Hello!

My name is Manuela Bogdanov and I am a medical student in my last year of studies at the University of Latvia. I am inviting you to participate in a research study which is my diploma project.

Cancer screening programs are important tools that aim to aid in secondary prevention. By detecting cancer in its earliest stage, health outcomes for the patient may be better.

However, the cancer burden in Latvia is quite high (2020: 12.373 people were diagnosed with cancer (WHO)). Although lung cancer is the leading cause of cancer-associated death, mortality due to other cancer types has increased alongside. The 3 most frequent cancers in 2020 in the Latvian population were Colorectal, Prostate and Breast cancers (International Agency for Research on Cancer, Globocan 2020).

Programs for population-based state-organised cervical cancer screening and mammography screening were introduced in 2009. The women receive invitations letter for their screening. Prostate examination and colorectal cancer screenings are regulated and offered by the General practitioners.

A recent data review by the OECD (OECD Reviews of Public Health: Latvia, 2018) showed that Latvian cancer screening rates (including cervical and breast cancer) are in the bottom third of the OECDs countries. Although the rate has doubled since 2009 to 2018, it remains low.

You are invited to participate in this research study. We are interested to find out the reasons for attending/ not attending cancer screening programs in Latvia. This study is planned to understand the common patterns of participation in order to recommend the possibilities of improving participation which is known to be low in Latvia in comparison with other countries. Your participation will require the completion of the attached survey. This should take about 7 minutes of your time. Your participation will be anonymous; we will not collect any personal information. You do not have to be in this study if you do not want to be. You do not have to answer any question that you do not want to answer for any reason. You can stop your participation at any time or reduce your completed answers from the study at any time by sending an e-mail to the study organizers by mail: manubog@hotmail.de.

The completion of this survey implies your consent to participate. If you choose to participate, please complete the attached survey! Thank you!

If you have any further questions, please do not hesitate to contact me by email (manuboghotmail.de) or by phone (+37120056215)

**In this section, you will be asked about general information**

Q1 What is your age (full years)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q2 Do you have any of the following conditions: Established diagnosis of breast cancer, cervical cancer, colorectal cancer, prostate cancer

* No
* Yes

Q3 What is your gender?

* Female
* Male
* Other

Q4 Where do you live (please write the name of the city/ town/ village)? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Q5 What is your marital status

* Single
* Married or living with a partner
* Divorced
* Widowed

Q6 Number of children that you have? \_\_\_\_\_\_\_\_\_\_

Q7 What is the highest level of school that you have completed?

* Primary education (till grade 9)
* Secondary education
* Professional education
* Higher education (bachelor, master’s)
* Doctoral grade

Q8 What is your occupation?

* White collars (office work)
* Black collars (physical work)
* Education
* Medicine
* Other

Q9 What is your employment status?

* Student
* Full-time
* Part-time
* Unemployed
* Retired
* Other

Q10 What is your smoking status?

* Non-smoker
* Current smoker
* Former smoker

Q11 Your daily alcohol consumption is:

* No alcohol
* Up to 500 ml of light beer, one glass (125 ml) of wine, or one shot glass (45 ml) of liquor
* Up to 1 liter of light beer, three glasses (125 ml) of wine, or three shot glasses (45 ml) of liquor
* More than 1200 ml of light beer, three glasses (125 ml) of wine, or three shot glasses (45 ml) of liquor

Q12 How often do you exercise?

* Everyday
* Once every two days
* Once a week
* Once a month
* Never

**In this section, you will be asked about healthcare-related information**

Q13 Do you know who is your general practitioner?

* Yes
* No

Q14 When was the last time you visited your general practitioner?

* 1 month ago
* 3 months ago
* 6 months ago
* More than 1 year ago
* Never

Q15 How often do you get health check-ups?

* Once in 3 months
* Once in 6 months
* Once a year
* Only when needed
* Never

Q16 For women only: When was the last time you visited your gynecologist?

* 1 month ago
* 3 months ago
* 6 months ago
* More than 1 year ago
* Never

**In this section, you will be asked about cancer screening**

Q17 Are you familiar with the concept of cancer screening in Latvia?

* Yes
* No

Q18 What types of cancer screening are you aware of?

* Screening for cervical cancer (PAPS examination)
* Screening for colorectal cancer (blood in feces)
* Screening for breast cancer (Mammography)
* Screening for prostate cancer (PSA analysis)
* Colonoscopy
* Prostate examination
* None

Q19 Which of the following cancer screenings have you attended in the last year?

* Screening for cervical cancer (PAPS examination)
* Screening for colorectal cancer (blood in feces)
* Screening for breast cancer (Mammography)
* Screening for prostate cancer (PSA analysis)
* Colonoscopy
* Prostate examination
* None

Q20 What sources have you used to learn about cancer screening tests?

* Internet – self-seeking information
* Information – social media
* SPKC webpage
* Information provided by my general practitioner
* Information provided by other healthcare organizations
* Advertisements
* Friends, family members
* Other

Q21 Have you received an invitation letter for a cervical cancer screening during the last year?

