

Using Virtual reality-based simulation (VR) to enhance nursing students' clinical reasoning in caring Dementia patient

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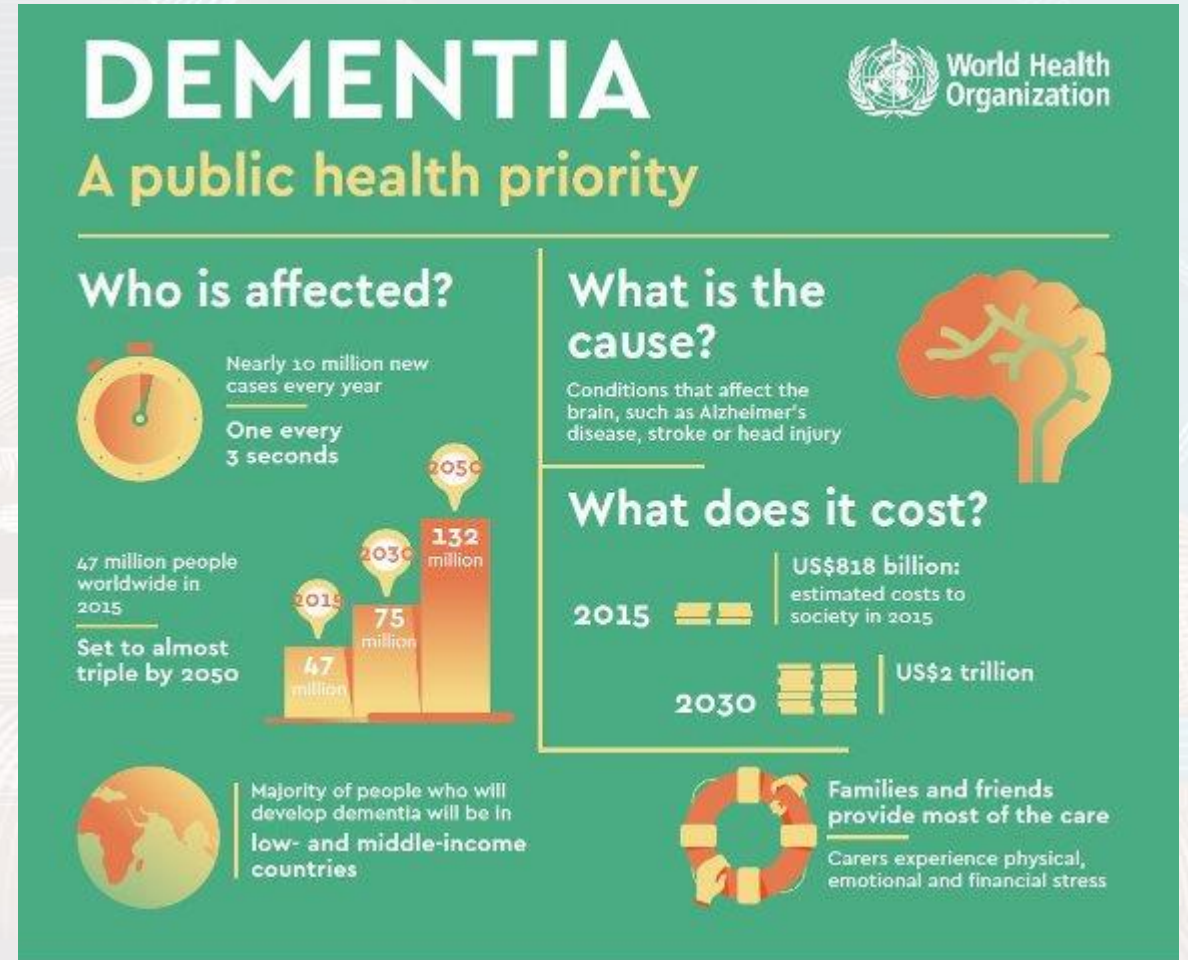
# Our team....



