## Awareness of Dementia Risk Factors Among Adults in Canada

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## Up to $40 \%$ of dementia cases could be prevented through lifestyle changes



International studies have shown that the public has low awareness of dementia risk factors

## Socio-demographic characteristics may affect knowledge of risk factors


status

## Study Aims

1) Establish the level of knowledge of risk factors for dementia among adults living in Canada
2) Investigate whether level of knowledge differs across demographic groups

## Methods

## Participants

- 18+ years old
- Recruited via hospital network, word of mouth, and online advertisements


## Procedure

- 10-minute online survey
- At the end of the survey, participants were provided with the answers and an easy-to-read tip sheet outlining actionable strategies to reduce dementia risk

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## Section 3: Dementia Risk Factors

Please indicate whether each of the following factors INCREASE the likelihood of developing dementia.

- Please select TRUE if you think the factor INCREASES the likelihood of developing dementia (i.e., it is a risk factor).
- Please select FALSE if you think the factor has NO IMPACT on the likelihood of developing dementia (i.e., it is not a risk factor).
- Please select DON'T KNOW if you are UNSURE if the factor increases the likelihood of developing dementia

| 1. Having a parent with dementia * must provide value | $\bigcirc$ True | $\bigcirc$ False | Don't Know | reset |
| :---: | :---: | :---: | :---: | :---: |
| 2. High blood pressure (hypertension) <br> * must provide value | $\bigcirc$ True | $\bigcirc$ False | Don't Know | reset |
| 3. High cholesterol <br> * must provide value | $\bigcirc$ True | False | Don't Know | reset |
| 4. Heart disease <br> * must provide value | $\bigcirc$ True | $\bigcirc$ False | Don't Know | reset |
| 5. Gingivitis (gum disease) <br> * must provide value | $\bigcirc$ True | $\bigcirc$ False | Don't Know | reset |

## Methods - Dementia risk factors survey

| 20 true risk factors: |  |
| :---: | :---: |
| Having a parent <br> with dementia | Sleep apnea |
| High blood <br> pressure | Multiple head <br> injuries |
| High cholesterol | Hearing loss |
| Heart disease | Being a woman |
| Gingivitis | Smoking cigarettes |
| Having a stroke | Heavy alcohol use |
| Chronic kidney <br> disease | Air pollution |
| Diabetes | Physical inactivity <br> ObesityLow level of <br> education |
| Depression | Loneliness |


| $\mathbf{1 3}$ false risk factors: |  |
| :---: | :---: |
| Chickenpox | Breast cancer |
| Wearing a tight hat | Arthritis |
| Poor eyesight | Pneumonia |
| Using over-the- <br> counter painkillers | Wearing blue <br> clothes |
| Exposure to <br> aluminum | Excessive UV / <br> sun exposure |
| Using hair dye | Being born in July |
| Vitamin C <br> deficiency |  |

## 9 Ways to Decrease Your Chances of Developing Dementia

## KEEP YOUR HEART HEALTHY

- Conditions that are harmful to your heart are also harmful to your brain, such as high blood pressure, high cholesterol, being overweight, and type 2 diabetes.
- Keep up with routine doctor visits, so these conditions can be monitored regularly.
- If you have been prescribed medication for high blood pressure, high cholesterol, or diabetes, take as directed.
- Eating a healthy diet and exercising regularly can decrease your chances of developing these conditions.


## QUIT SMOKING

- It is never too late to stop smoking.
- Speak to your doctor about resources to help you quit smoking.
- Call the Government of Canada's pan-Canadian, toll-free quitline at 1-866-366-3667.


## EAT A HEALTHY DIET

- Eat a healthy balanced diet that includes fruits and vegetables, fish, nuts, and legumes.
- Eat less meat, sugar, and saturated fats.


## ENGAGE IN PHYSICAL ACTIVITY

- Make exercise a regular part of your daily life.
- Engage in activities that increase your heart rate, such as brisk walking, jogging, cycling, or swimming.
- Add strengthening or toning activities at least twice per week, such as yoga, tai-chi, or gardening.


