

# Investigation of Perception About Air Pollution and Its Health risks

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Punjab Visit in 2019 and interview with farmers

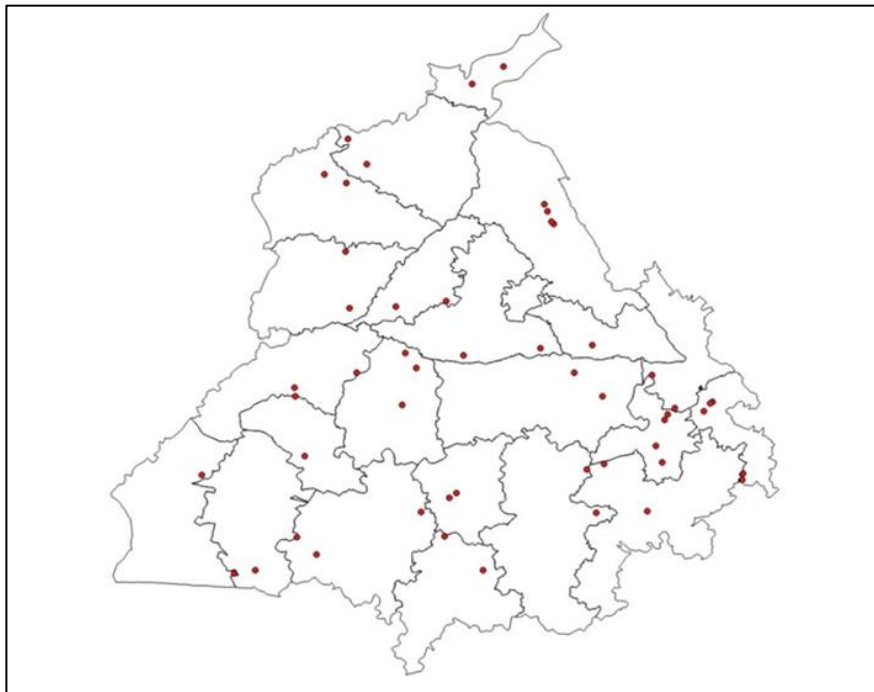
No family members & neighbors have respiratory problems.



# Questionnaire Survey about Air Quality and Health

# A survey to explore the perception of air quality and its health risks in Punjab area

- Survey area: 22 districts of the state of Punjab
- Time period: 2020 Aug. to 2021 Jan.
- Subjects: 2202 households(50 Households/Village)