* Yes
* No

Q22 Have you received an invitation letter for mammography during the last year?

* Yes
* No

Q23 Did your general practitioner offer you a fecal-occult blood test during the last year?

* Yes
* No

Q24 Did your general practitioner offer you a prostate examination (PSA blood test) during the last year?

* Yes
* No

Q25 If you received one of the invitations mentioned above, did you perform the screening that you were invited for?

* Yes - for all the screenings that I received the invitations
* Yes for a part of screenings that I received the invitations
* No

**In this section you will be asked about your motivation and the influencing factor to attend cancer screenings**

Q26 To what extent do you agree or disagree with the following statements? (personal)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
| My health and well-being is very important to me | ❏ | ❏ | ❏ | ❏ | ❏ |
| I take precautions to have a healthy lifestyle | ❏ | ❏ | ❏ | ❏ | ❏ |
| Cancer is a serious health condition | ❏ | ❏ | ❏ | ❏ | ❏ |
| I am afraid of cancer | ❏ | ❏ | ❏ | ❏ | ❏ |
| I am concerned about my own risk to develop cancer | ❏ | ❏ | ❏ | ❏ | ❏ |
| I am concerned about my family's risk to develop cancer | ❏ | ❏ | ❏ | ❏ | ❏ |

Q27 To what extent do you agree or disagree with the following statements (awareness)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
| Cancer screening is an effective way to detect cancer early | ❏ | ❏ | ❏ | ❏ | ❏ |
| I think it is important for individuals to participate in regular cancer screenings | ❏ | ❏ | ❏ | ❏ | ❏ |
| I worry that cancer screening tests may give false-positive results | ❏ | ❏ | ❏ | ❏ | ❏ |
| I trust the recommendations of my healthcare provider regarding cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |
| I follow my healthcare provider's recommendation to participate in cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |

Q28 To what extent do you agree or disagree with the following statements? (access, knowledge)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
| Cancer screening is available in my area | ❏ | ❏ | ❏ | ❏ | ❏ |
| Cancer screening is easily accessible in my area | ❏ | ❏ | ❏ | ❏ | ❏ |
| I can afford to pay for medical tests | ❏ | ❏ | ❏ | ❏ | ❏ |
| If I make an appointment for an examination, I attend it | ❏ | ❏ | ❏ | ❏ | ❏ |
| I received information about cancer screening through public health channels or healthcare providers | ❏ | ❏ | ❏ | ❏ | ❏ |
| I do understand the information I get about cancer screenings | ❏ | ❏ | ❏ | ❏ | ❏ |

Q29 To what extent do you agree or disagree with the following statements? (social aspects)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
| I have good experience with cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |
| Family, friends and others influence my decision to attend cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |
| Attending healthcare/cancer screening is a common practice in my community | ❏ | ❏ | ❏ | ❏ | ❏ |
| I consider opinions or behaviors of others in my decision to attend cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |
| Cultural beliefs or traditions within my community influence my attitude towards cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |

Q30 To what extent do you agree or disagree with the following statements (public health, economy)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
| Government or public health effectively promote awareness and education about the importance of cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |
| Government commitment and investment in cancer screening affect my decisions to participate in cancer screening | ❏ | ❏ | ❏ | ❏ | ❏ |
| Cancer screening is considered a priority within the political agenda of my country | ❏ | ❏ | ❏ | ❏ | ❏ |
| Public health campaigns influence my decisions to attend cancer screenings | ❏ | ❏ | ❏ | ❏ | ❏ |
| Health insurance coverage influence my decision to participate in cancer screenings | ❏ | ❏ | ❏ | ❏ | ❏ |

**Screening attended**

Q31 If you did attend any of the state-provided cancer screenings during the last year, what were your reason?

* I want to maintain my overall health
* I believe that cancer screening can detect cancer even before symptoms appear
* I feel confident towards the accuracy and reliability of cancer screening tests
* I believe that cancer screening increases the likelihood of receiving timely and appropriate medical interventions
* I trust the recommendations and advice of my healthcare provider regarding cancer screening
* Others (please specify):

**Not attended screening:**

Q32 If you did not attend any of the cancer screenings that you were invited to attend during the last year, what were your reason?

* I do not believe in cancer screening
* I believe that attending cancer screening does not significantly improve the chances of detecting cancer at an early stage
* I do not have time to schedule an appointment and attend it
* I forgot to schedule/ attend the appointment
* I am fearful of receiving a positive cancer screening result and the potential implications it may have on my life
* I am concerned that cancer screening may result in false-positive results or unnecessary follow-up procedures
* I am not aware of the recommended guidelines or frequency for attending cancer screening
* I have not received sufficient information or education about cancer screening from healthcare providers or public health sources

Q33 What would motivate or encourage you to participate in medical screening?

1. Personalized reminders and notifications
2. Rewards for participation in medical screening
3. Flyers, posters, etc. in healthcare institutions and in public places
4. Information in social media (websites, news portals, newspapers and similar)
5. “Motivational interviewing” by general practitioner or other healthcare providers

Thank you for your participation!