Examining the impact of tobacco pricing and packaging strategies on tobacco use and equity in middle-income countries

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1. Introduction

- Around 1.1 billion people are using tobacco products globally and 82% of them are living in low and middle income.
- Smoking causes burden on both health and economics of the individual and nation.
- The main measure to reduce demand and these burden is to increase the price and tax.
- Gaps in knowledge of the impact on tobacco price and tax on smoking cessation and onset, plain packaging on the demand for cigarettes in low and middle income countries.
- Vietnam is one of 5 countries participating in the study (Chile, Colombia, Ecuador, South Africa and Vietnam) – funded by IDRC and coordinated by McMaster University.
2. Objectives

- The overall objective is to increase our understanding of the impact of tobacco pricing and packaging strategies on tobacco use and equity in middle-income countries.
3. Research components

In Vietnam, the study examines:

1. The impact of tobacco prices on smoking onset, smoking cessation, household consumption on tobacco, tobacco use participation and tobacco consumption – Ongoing

2. The effects of taxes on the retail price of tobacco products - Ongoing

3. Socioeconomic inequalities in smoking and the contribution of smoking to socioeconomic-related inequalities in health;

4. The impact of cigarette packaging, including plain packaging, on various sub populations;

5. Using simulations, the distributional consequences of changes in tobacco pricing and taxation policies on tax revenue, use and health - Ongoing
4. Method

- Secondary data sets: VHLSS, GATS, Tobacco price, CPI and tax (from 2000 to 2016)
- Primary data: DCE survey (2019)
- Subjects: Households, Adult (≥15 years old); Female student (13-15 years old); Adolescent and Youth (14-25 years old)
- Provincial scope: 63 provinces (retrospective data); Hanoi (DCE research)
- Time: 2017-2021
- Modeling: descriptive analysis, regression, etc.
5. Descriptive analysis: individual smoking

Smoking rate in Vietnam, 2015 (%)

- Male: 45.3%
- Female: 36.7%
- Total: 22.5%

- % of adult ≥ 15 years who currently smoke tobacco
- % of adult ≥ 15 years who currently smoke cigarettes*
5. The price of cigarette, the smoking rate and tax increases

**Price of cigarette over time (thousand VND)**

![Graph showing the price of cigarette over time](image1)

**The smoking rate over time (%)**

![Graph showing the smoking rate over time](image2)
5. The impact of tobacco prices on smoking

There is a positive association between the special consumption tax rate and the cigarette price. The elasticity is estimated at around 0.51%.

Higher cigarette price reduces the smoking participation. If the price increases by 1 percent, the probability of smoking decreases by 0.05 percentage points.

We also find a reducing effect of the cigarette price on smoking onset. If the price of cigarette increases by 1%, the hazard decreases by around 0.95%.

However, higher price does not increase the smoking cessation. Possibly, the increase in the constant cigarette price has been small. This also suggests that reasons for smoking cessation might be other factors than pricing.
6. Next steps

• Revise and finalize the reports on impact of prices on smoking

• Develop the report of the study “Impact of tobacco tax on the retail prices, tax revenue, use and health”;

• Conduct the study “Socioeconomic inequalities in smoking and the contribution of smoking to socioeconomic-related inequalities in health”; and “The impact of cigarette packaging, including plain packaging, on various sub populations”.

• Prepare policy briefs and disseminate to policy makers
THANK YOU!