# *Trust and community in infectious disease survival: A syndemic approach to COVID-19 immunity and illness amongst Orthodox Jews in Montreal*

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# Background

- Infectious disease research typically stems from single disciplines (e.g. immunology, anthropology)
- We adopt a “syndemic” approach encompassing socio-political and biological factors producing cumulative disease effects on marginalized communities

(Singer et al, 2021; Yadav et al, 2020)

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# Objective

To understand multidimensional aspects of infectious disease within the Orthodox Jewish community

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# Materials and Methods

- We used a parallel convergent mixed-methods approach representing immunology, epidemiology and anthropology disciplines.
- We conducted blood sampling, community surveys, key informant and community member interviews, and participant-observation

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Immunology

Epidemiology

Anthropology


# *Results

# Results

## Immunology

- 53 clinics (14 Santé Québec vaccination events + 39 clinics at Refuah V'Chesed)
- 257 blood samples (spots and draws) across 4 rounds of sampling
- Average of 6.5 calls / emails per person per round of sampling to retain participation
- Ongoing longitudinal serological (antibody) analyses of acquired samples, and of cell-mediated immunity (T cell responses to virus proteins) of acquired samples

- Our first sampling round, in June 2021, yielded high community infection rates, 51% having antibodies for COVID-19, compared with approximately 10% of the general population

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# Results

## Epidemiology

- 613 surveys
  - 54% men
  - 46% women

| | Men | Women |
|---|---|---|
| Age | | |
| Mean [SD] | 36.2 [14.1] | 35.6 [14.1] |
| Median [Q25, Q75] | 33 [24, 45.3] | 32.5 [23, 47] |
| Min, Max | 18, 72 | 18, 71 |
| Number of Household Members | | |
| Mean [SD] | 5.6 [2.8] | 6.2 [3.1] |
| Median [Q25, Q75] | 5[3, 8] | 6[4, 8] |
| Min, Max | 1, 12 | 1, 16 |
| Municipality(%) | | |
| Boisbriand | 12.8 | 7.7 |
| Côte-des-Neiges-NDG | 6.9 | 13.5 |
| Mile-End | 19.7 | 21.2 |
| Outremont | 59.8 | 54.8 |
| Côte-Saint-Luc | 0.9 | 2.9 |
| Educational Level(%) | | |
| Yeshiva (high school) and less | 72.6 | 32.7 |
| Diploma/Trade certificate | 15.4 | 55.8 |
| University degree | 6 | 9.6 |
| Other | 5.1 | 1.9 |

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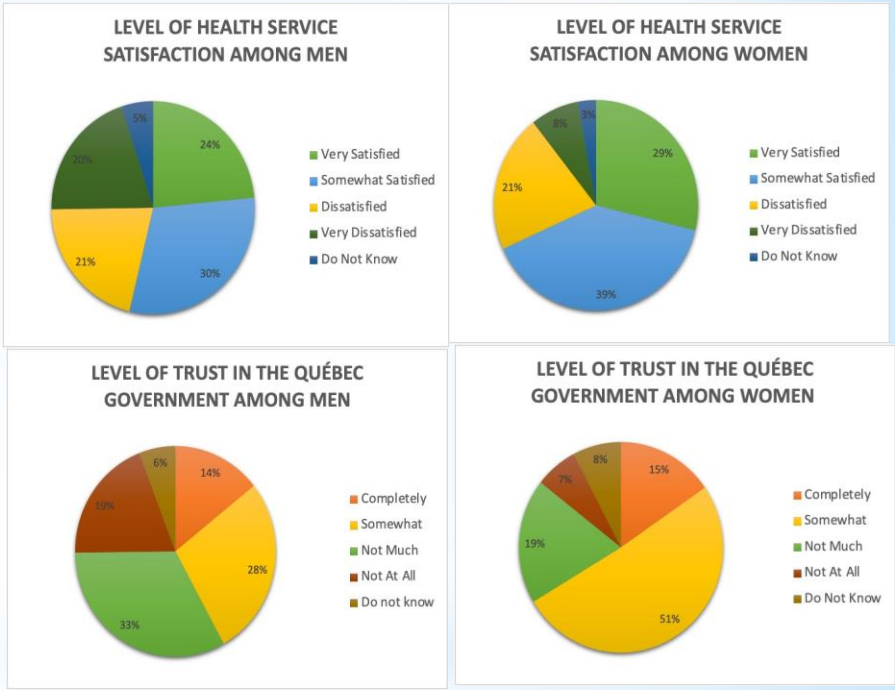
# Results

## Epidemiology

- Women expressed **greater satisfaction** with Quebec health services (68%) compared to men (54%), and **higher trust** in governments (66%) than men (42%)

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# Results

## Anthropology

- Thematic analysis of 104 survey interviews shows, in general, **intensification** of community-specific disease management and **dissatisfaction** with public health messaging
    - Excessive and demonstrative policy rule-enforcement weakened public trust
- **High family orientation**: either source of concern or support, socializing, information and aspiration /role modeling (for children).
- Women's main source of **COVID-19 information** was men, while men deferred to rabbis of their sub-communities transnationally and the community clinic Refuah V'Chesed.
- **Family cohesion** was intensified through school shutdowns and homeschooling, although there were gender differences in reporting.
- **Attitudes toward COVID-19 vaccines** depended on expediency in terms of ability to travel.

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# Results

**Anthropology**

- Cultural and religious ***identity*** was the main factor distinguishing "insider"/ "outsider" and corresponding distinction between who was trusted and not trusted

*"The government does not consider the religious needs of its citizens."*

*"It is clear that the people in power have their own agendas."*

*"I trust my community to look after me. … I only got vaccinated because I had to travel. …. The (government) doesn't help at all. … only asks for things by force and looks after their own needs."*

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# Lessons / implications

- A **syndemic** perspective shows that a combination of heightened disease **susceptibility** and **rate of infection**, and systems of power that foster **social exclusion** can exacerbate public policy **mistrust** at a time when it is most needed.

- A **"one-size-fits-all"** strategy of public health communication is **ineffective**, requiring consultation, negotiation and a degree of self-determination in health policy.

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