

Risk Factors and Secondary Prevention in Younger People with Stroke:

Are We Asking the Right Questions?

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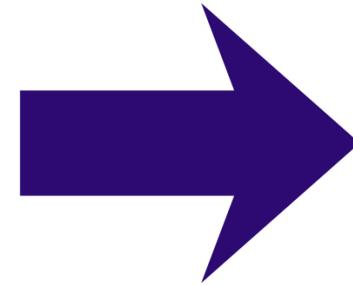
Disclosure Statement

There are no conflicts of interest to declare.

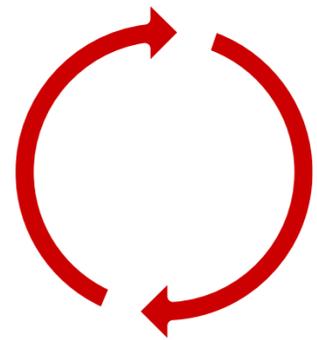
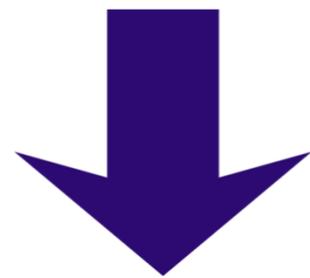
Recurrence of “Young Stroke”

Between

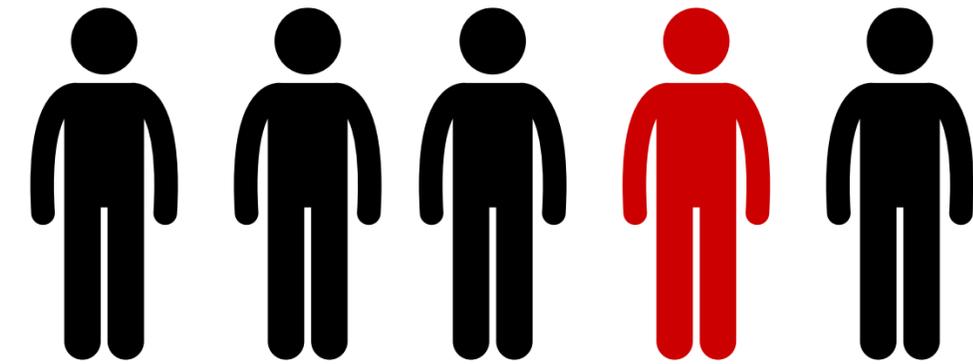
18-55 years



The risk doesn't **disappear**



Vulnerability



**Risk of recurrence &
often disabling and
harder to treat**

Secondary prevention is essential

Young Stroke \neq **Older Stroke in “Younger Bodies”**

Older-adult secondary stroke models assume...

But the reality of young recurrent stroke is...

- Long-term health problems
 - Ageing blood vessels
 - Mostly the same cause as the first stroke
-
- Builds up gradually
 - More predictable
-
- Medications
 - Blood pressure, cholesterol, sugar control
 - Diet and exercise

Main “Drivers”/Contributors

Risk Patterns

Prevention Focus

- Missed or complex causes
 - Hormones, pregnancy, and immune issues
 - Lifestyle and psychosocial factors
-
- Mostly low risk
 - Sudden spikes at certain times
 - Hidden causes can become risk factors
-
- Medications
 - Sleep, stress, mental health
 - Hormones and life-stage planning
 - Substance use and adherence
 - Re-checking causes and risk factors if stroke recurs