51 villages locations in Punjab

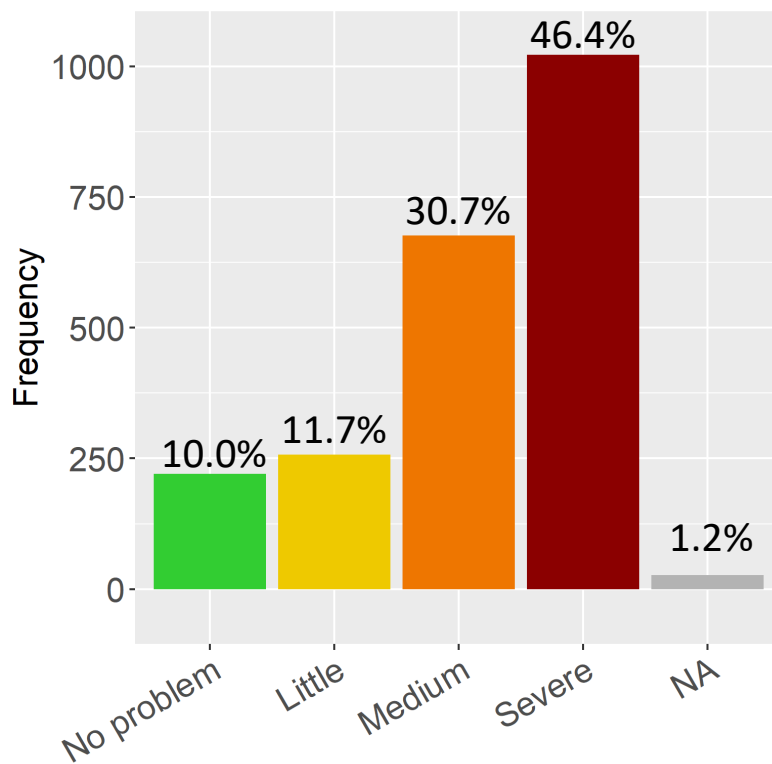


Respondents:  
M:F =2196 : 6  
Mean Age 50.8

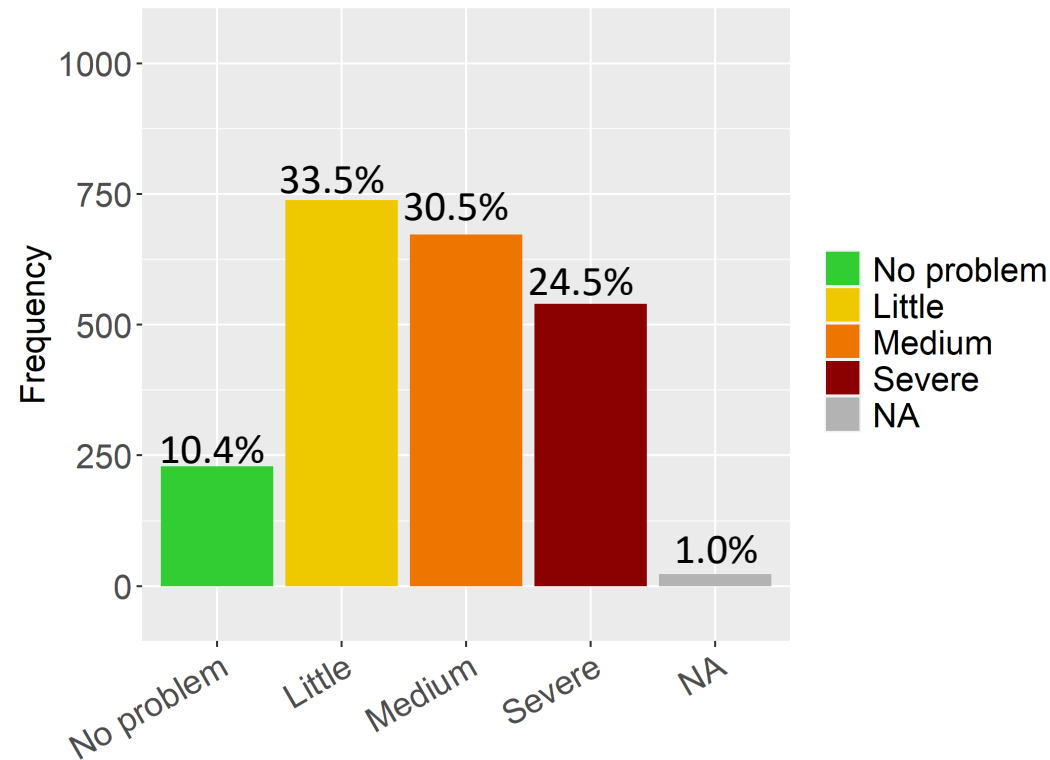
# Perception of air pollution in Delhi / Punjab

■ How do you think about air pollution in November 2019?

