CANCER SCREENING (NON-)ATTENDANCE: DETERMINANTS, BARRIERS AND MOTIVATIONS

A surprisingly complicated journey from Measuring to Understanding

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ACKNOWLEDGEMENTS

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RESEARCH: BACKGROUND

What do the stats say:

58,000 cases (10.7 per 100,000) and 26,000 deaths (3.8 per 100,000) in Europe

750 cases (9.1 per 100,000) and 293 deaths (2.7 per 100,000) in Czechia

531,000 cases (74.3 per 100,000) and 142,000 deaths (84.9 per 100,000) in Europe

7,256 cases (72.35 per 100,000) and 1,710 deaths (12.27 per 100,000) in Czechia (in 2020)
RESEARCH: BACKGROUND

What do the stats say:

Europe:
- 10.7 cases per 100,000 females and 26,000 deaths
- 750 cases (9.1 per 100,000) and 293 deaths in Czechia

Czechia:
- 74.3 cases per 100,000 females and 142,000 deaths
- 7,256 cases (69.6 per 100,000) and 1,710 deaths

(in 2020)

WHAT CAN WE DO ABOUT IT?
“Screening is the **systematic application of a test** or inquiry to identify those **individuals at sufficient risk** of a specific disorder to benefit from further investigation or direct preventive action, among persons who have **not sought medical attention on account of symptoms of that disorder.**”

Wald, 2008
~40-90% cervical cancer deaths can be prevented
~20-50% breast cancer deaths can be prevented
CANCER SCREENING

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~20-50% breast cancer deaths can be prevented

EU GUIDELINES (2003):
♀ ~20-60 y.o.
every 3-5 years → cervical cytology
♀ 50-69 y.o.
every 2 years → mammography

CZECH GUIDELINES:
♀ 15+ y.o.
every year → cervical cytology
♀ 45+ y.o.
every 2 years → mammography

Cancer screening (non-)attendance: Determinants, barriers and motivations
Anna Altová
Cancer screening (non-)attendance: Determinants, barriers and motivations

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MY RESEARCH

Cancer screening (non-)attendance: Determinants, barriers and motivations

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Part One

HOW MANY WOMEN ATTEND SCREENING IN EUROPE?

AND ARE THERE ANY INEQUALITIES?
### How Many Women Attend Screening in Europe?

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### Cancer screening (non-)attendance: Determinants, barriers and motivations

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HOW MANY WOMEN ATTEND SCREENING IN EUROPE?

• data: EHIS 2019
  ○ self-reported
• “Last time of cervical smear test”
  ○ within the past 12 months, 1 to less than 2 years, 2 to less than 3 years, more than 3 years, never
• up-to-date participation based on country-specific screening interval
  ○ “ability” of women to use the offered preventive care
  ○ group 2: ever screened
HOW MANY WOMEN ATTEND SCREENING IN EUROPE?

large differences - within and between countries

group 1 - all:
  highest: Sweden, 95.4%
  lowest: Serbia, 65.8%

Czechia: 66.5%
  • high edu: 71.9%
  • low edu: 52.2%
... AND YES, THERE ARE INEQUALITIES

Chances of up-to-date non-participation by education compared to high education

- LOW-HIGH:
  - Group 1
    - Sweden OR = 6.36 (95% CI 3.89-10.35)
    - Slovenia OR = 1.67 (95% CI 1.24-2.26)
  - Group 2
    - Romania OR = 4.49 (95% CI 3.68-5.49)
    - Ireland OR = 1.81 (95% CI 1.30-2.51)

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Part Two

HOW MANY WOMEN ATTEND SCREENING IN CZECHIA?
HOW MANY WOMEN ATTEND SCREENING IN CZECHIA?

- data: VZP - administrative data from largest health insurance company (~2.5 million women)
- standardized and age-specific attendance rates
- regional attendance?
How many women attend screening in Czechia?

- Cervical cancer screening: 46%
- Breast cancer screening: 52%

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HOW MANY WOMEN ATTEND SCREENING IN CZECHIA?

standardized cervical screening attendance rates by region

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HOW MANY WOMEN ATTEND SCREENING IN CZECHIA?

standardized cervical screening attendance rates by region

what a mystery...

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Part Three

WHO ARE THE WOMEN NOT-ATTENDING SCREENING?
WHAT ARE THEIR REASONS?
AND DO WOMEN DIFFER BY REASON?
WHO ARE THE WOMEN NOT-ATTENDING SCREENING?

- data: representative questionnaire survey, N=902 women
- non-attendee: >2 years OR not regularly
WHO ARE THE WOMEN NOT-ATTENDING SCREENING?

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35.5% non-attendees in cervical screening

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AND WHAT ARE THEY REASONS?

37.5% I do not experience any symptoms

23.8% fear of the diagnosis

20.9% fear of the procedure

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DO THE REASONS DIFFER AMONG NON-ATTENDEES?

(almost) no differences between women who do and do not declare particular barriers

Part Four

IS THERE MORE TO THAT?
Cancer screening (non-)attendance: Determinants, barriers and motivations

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IS THERE MORE TO THAT?

- semi-structured interviews,
  N=10 women (non-attendees)
IS THERE MORE TO THAT?

- semi-structured interviews,
  N=10 women (non-attendees)

YES
perceived risk of cancer and a healthy lifestyle

“I think that I have such a good lifestyle that I've reduced the risk, so it will only begin to increase as I get older. I don't smoke, I don't drink, I don't eat cancer-causing products. I think I have nothing to worry about.”

health literacy and awareness

“I mean, it's not smallpox, it's not some sort of thing that's worthy of eradication... Because for me, cervical cancer, and in general, bottom problems, breast problems, everything, are really linked to disrespecting yourself. It is just connected with the psychological stuff.”

previous experiences with healthcare and healthcare professionals

“When I was a kid, I wasn’t thin. And we had a doctor who was constantly scolding my mom for that and yelling at me.”

traditional barriers

“There are very few doctors here in [my hometown]. If I want to find a good doctor, I go to Prague, right? But I don't really want to go to Prague to see a gynecologist...”

personal traits

“I wish I hadn’t neglected [my health] as much as I did my entire life. But I can't change that now.
Time for commercial break
We want you to submit your research to the 15th Conference of #YoungDemographers

7-9 February 2024, Prague
deadline: 20 October 2023

youngdemographers.github.io
CONCLUSION

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differences in attendance are still quite low
CONCLUSION

attendance is still quite low

differences

attendees x non-attendees
(but not really within non-att)
CONCLUSION

Differences in attendance are still quite low.

 Attendees vs. non-attendees (but not really within non-att)

Complex reasons

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CONCLUSION

Attendance is still quite low among attendees compared to non-attendees (but not really within non-att).

Complex reasons for low attendance...
... COMPLEX SOLUTIONS?

- switching from the **opt-in** to **opt-out** invitations
- educating healthcare professionals in **communication**
- raising **health literacy** and screening awareness
DON'T FORGET ABOUT PREVENTION AND GO GET SCREENED!

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