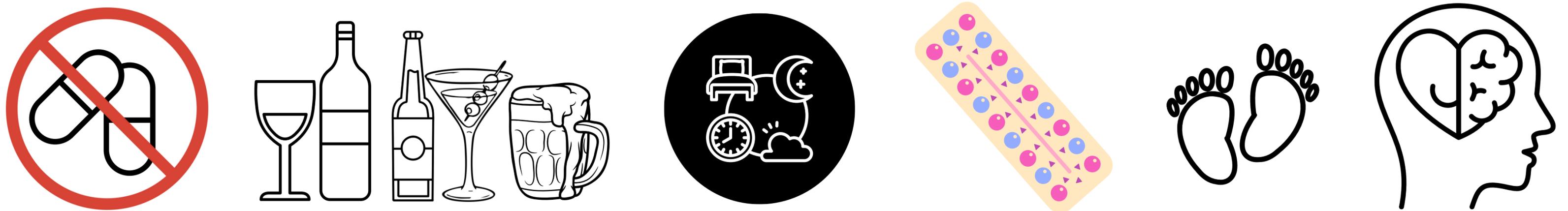
Traditional Risk Factors of Recurrent Stroke

Still matter!



...but alone **don't capture the "full picture"**

Needs to include Underrecognised Risk Factors



! These are **not always discussed, screened for or followed up on** as much as traditional risk factors

Top

Underrecognised Risk Factors

Strong ——— **Moderate** ——— **“Emerging”**

Proof exists in studies of cardiovascular disease (including stroke) and mixed-age survivors.

There are more, **but...**



Widely studied



More **often discussed in research**



Among the most practically relevant in real-life recurrences among young survivors.