## Perception in air pollution in **Delhi**



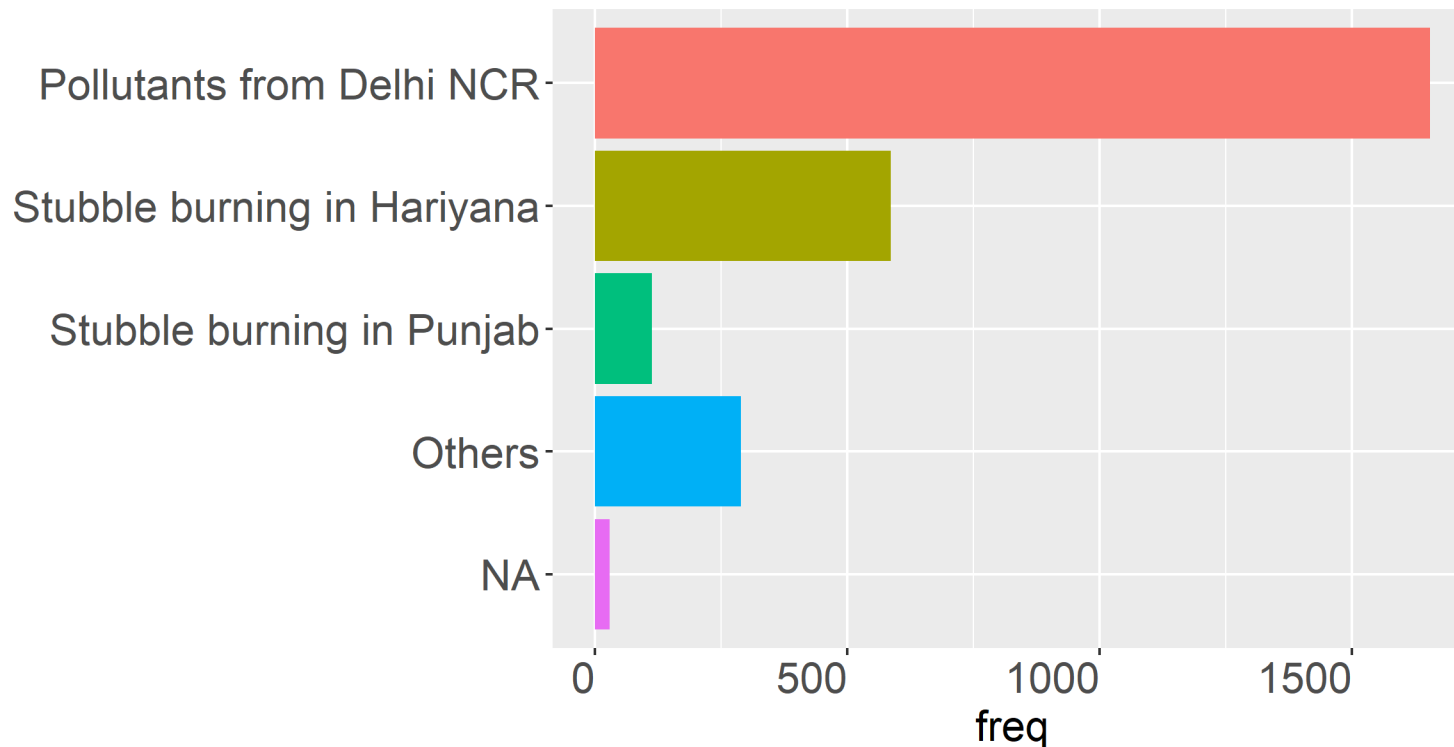
## Perception in air pollution in **Punjab**



# Perception about the cause of air pollution in Delhi

- What do you think about the cause of air pollution in Delhi?

Multiple choices also included.

