

BRAIN: Mental & Cognitive Health

Healthy Ageing Program

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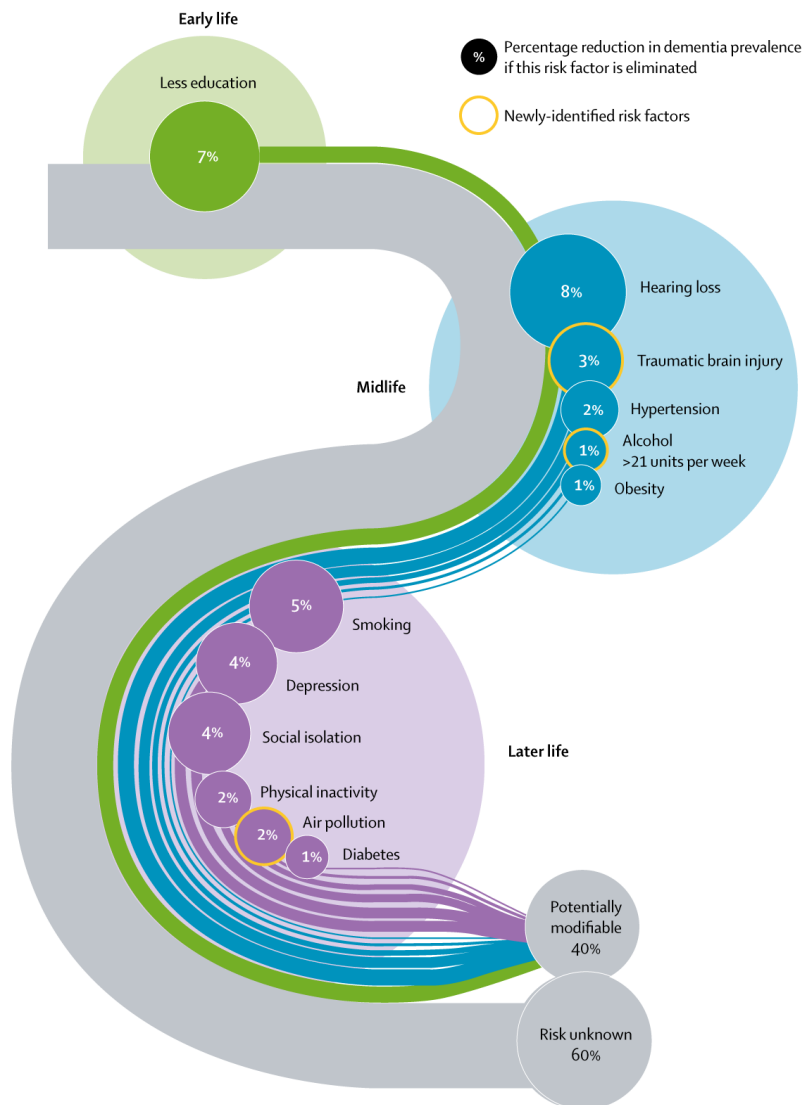
Medicine | Medicine, Dentistry and Health Sciences | The University of Melbourne



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Risk factors for dementia

An update to the *Lancet* Commission on Dementia prevention, intervention, and care presents a life-course model showing that 12 potentially modifiable risk factors account for around 40% of worldwide dementias



Livingston G, Huntley J, Sommerlad A, et al. Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *The Lancet* 2020.