Behavioural & Psychosocial

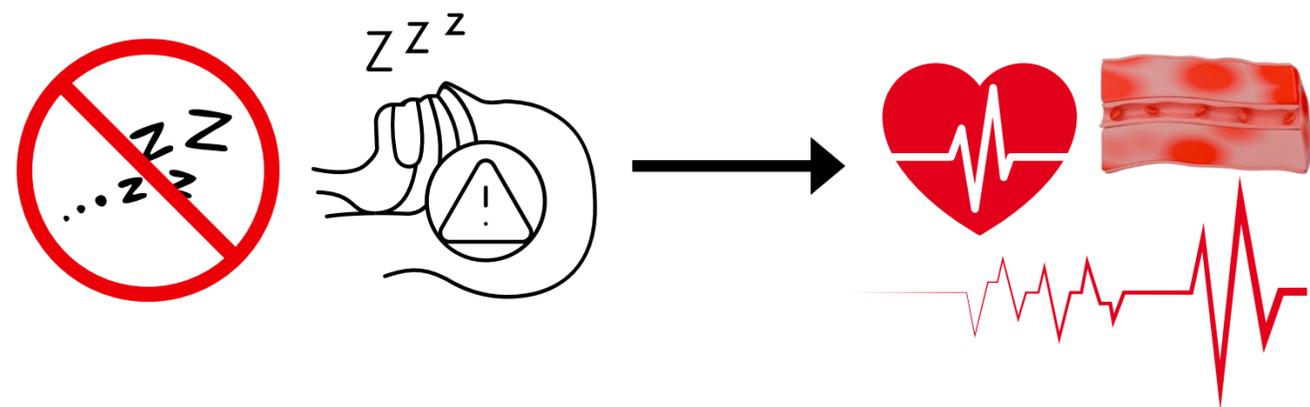
Medication Nonadherence



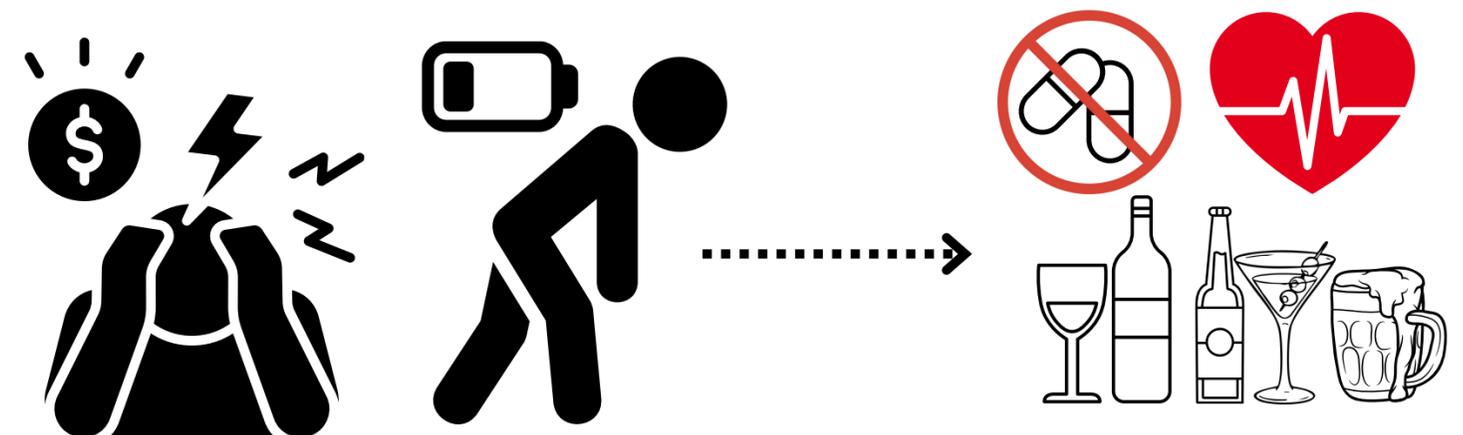
Substance Use



Sleep Disturbances