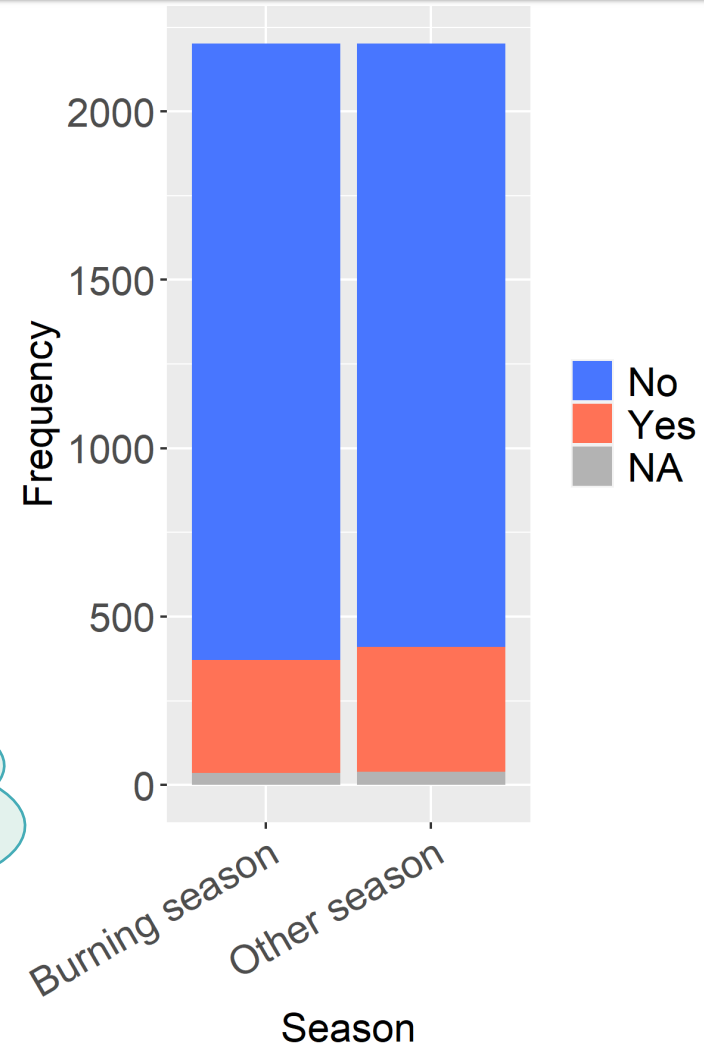


# Health condition for farmers and their family

## ■ Did you or your family have any problems (including COVID-19) about health condition in 2020?

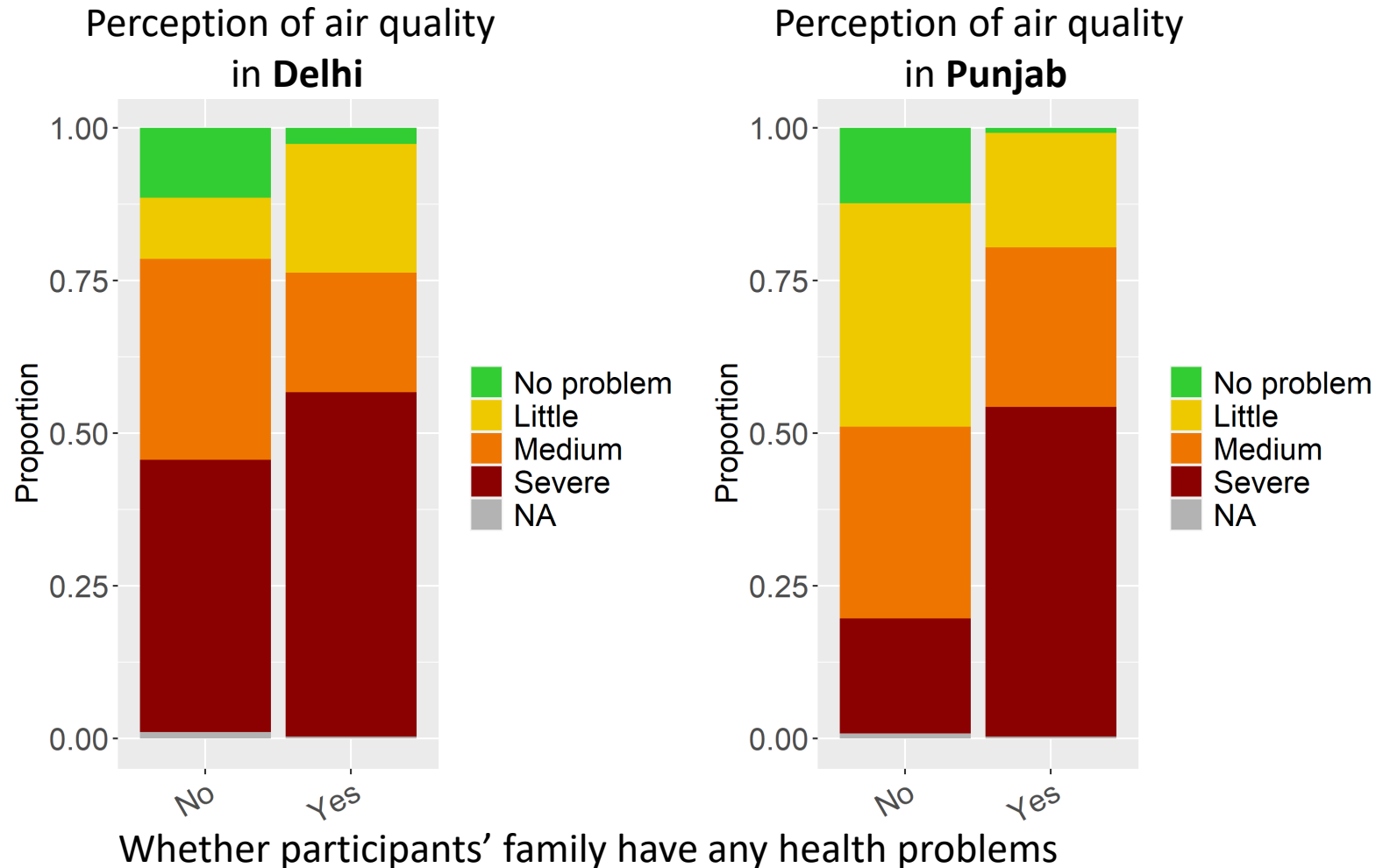
- Prevalence of having any health problems in family is approximately 17%.
- There is no difference in prevalence between burning/non-burning season 2020.

