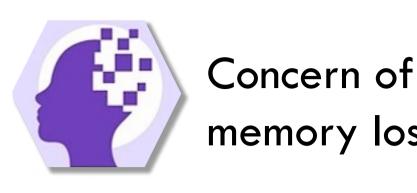
# ORAL HEALTH STATUS OF PATIENTS WITH MILD COGNITIVE IMPAIRMENT (MCI): A SYSTEMATIC REVIEW

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### INTRODUCTION

Mild Cognitive Impairment (MCI) is defined as a transitional stage between healthy aging and early stage of dementia<sup>1</sup>





Concern of Independent for daily activities



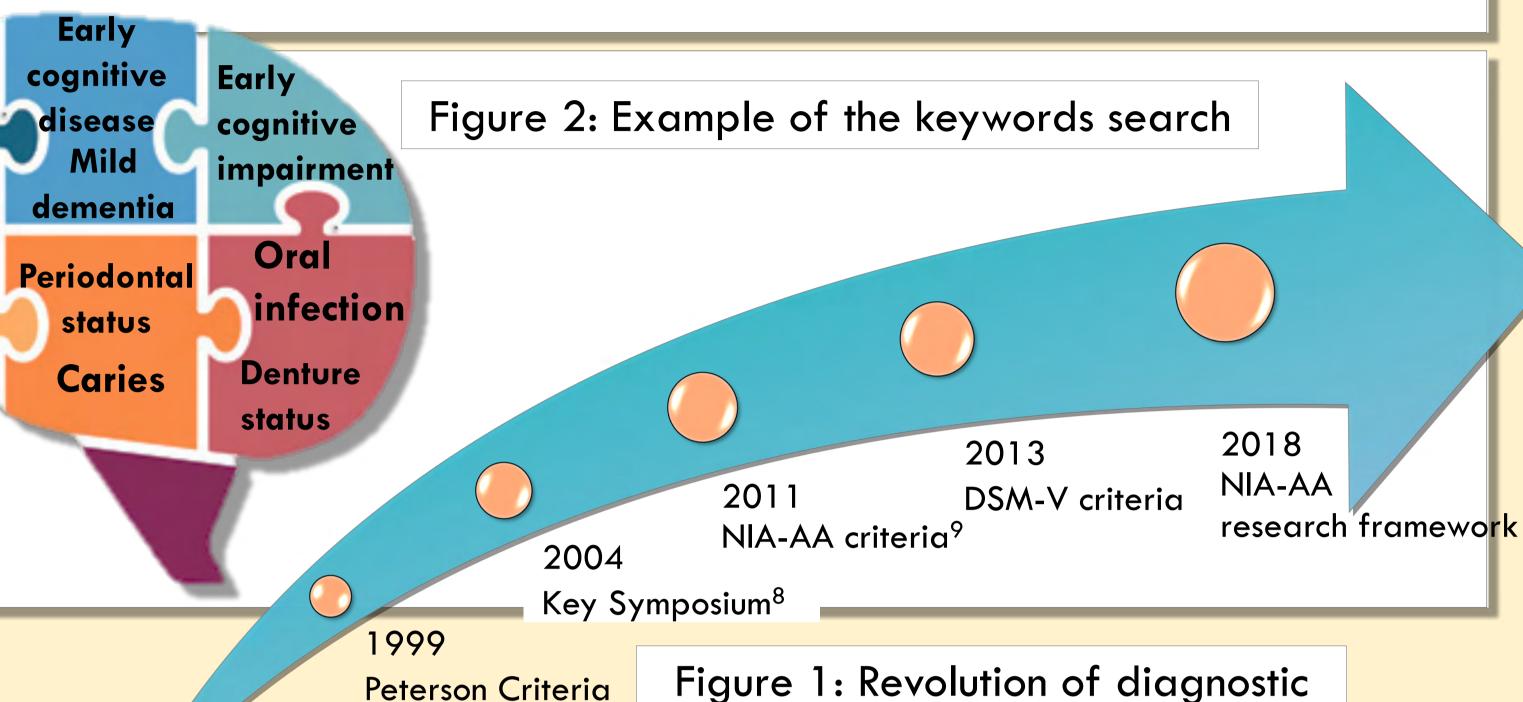
Teeth

status

Heterogeneity of the diagnostic criteria (Figure 1) and variation in oral health (OH) indices has meant research into this cohort is challenging.

## Aim:

- 1. To determine the oral health status of patients with MCI Objectives:
  - 1. To identify relevant literature and critically appraise the study that record the OH status of patients with MCI
  - 2. To determine the OH status of patients with MCI (i.e. teeth status, periodontal status, oral hygiene, denture status etc.)
  - 3. To determine the OH needs amongst patients with MCI