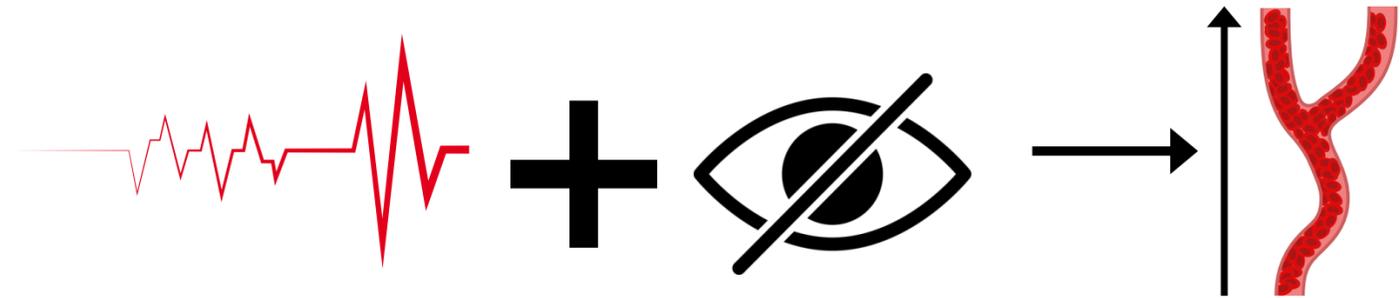


Psychosocial Stressors

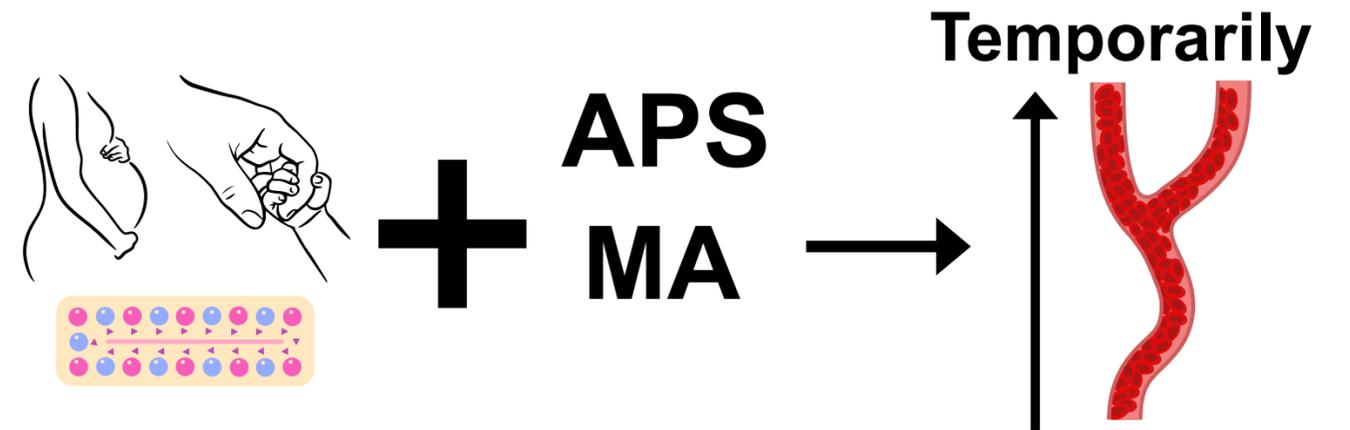


Medical & Biological

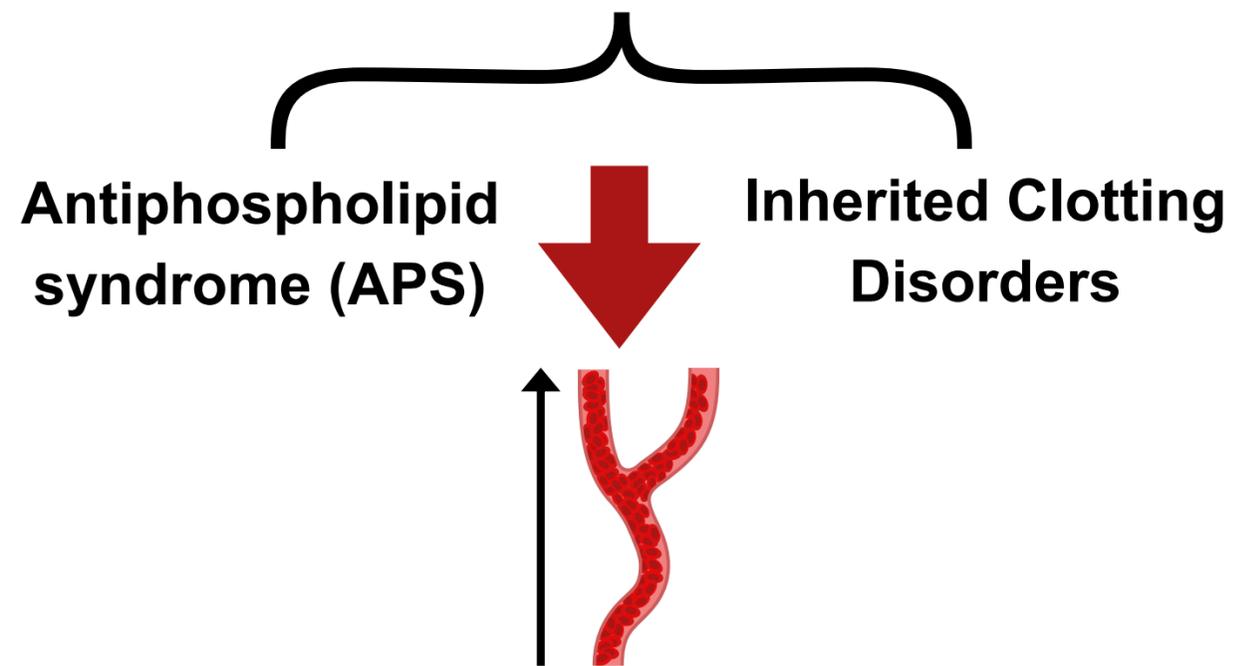
Undetected Atrial Fibrillation (AF)