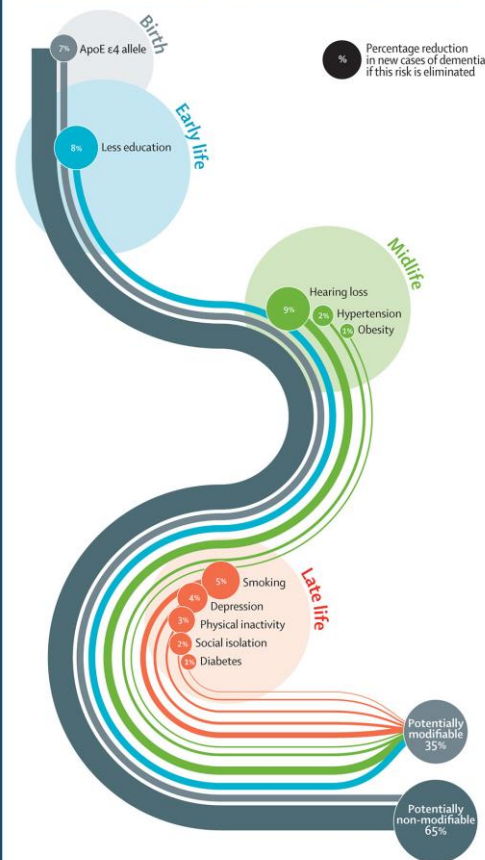
THE LANCET

The best science for better lives

LANCET COMMISSION PREVENTION

Risk factors for dementia

The Lancet Commission presents a new life-course model showing potentially modifiable, and non-modifiable, risk factors for dementia.



THE LANCET

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Stroke

B

BALANCE

LOSS OF BALANCE
HEADACHE,
DIZZINESS



E

EYES

SUDDEN LOSS
OF VISION
IN ONE OR BOTH EYES



F

FACE

DOES THE
PERSON'S FACE
LOOK UNEVEN?



