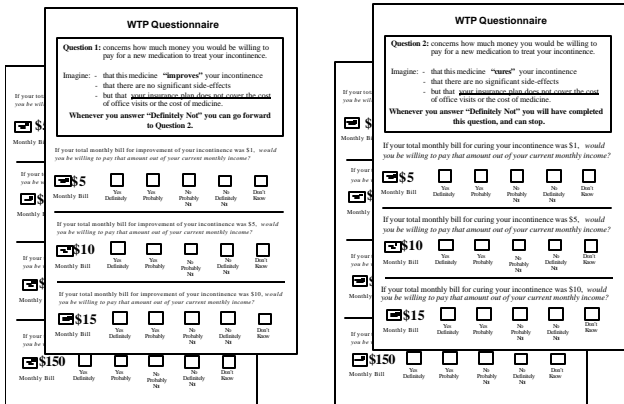
- The dependent variable is maximum WTP, which is defined as the largest dollar value of the “yes-definitely” or “yes-probably” response to willingness to pay bids.
- The independent variables included income, education, self-perceived severity, symptom bothersomeness, number of medical appointments for their condition in the past year, and the number of years with the condition.

Results

Independent Variables	Dependent Variable	
	Max.WTP Improvement	Max.WTP Cure
Intercept	-71.5	-182.4
Income (mid-point)	-0.0004	-0.0004
Symptom Bothersomeness	-0.4	-0.8
Education	7.7*	13.9***
Medical Appointments	2.7*	1.2
Self-Reported Severity	15.9	32.3*
Years with PIBS	0.2	1.0
NOTE *** = significant for $\alpha=0.01$ ** = significant for $\alpha=0.05$ * = significant for $\alpha=0.10$	n = 56 F = 2.95** R ² = 0.51 Adj. R ² = 0.17	n = 56 F = 2.48** R ² = 0.48 Adj. R ² = 0.14

WTP Questionnaire

- 4-page self-administered questionnaire for two situations: cure and improvement
- Close-ended WTP bids: 11 bids from \$1 to \$200
- 5 responses: “yes-definitely”, “yes-probably”, “no-probably not”, “no-definitely not”, “don’t know”
- Average administration time: 2 minutes



Sample

Participants in the study were recruited from clinics, newspaper advertisements, posters, and contact cards at medical centers in Seattle and Philadelphia. To ensure they met the inclusion criteria, the site staff carefully surveyed the subjects using a clinician-established screen. After being screened for the presence of PIBS, a total of 60 female patients were entered into the study.



Health Research Associates, Inc

Study sponsored by:
Eli Lilly & Co., and
Zeneca Pharmaceuticals

Conclusion

As hypothesized, the mean predicted willingness to pay for cure is higher (\$100.50 a month), than the WTP for improvement (\$70.50 a month).

For improvement: education level and the number of medical appointments to treat PIBS in the last year have a positive and significant impact on WTP; income and symptom bothersomeness have negative but insignificant impacts; and self-reported severity and years with PIBS are statistically insignificant.

For cure: education and self-reported severity have a positive and significant impact on WTP; income and symptom bothersomeness have negative but insignificant impacts; and medical appointments and the number of years with PIBS are statistically insignificant.

The R-square and F statistics for each model showed that the variables in the model reasonably explain the variation of WTP at a significant level.

This unique self-administered WTP measure proved useful in identifying patient preferences associated with painful-irritable bladder syndromes.