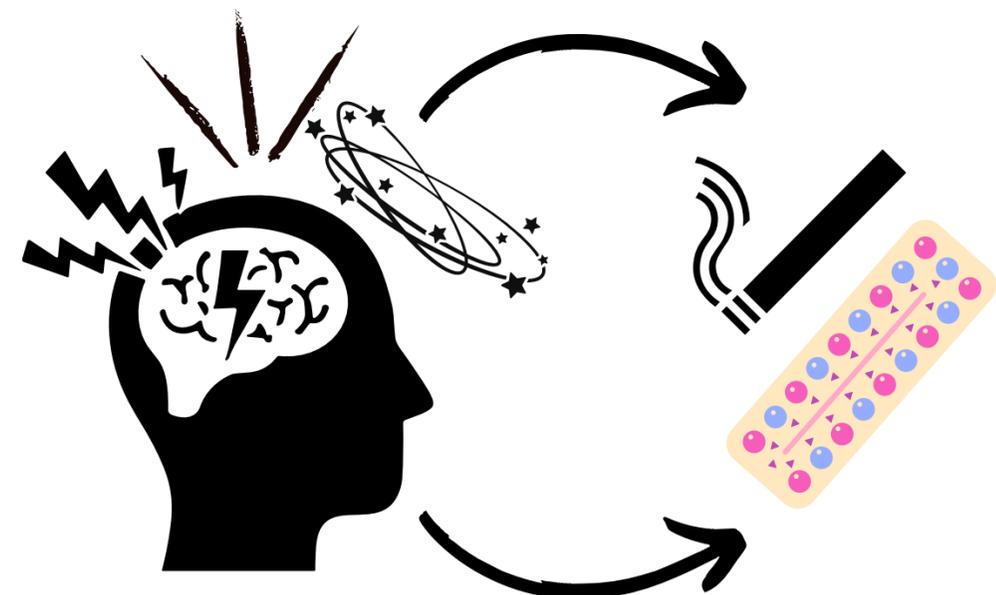
Hormonal Factors



Autoimmune and Clotting Conditions

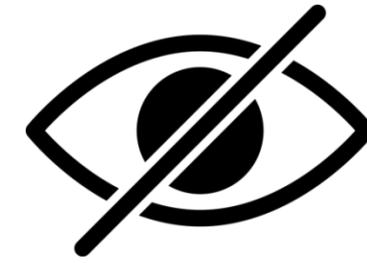


Migraine with Aura (MA)



Structural Abnormalities & Diagnostic-Related

Patent Foramen Ovale (PFO)



Cervical Artery Dissection



Vulnerability

**History of
“Cryptogenic” Stroke**



Their “reality” is...

I want to know **why** it happened. I am **afraid** of getting it again.



Saying to “live healthier” or “take this medication” is **not enough** for me.



I was **too stressed** to fully process what was happening.



It would have been nice to **talk** to a healthcare professional about my **fears of recurrence**.



I feel **pressured** by work friends to go out to eat and drink.



I can barely survive on disability. You still need **money** to do things.



Young survivors with **mental health** issues are very **neglected**. It's like, ‘Oh, get them out.’



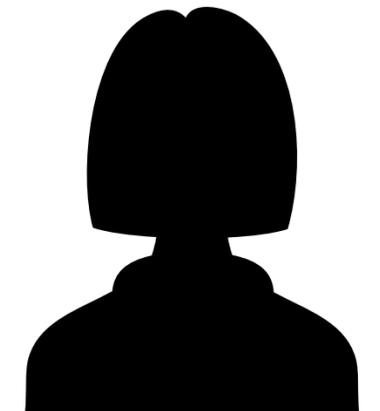
In the first year, people constantly **contact** you, but then it suddenly **stops**. There's no phase-out. It just **ends**.



I **don't understand** why I'm taking this **medication**. Some doctors have told me I shouldn't be taking them.



The **follow-up** questions feel like a **checklist**. If they don't get responses they expect, they just **dismiss** me.



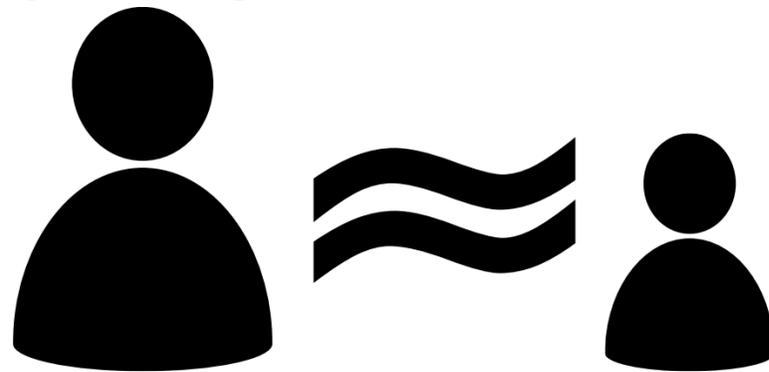
Many Young Stroke Survivors' Response:

Self-Directed Prevention Approaches

Online searching for similar relevant information.