A

ARM

WEAKNESS



S

SPEECH

DIFFICULTY



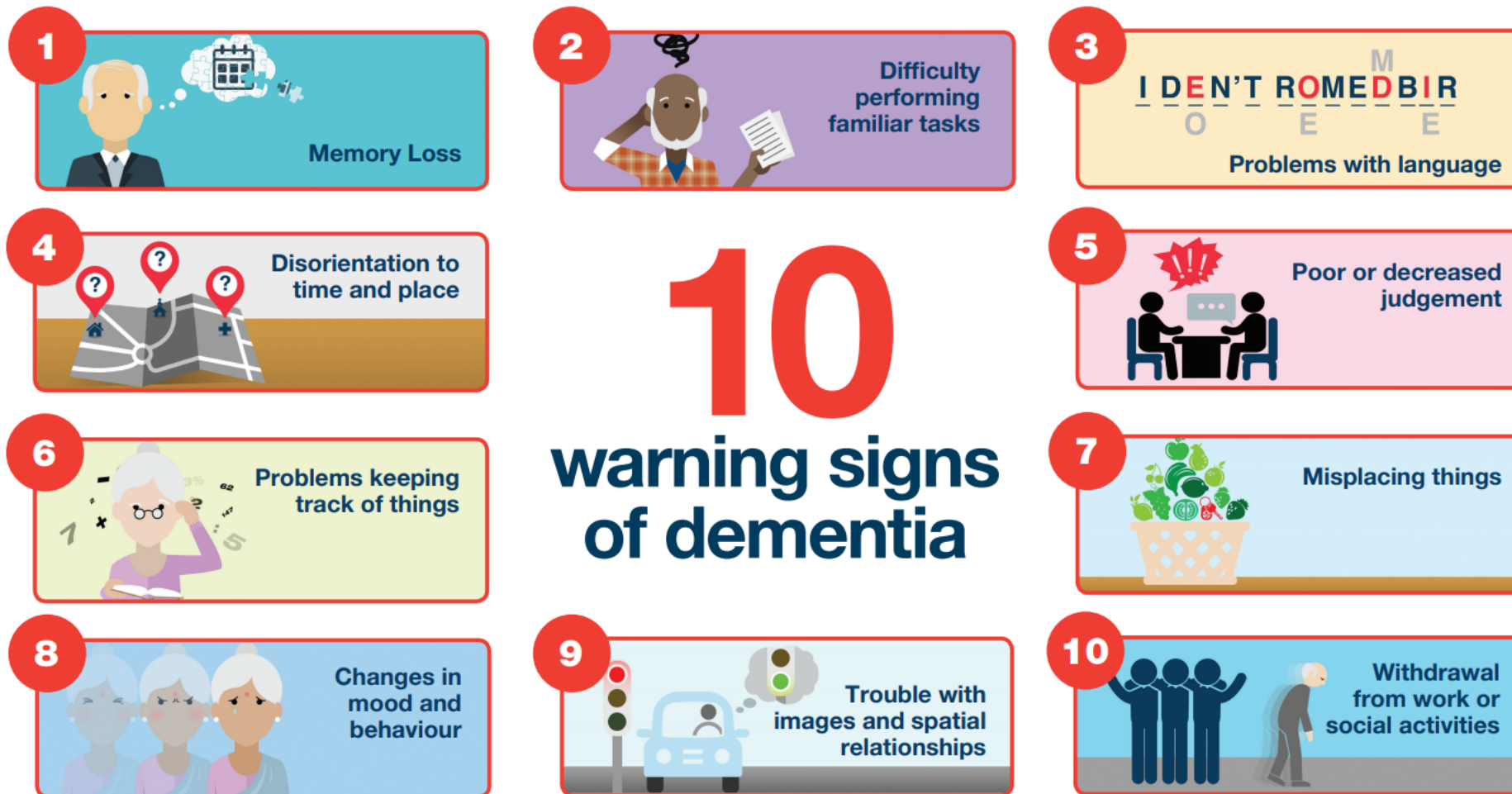
T

TIME

TO **CALL**
911



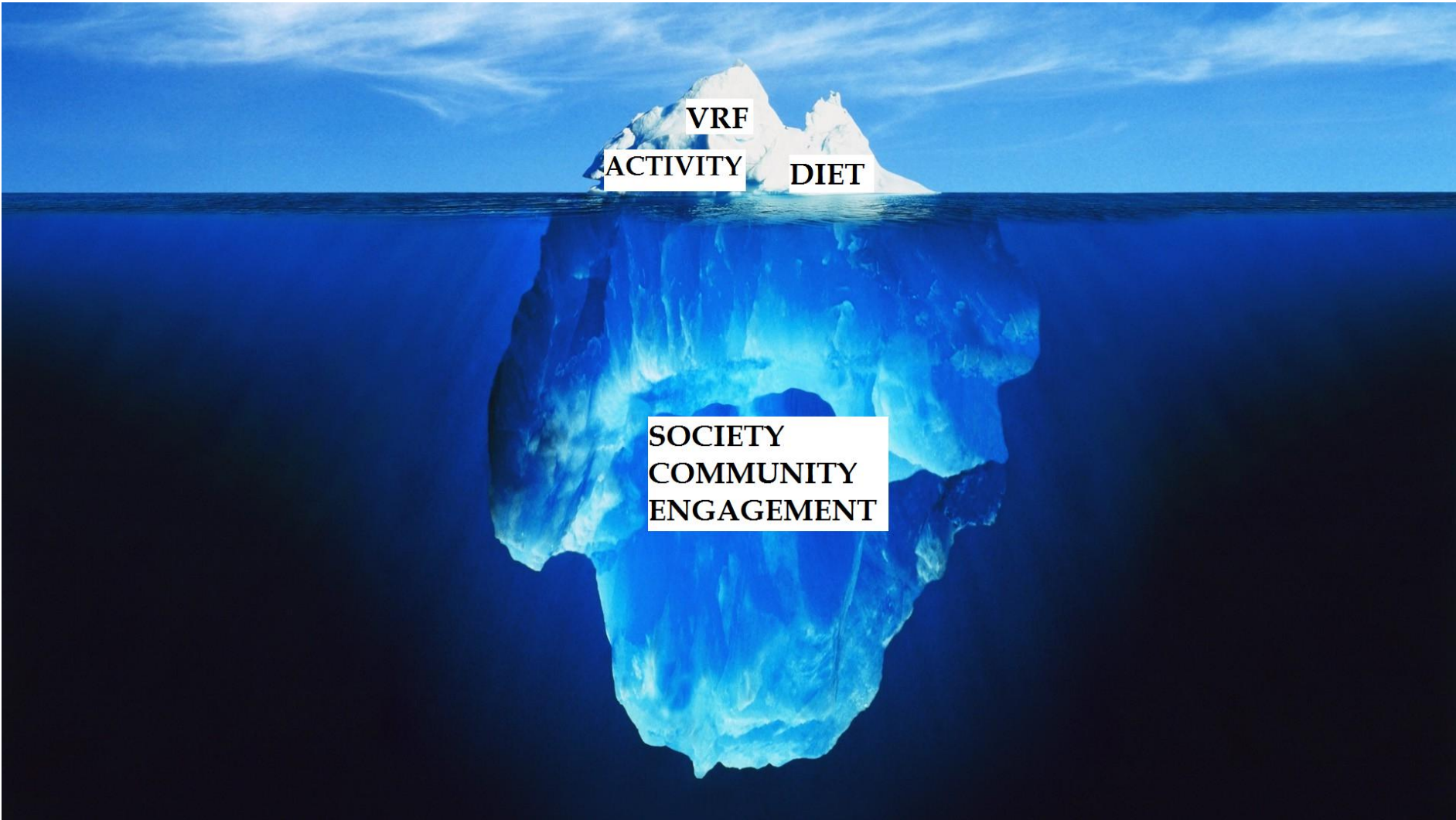
Dementia



**Dementia is not a part of normal ageing.
Talk to a doctor or contact the
Alzheimer association in your country.**

Health SUMMARY

- PHYSICAL ACTIVITY
- SUNLIGHT - Vit D
- Non-Western Diet, FRESH FRUIT AND VEG, avoid sugar and processed fat
- Blood Pressure, Lipid Profile
- SOCIAL ENGAGEMENT



It's Time to Act

The Challenges of Alzheimer's
and Dementia

HAP research cited:

Aljondy et al. (2019)

"A decade of changes in brain volume and cognition."
<https://doi.org/10.1007/s11682-018-9887-z>

Aljondy et al. (2018)

"The effect of midlife cardiovascular risk factors on white matter hyperintensity volume and cognition two decades later in normal ageing women."
<https://doi.org/10.1007/s11682-018-9970-5>

Burn et al. (2015)

"Grandparenting predicts late-life cognition: Results from the Women's Health Ageing Project."
<https://doi.org/10.1016/j.maturitas.2015.03.013>

Burn et al. (2015)

"Is grandparenting a form of social engagement that benefits cognition in ageing."
<https://doi.org/10.1016/j.maturitas.2014.10.017>

Burn et al. (2014)

"The role of grandparenting in post-menopausal women's cognitive health: results from the Women's Healthy Ageing Project."
<https://doi.org/10.1097/GME.0000000000000236>

Campbell et al. (2017)

"Impact of menopausal status on negative mood and depressive symptoms in a longitudinal sample spanning 20 years."
<https://doi.org/10.1097/GME.0000000000000805>

