

The Impact of Quack Markets on Patient Welfare

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Importance of the Study

Quack markets, where charlatans and patients engage in price competition, are prevalent in industries such as psychological therapy, management consulting, and alternative medicine. The limited rationality of patients leads to the selection of treatments based on anecdotes rather than probabilistic reasoning. Understanding the impact of market competition on the exploitative effects of quacks is crucial for developing effective policies to protect consumer welfare.

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Hypotheses

Can market competition mitigate the exploitative impact of quacks on patient welfare?

- Patients follow a limited rationality decision rule, the $S(1)$ procedure, reflecting anecdotal reasoning.
- An extended model where quacks can choose treatment methods to maximize price competition pressure is considered.

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Formula Interpretation

- Define the decision processes of patients and quacks.
- Derive the Nash equilibrium in the price competition game, showing that the equilibrium strategy is mixed and symmetric.
- The expected equilibrium price of quacks is related to the disease cure probability α .
- As the number of quacks n increases, the patient welfare loss changes non-monotonically.

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Main Results

- Quack markets are active regardless of the cure probability α .
- The expected equilibrium price decreases as α decreases, indicating more quack behavior for harder-to-cure diseases.
- Patient welfare loss is non-monotonic with respect to n and α .

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Practical Significance

The study's findings are significant for understanding irrational behavior in markets and the effectiveness of price competition policies. It highlights the importance of improving consumer decision-making quality, especially in industries where service quality is difficult to assess.

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Conclusion

The study, through a theoretical model, analyzes the impact of limited rationality on market behavior and suggests that market competition may not always alleviate the negative impact on consumer welfare. It emphasizes the importance of improving consumer decision-making quality and provides new perspectives for future research.