Patients’ Preferences and Willingness-to-Pay for Disease-Modifying Therapies: A Discrete Choice Experiment in the U.S.
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Background

• While disease-modifying therapies (DMTs) for multiple sclerosis (MS) treatments are costly, patient valuation of DMTs has not been examined.

Objective

• To examine parents’ preferences and willingness-to-pay (WTP) for DMTs.

Methods

• Six attributes and their levels from literature and the interviews of neurologists and patients were used to develop a discrete choice experiment, web-based questionnaire.

  - Each questionnaire was composed of seven choice sets and each choice set contained those six attributes with different levels.

Results

• 508 (42%) usable responses

  - Patient characteristics
    - Average age: 53.0±11.0 years old
    - Female: 78.1%
    - White: 95.6%
    - Married: 68.7%
    - Higher than college: 38.6%
    - Employed outside home: 36.4%
    - Average # MS years: 13.4±9.4 years
    - Average # of relapses during last 2 years: 1.1±2.4
    - Type of MS
      - Relapsing-remitting MS: 66.1%
      - Secondary-progressive MS: 19.7%
      - Primary-progressive MS: 9.1%
      - Progressive-relapsing MS: 2.0%
      - Do not know: 3.1%
    - MS symptoms by Patient Determined Disease Steps
      - Normal: 21.7%
      - Mild disability: 15.7%
      - Moderate disability: 10.0%
      - Gait disability: 10.4%
      - Early cane: 14.2%
      - Late cane: 7.7%
      - Bilateral support: 18.9%
      - Bedridden: 1.4%

• Patients preferred DMTs with lower relapse rate, lower disability progression, lower severe adverse events, lower frequency of administration, and lower cost.

• The patients preferred and were willing to pay more for oral DMTs, compared to other dosage forms.

Conclusions

• Patients with MS weighted importance on the route of administration and the number of relapses relatively high, compared to other DMT attributes.

• Their WTPs for DMTs varied widely and the majority of them were lower than the DMT market prices.

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