Chen et al. (2015)

"Prehypertension in midlife is associated with worse cognition a decade later in middle-aged and older women."
<https://doi.org/10.1093/ageing/afv026>

Hill et al. (2019)

"Diet and biomarkers of Alzheimer's disease: a systematic review and meta-analysis."
<https://doi.org/10.1016/j.neurobiolaging.2018.12.008>

Hill et al. (2018)

"Dietary patterns and beta-amyloid deposition in ageing Australian women."
<https://doi.org/10.1016/j.trci.2018.09.007>

McCluskey et al. (2018)

"Self-reported confusion is related to global and regional β -amyloid: data from the Women's Healthy Ageing Project."
<https://doi.org/10.1007/s11682-016-9668-5>

Szoeke et al. (2019)

"Apolipoprotein E4 Mediates the Association Between Midlife Dyslipidemia and Cerebral Amyloid in Aging Women."
<https://doi.org/10.3233/JAD180815>

Szoeke et al. (2017)

"Unhealthy habits persist: The ongoing presence of modifiable risk factors for disease in women."
<https://doi.org/10.1371/journal.pone.0173603>

Szoeke et al. (2016)

"Predictive factors for verbal memory performance over decades of ageing: Data from the Women's Healthy Ageing Project."
<https://doi.org/10.1016/j.jagp.2016.05.008>

JOIN THE ageHAPPY, Healthy Brain Initiative

<https://sphinx.org.au/limesurvey/index.php/786831?lang=en>

AgeHAPPY: Healthy Ageing Project, Population Youth-senior



You must be registered to complete this survey

You may register for this survey if you wish to take part.

Enter your details below, and an email containing the link to participate in this survey will be sent immediately.