Having health problems may affect their perception of air pollution.

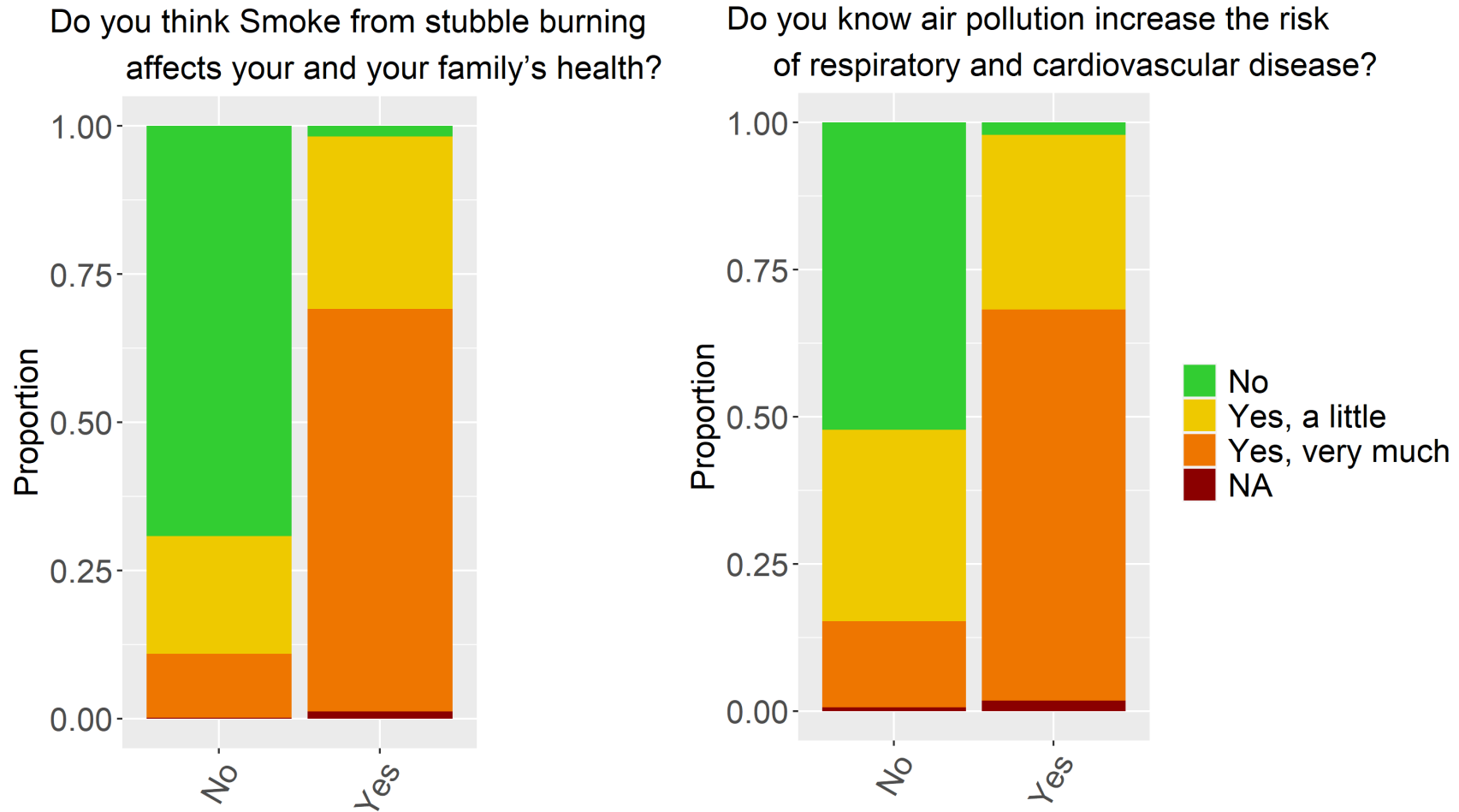


# Comparison in the perception of air quality between those with/without health problems in family.