Looking for age-appropriate peer support.



Research participation.

Personalised advice from specialists.



Reliance on family members for emotional and practical support.



I need...



The
“Gap”

We provide...



Are We Asking the Right Questions?

Example of Questions **Usually** Asked:

- Is your **blood pressure** under control?
- Are you **taking your medication?** (yes/no)
- Have you stopped **smoking?**
- Is your **cholesterol** okay?
- Have you had **any new symptoms?**

Tells us **numbers**

Are We Asking the Right Questions?



Previous Questions

Plus...

Examples:

- Ever **worry** about **having another stroke**?
- **How often** do you drink **alcohol**? Roughly **how much**?
- How is your **sleep**? Do you **feel rested** after waking?
- Are **contraception or pregnancy** relevant to you?
- Are you **working, studying, caring for others, or not working**?
Does this cause **stress**?

Tells us whether prevention will actually work

Are We Asking the Right Questions?

Example of Questions **Healthcare Professionals** (to ourselves and each other)

- Are strokes with **unknown causes** being **revisited** over time?
- Are **less obvious** biological and structural **risk factors** being **looked for and monitored beyond** the **first** stroke event?
- Are **biomedical and psychosocial risks** considered together?
- Are **conversations including fear and real-life barriers** to prevention?
- Are **families and supporters included** in prevention planning?

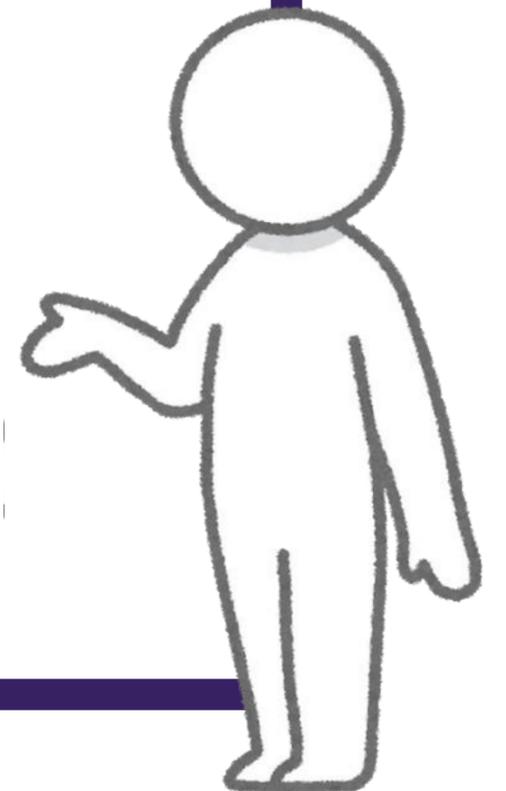
Are We Asking the Right Questions?

Examples of Questions **Stroke Services and Policymakers** (to ourselves and each other)

- Are services **inclusive** enough to **reflect** the **realities** of younger survivors?
- Are prevention care **flexible** and **personalised** enough?
- Are biological, behavioural, and psychosocial risks **considered together**?
- Are there clear pathways for **identifying and/or monitoring hidden or evolving** risks **over time**?
- Is support **continuous** enough to **sustain prevention beyond** the early years?

Take-Home Messages

- **Risk can be hidden and evolving**
- **Prevention is ongoing, not a one-time decision**
- **Real life shapes what is sustainable**
- **Underrecognised risks matter**
- **Prevention works best with survivors**



Thank you



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