First name	<input type="text"/>
Last name	<input type="text"/>
Email address	<input type="text"/>
<input type="button" value="Continue"/>	



Further Reading

> Report Excerpts

Australian researchers have also played an instrumental role in efforts to understand mechanisms underlying vascular contributions to cognitive impairment and dementia; and through the Women's Healthy Aging Project have elucidated hormonal and other factors that contribute to the increased risk of AD in women. Alleviating the behavioral and psychological symptoms of dementia has also been a strong research and clinical focus in Australia.

The influence of sex hormones on dementia risk remains poorly studied and understood although there is substantial evidence pointing to dramatic brain effects associated with hormonal changes during the menopausal transition.⁶⁹ For 30 years, the Women's Healthy Aging Project (WHAP), a longitudinal study of Australian-born women, has been collecting multi-domain data—including hormone levels; cognitive measurements; brain imaging; and vascular, genetic, and lifestyle risk factors—on women through the menopausal transition and into aging.^{70,71} Recent research by Szeke et al. at the University of Melbourne showed that the combination of APOE ε4 and midlife dyslipidemia compounded the risk of brain amyloid deposition in late life.⁷² These findings may help explain why carriage of APOE ε4 increases the risk of developing AD to a greater extent in women than in men.⁷³

Alzheimer's disease research progress in Australia: The Alzheimer's Association International Conference Satellite Symposium in Sydney

> Impact of WHAP

In outlining the role Australian researchers have played in efforts to understand mechanisms underlying vascular contributions to cognitive impairment and dementia, the report highlights the Women's Healthy Aging Project's work in elucidating hormonal and other factors that contribute to the increased risk of AD in women.

Also featured were Szeke et al.'s WHAP study findings which showed that the combination of APOE ε4 and midlife dyslipidemia compounded the risk of brain amyloid deposition in late life. The report emphasised how these findings may help explain why carriage of APOE ε4 increases the risk of developing AD to a greater extent in women than in men.

<https://doi.org/10.1002/alz.12380>

Understanding the relaxation effects of Essential Oils and opportunities for therapeutic optimization

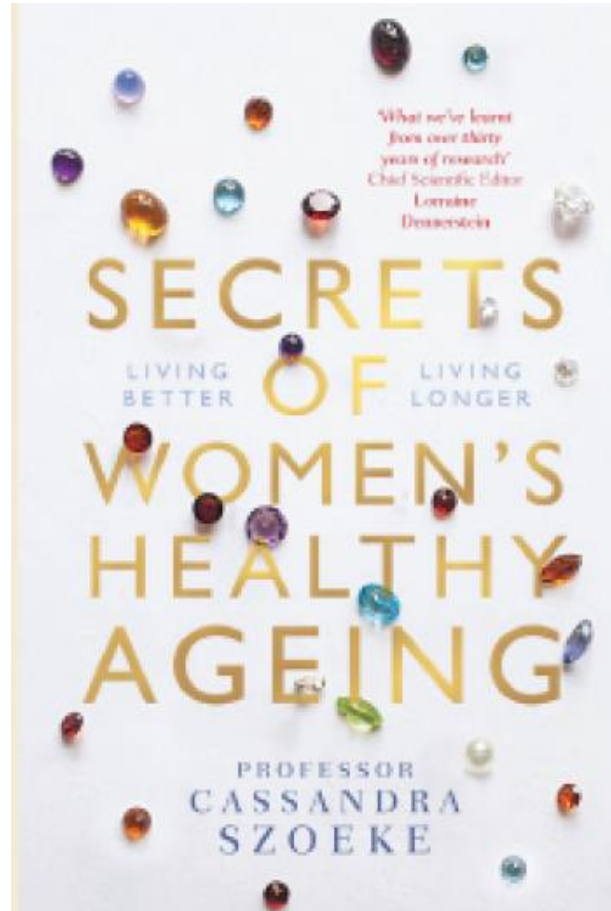
Healthy Ageing Webinar Series

Professor Louise Bennett
School of Chemistry
Monash University

30 November, 2022



Further Reading



**THANK YOU
FOR YOUR
ATTENTION**

FURTHER READING

Chapter 9: Hormones and dementia

Abstract

Sex differences are hormone differences

Hormones and cognition

Menopause and cognition

Observational studies of hormone therapy use

Interventional HT use

Hormone therapy in younger women

Hormones and cognition in men

Gaps in knowledge

Conclusion

Chapter highlights