## How do you think about air pollution in November 2019?



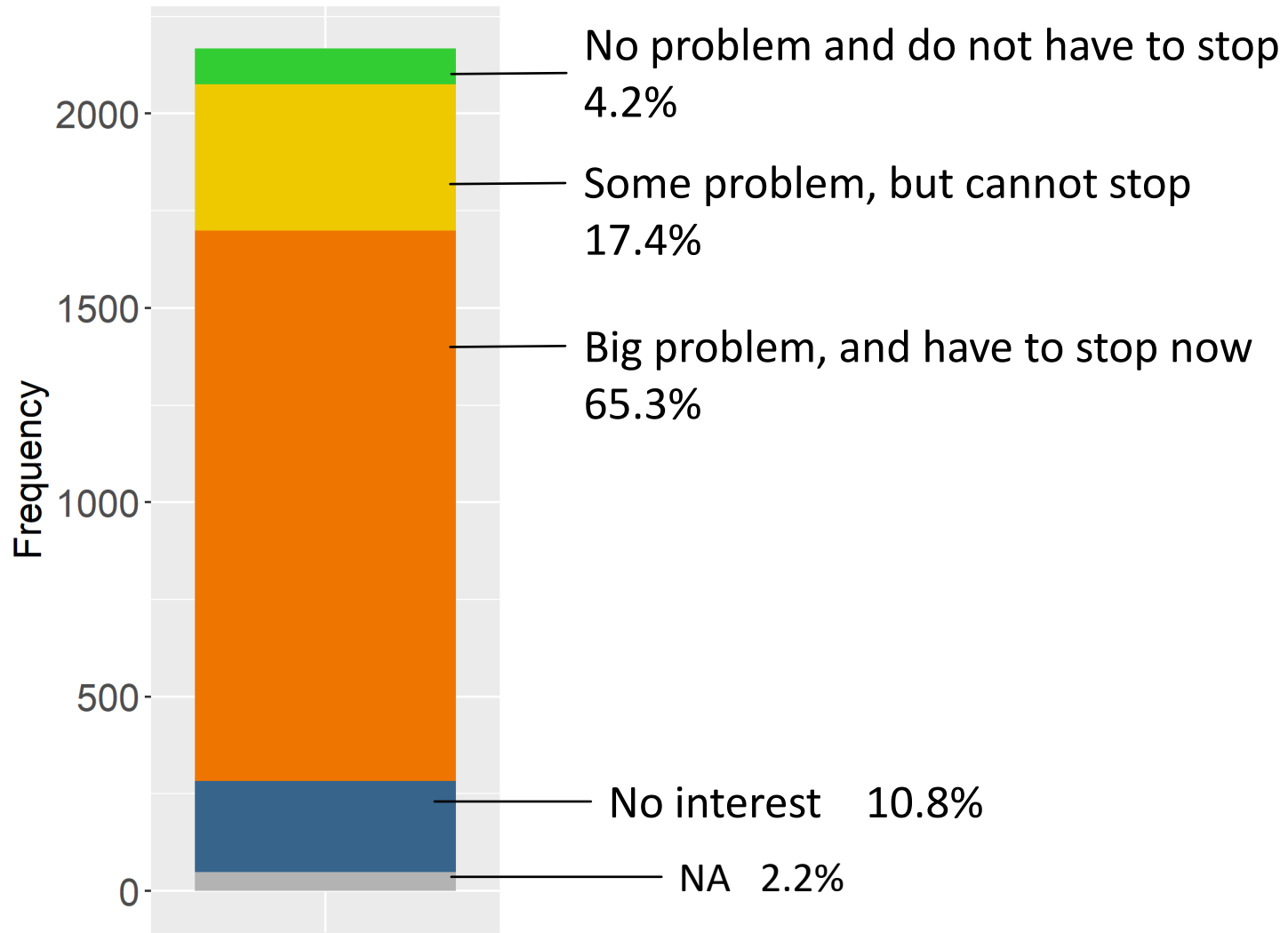
# Comparison in the awareness/knowledge of air pollution between those with/without family having health problems