Peterson Criteria 1990

MCI in GDS

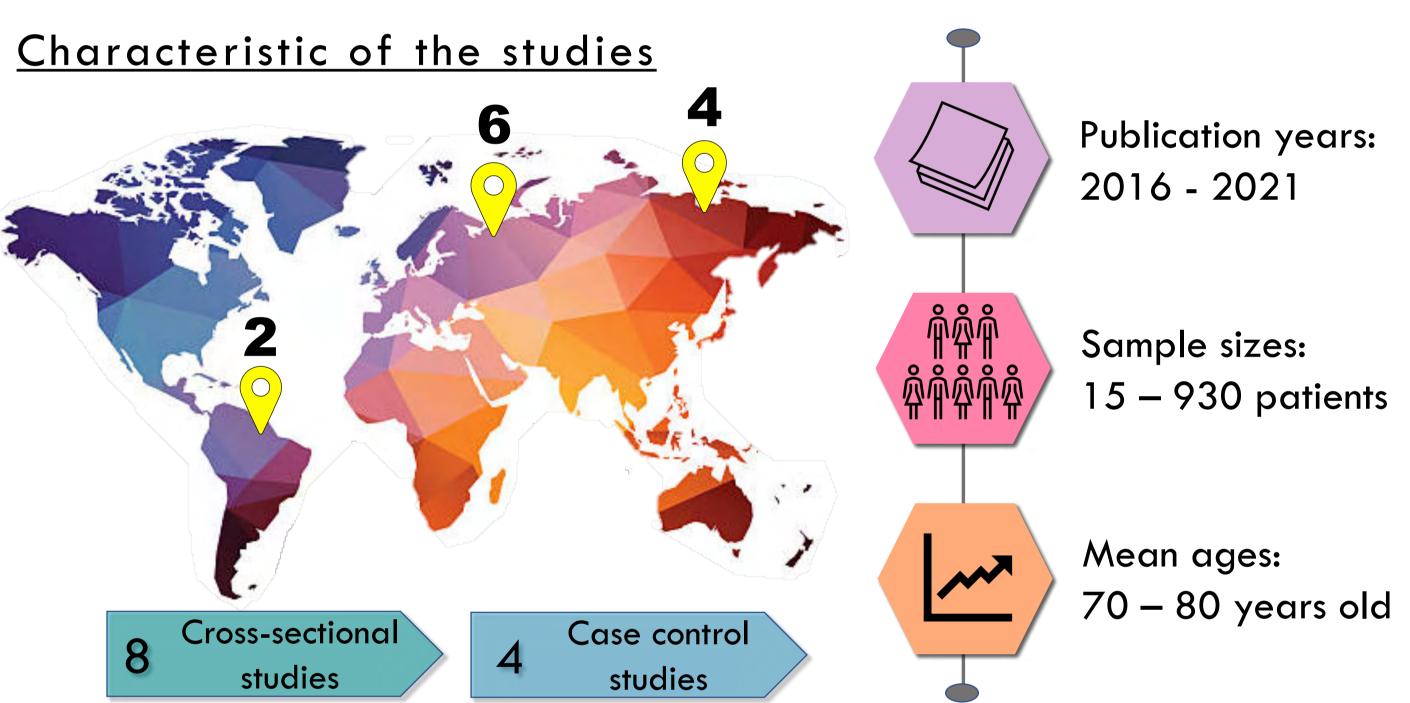
criteria of MCI

### METHODS

Electronic search based on selected keywords (Figure 2) 2 databases were used: Medline and Embase (Ovid) Inclusion criteria:

- Cohort, case-control or cross-sectional studies
- Quantitative oral health data available
- Diagnosis of oral status and MCI done by health professionals

### RESULTS



### Research settings











Hospital-based

Communitybased

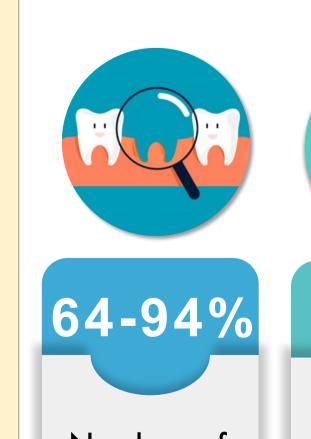
Geriatric clinic Nursing homes Memory clinic

### Quality of the studies



- Studies appraised using Newcastle Ottawa Scale (NOS) and AXIS tool
- Moderate to high quality of studies
- Multiple confounding factors, heterogeneity of the diagnostic tools of OH status and assessment of MCI

### Oral health status



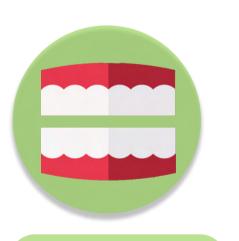












Number of teeth present (dentate patients)<sup>5,6,7</sup>\*

References

16% Dental caries<sup>5</sup> \*

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Chronic periodontitis

Minimal tooth wear<sup>7</sup> (PPD 4-5mm) $^{2,6}$  \*

70% Poor oral hygiene

Nondenture wearer

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### DISCUSSION & CONCLUSION

Difficult to elicit concrete conclusion and complete meta analysis given that heterogeneity of the diagnostic tool for MCI and oral health indices used within the studies

Oral health status (in comparison with ADHS, 2009):

- Low number of teeth present affect the chewing function
- High incidence of chronic PD induce systemic inflammatory process and contribute to the progression of cognitive decline
- Low prevalence of dental caries

#### Limitations:

- Limited databases used
- Studies appraised by single author
- Difficult to extrapolating MCI candidates from studies with mixed group
- Variation of diagnostic tools and oral health indices

### RECOMMENDATION

#### For future research:

- Justification of sample size
- Controlling the confounding factors
- Recruitment process of participants should endeavour to meet standard diagnostic criteria of MCI

#### Implications for specialty:

- Inter-professional education between medical team, dental professionals and social supporting staff.
- Incorporating of dental care as a part of health care plan for patients with MCI
- Provision of training for supportive staff regarding the importance of oral hygiene care and association with general health
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<sup>\*</sup> Compared to Adult Dental Health Survey, UK (ADHS, 2009)