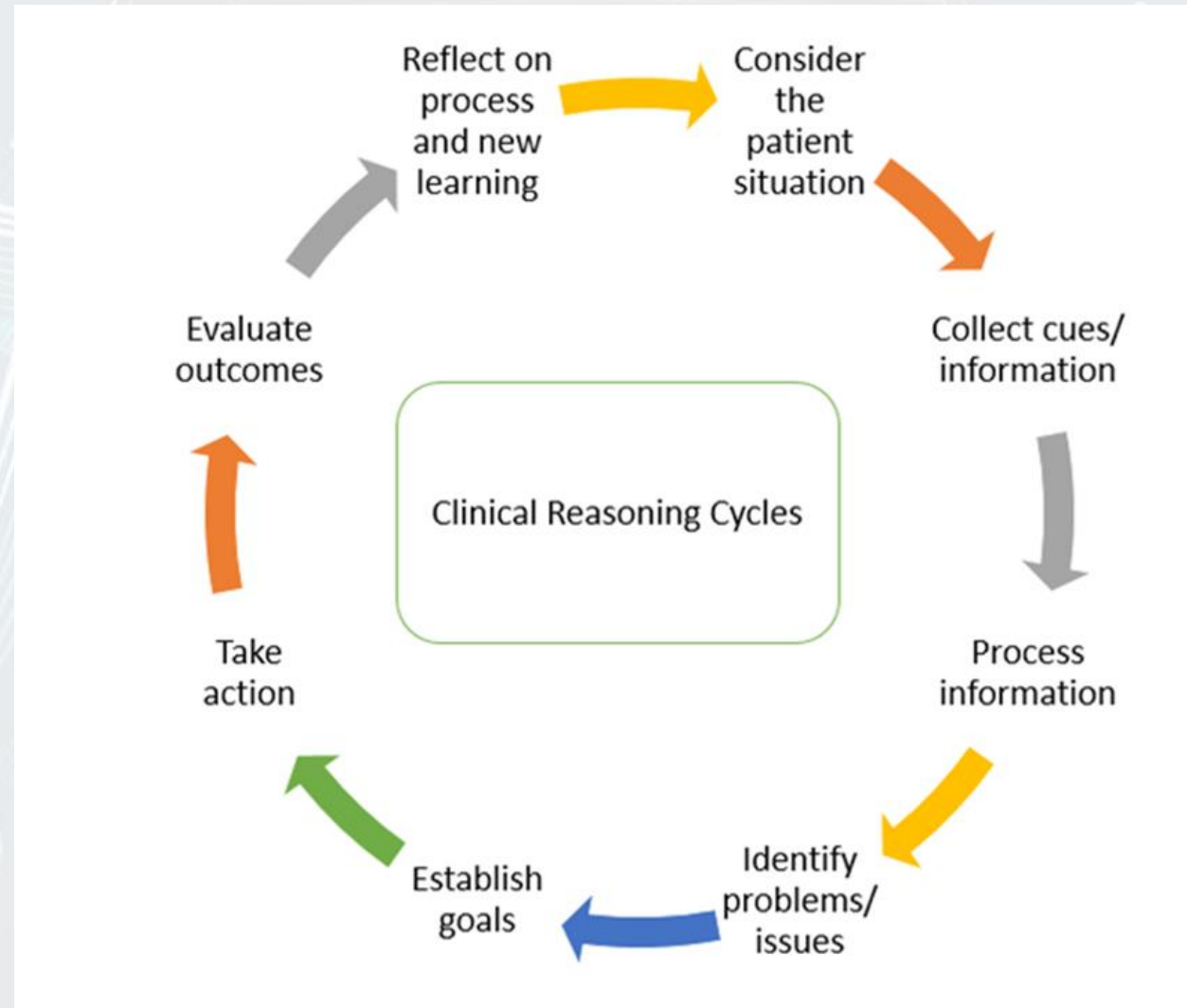
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# Introduction

- According to WHO (2017)
  - Dementia is one of the major causes of disability and dependency among older people worldwide.
- Skills and knowledge are important in caring for elderly and negative attitudes towards dementia can be an obstacle to provide better care for dementia clients.



# Clinical Reasoning Cycle



# VR simulation-based learning

- Virtual reality-based simulation training is useful to allow nursing students to experience and understand dementia patients
- Integrate knowledge and practice, and fostering clinical reasoning
- Develop a positive attitude towards dementia patients

## Study aims:

**Does virtual reality-based simulation training improve nursing students' confidence and competence in caring dementia patients?**



# Methods



- Cohort study design
- 102 final year nursing students
- Tutorial using VR video
- Questionnaires concerning their learning and clinical reasoning with virtual patients were used to evaluate nursing students' experiences with VR.



Three VR videos/ 3D simulation case scenarios were developed

1. Hospital setting
2. Home setting
3. Community setting

# Findings



- Confidence in the management of dementia patient (mean diff=0.38,  $p<0.000$ )
- Competent in the management of dementia patient (mean diff=0.427,  $< 0.000$ )
- 84% nursing students felt better prepared to care for dementia patients
- 85.2% nursing students stated they had worthwhile learning experiences.



# Conclusion

- Simulation-based teaching using VR can enhance nursing students' confidence and competence in caring dementia patient



**Thank you**



# References

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