Whether participants' family have any health problems in 2020



## ■ What do you think about stubble burning in Punjab?

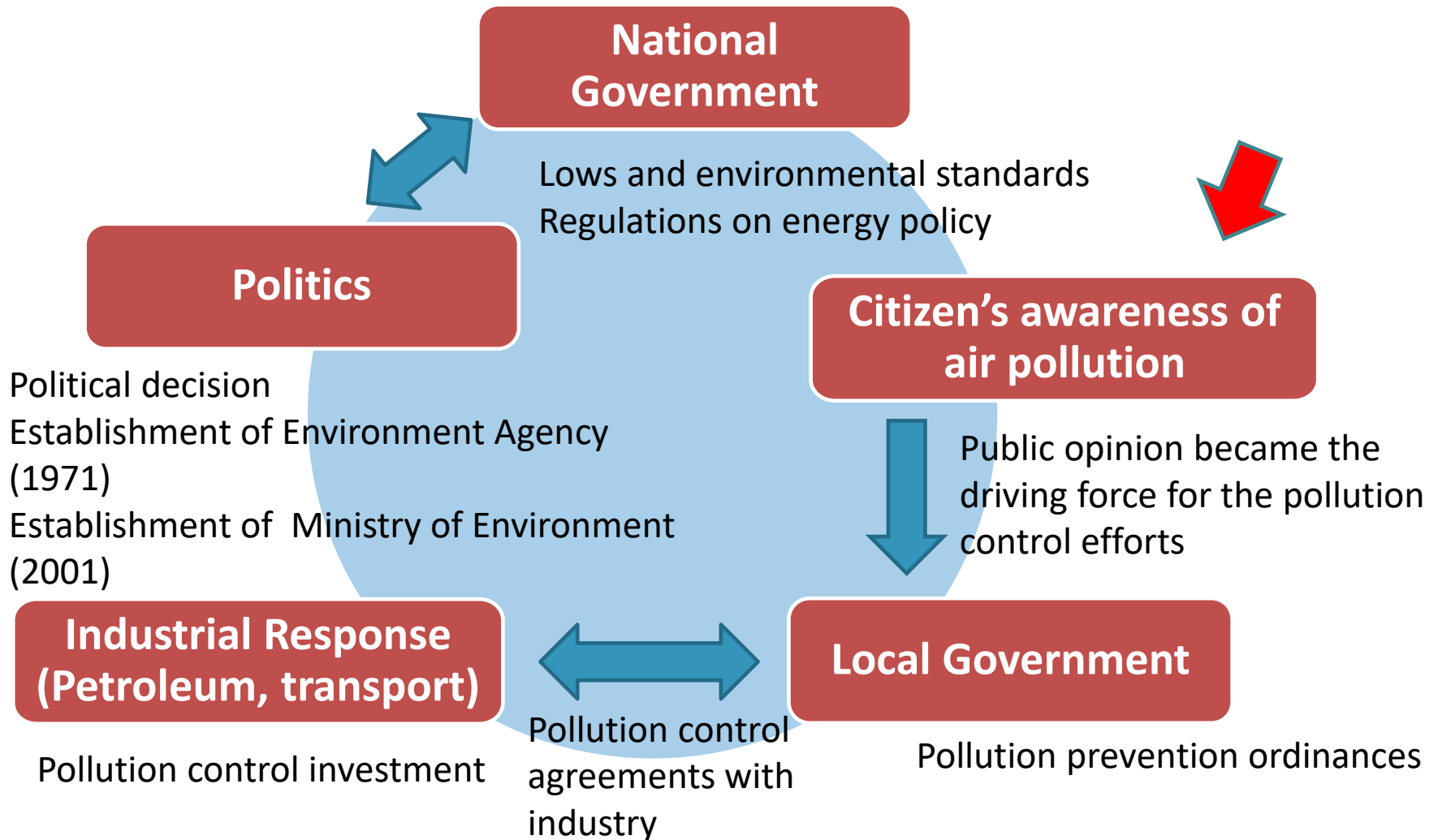


## Summary

- Punjab households generally thought that the air quality was serious in November 2019 but many of them may think that stubble burning is not the (single) cause of bad air quality in Delhi.
- Approximately 20 % of Punjab households had family members with health problems in 2020.
- The households with family members having health problems tended to be aware of air quality and to have more knowledge about air pollution and health.

# **A collaborative study about Air Quality and Respiratory Health/QOL**

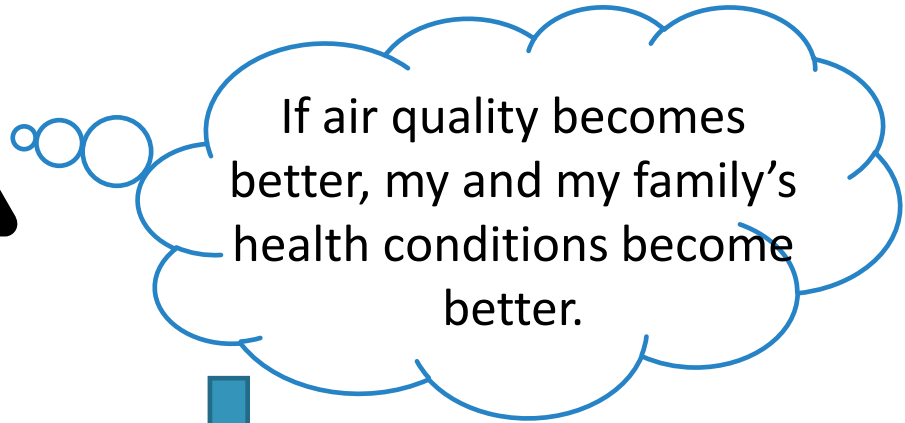
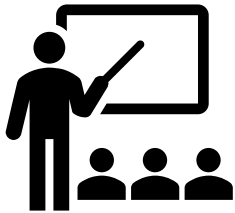
# Sector's efforts to improve air quality in Japan



# Study background and objectives

Increasing awareness and knowledge about health effects of air pollutants change the behavior.

Educational session about air quality and health



Preventive behavior (Wearing facemask, Increase public opinion about air quality)

Study objective

To implement an education intervention to raise community awareness about health-related for respiratory diseases QOL and the perception on the risk factors, such as air pollution,

# A collaborative study by India-Japan teams

- Study area and study participants:
  - Residents in rural areas in Chandigarh
- Intervention
  - Develop Information Education & Communication tools
  - Health education session about respirator health, COVID-19, air pollution and stubble burning
  - Online outreach from India-Japan teams
- Outcomes
  - Participants' respiratory symptoms, Participants' QOL, Perception about air quality, Impact on behavior change



Raising awareness is the first step to improve the air quality



Thank you for your attention.