## KEEP YOUR BRAIN ACTIVE

- Play challenging games, such as bridge or chess. Learn a new instrument or language. Complete a crossword puzzle or jigsaw puzzle. Read a book. Socialize with family and friends.
- Choose activities that you enjoy. This will ensure you do the activities often and keep your brain active.


## SOCIALIZE WITH OTHERS

- Stay socially active. Connect often with your friends and family. Meet new people.
- Volunteer in your community. Join a club or exercise class.
- Your local community centre can be a good resource for social activities in your area.


## PROTECT YOUR HEARING AND TREAT

## HEARING LOSS

- To decrease hearing loss, limit your exposure to loud noises.
- If you have hearing aids, wear them every day.
- Speak to a doctor if you are experiencing hearing difficulties


## PROTECT YOUR HEAD

- Avoid head injuries
- Wear a seat belt in the car and wear a helmet when riding a bicycle, skiing, or skating
- Reduce your risk of falling. Be aware of tripping hazards and use hand railings for extra support. If you have a cane or walker, use it at all times.


## LOOK AFTER YOUR MENTAL HEALTH

- People with a history of depression have a higher chance of developing dementia.
- Speak to a healthcare professional if you have symptoms of depression or anxiety, or if your symptoms worsen.
- If you have a treatment plan, make sure to follow it

Tip sheet provided to participants

| All participants | $\mathbf{N}=\mathbf{4 , 4 1 1}$ |
| :--- | :--- |
| Age, mean $\pm$ SD, range | $62.10 \pm 15.41,18-102$ |
| Sex, $\mathrm{N}(\%)$ | Female: $3107(70.4 \%)$ <br> Male: $1292(29.3 \%)$ <br> Other: $12(0.3 \%)$ |
| Ethnicity, N (\%) | White: $3510(79.6 \%)$ <br> South Asian: $299(6.8 \%)$ <br> Other: $602(13.6 \%)$ |
| Highest level of education, $\mathrm{N} \mathrm{( } \mathrm{\%)}$ | Post-Secondary: $3826(86.7 \%)$ <br>  <br>  |
|  | High School or less: $576(13.1 \%)$ |
| Unknown: 9 (0.2\%) |  |


| All participants | N = 4,411 |
| :--- | :--- |
| Province, $\mathrm{N}(\%)$ | Ontario: $4090(94.2 \%)$ |
|  | B.C.: $75(1.7 \%)$ |
|  | Alberta: $51(1.2 \%)$ |
|  | Other: $128(2.9 \%)$ |
|  |  |
| Background in healthcare, N (\%) | Yes: $1101(25.0 \%)$ |
|  | No: $3310(75.0 \%)$ |
| Area of residence, $\mathrm{N} \mathrm{( } \mathrm{\%)}$ | Urban: $3974(90.7 \%)$ |
|  | Rural: $409(9.3 \%)$ |

## Overall Performance

Main metric: Percent correct

- "Don't Know" responses were considered incorrect

On average, participants correctly identified:

- $40 \%$ true risk factors ( $8 / 20$ )
- $62 \%$ false risk factors $(8 / 13)$


## Majority of true risk factors were not well known



## Knowledge decreased with age

Age, $H(3)=160.52, p<.001$


# Female participants had higher knowledge 



## Higher educational attainment was associated with higher knowledge

Education, $W=858446, p<.001$


Highest level of education

## A background in healthcare was associated with higher knowledge

Healthcare, $H(1)=209.74, p<.001$


## Knowledge did not differ by area of residence

Residence, $W=794728, p=.461$


## Summary

- There was a lack of awareness of most dementia risk factors, notably: chronic kidney disease (15\%), low level of education (17\%), and air pollution (17\%)
- Awareness of risk factors differed by:
- Age
- Sex
- Education
- Healthcare background


## Conclusions

- This work suggests that Canada should invest in inclusive educational campaigns and/or public health initiatives focused on risk factors for dementia, with consideration of groups who could benefit most
- Future work will further investigate how demographic characteristics relate to level of knowledge, and how to help Canadians make behavioural changes to reduce their risk of dementia


## Please Share Widely



We are actively recruiting participants.
Please feel free to participate and share widely!

You can also access the survey here: https://redcap.link/shsc-dementia

## Thank you!



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