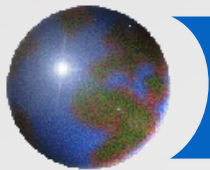


*Disturbi cognitivi nella popolazione  
immigrata: analisi retrospettiva (2001  
- 2017) in un Centro per i Disturbi  
Cognitivi e le Demenze a Milano*

Simone POMATI

Ospedale Luigi Sacco - Milano



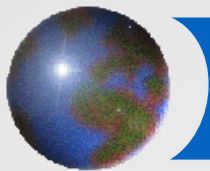
## PREMESSE

- Invecchiamento demografico globale
- Transizione demografica e transizione sanitaria
- Malattie non trasmissibili come principali cause di disabilità
- Stime indicano che la demenza interesserà 75 milioni di individui in tutto il mondo nel 2030
- Principale determinante del bisogno di assistenza nelle persone anziane

- ✦ Dagli anni '60 in Europa è aumentato il flusso migratorio
- ✦ Il numero di persone che invecchiando sviluppano la demenza in un paese diverso da quello di origine continua ad aumentare



Majority of people who will develop dementia will be in low- and middle-income countries



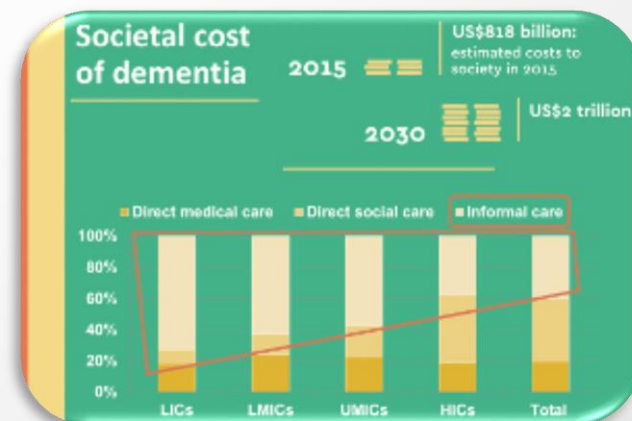
## *Premesse: epidemiologia*

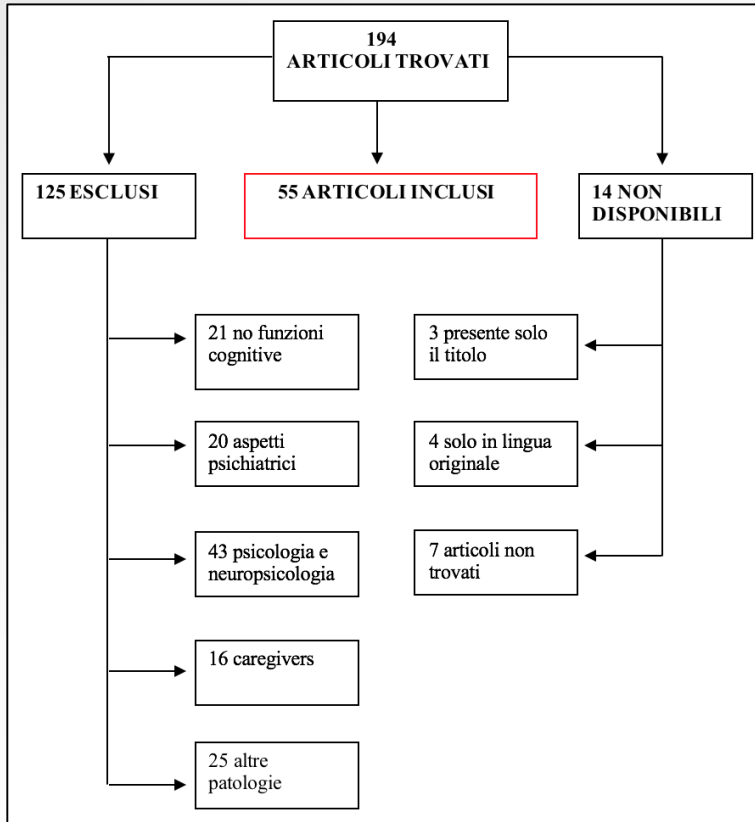
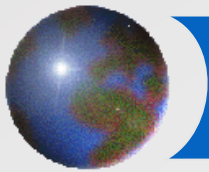
- L'Italia rappresenta uno dei principali Paesi di immigrazione in Europa
- 5 milioni di stranieri residenti (2017)
- 8,3% della popolazione totale
- **La stima del fenomeno e l'attuazione di strategie e politiche dedicate costituiscono questioni prioritarie per i nostri sistemi sanitari**

Worldwide trends in the prevalence of dementia.  
(Cova, 2017)

A Systematic Review and Meta-Analysis on the Prevalence of Dementia in Europe: Estimates from the Highest-Quality Studies Adopting the DSM IV Diagnostic Criteria. (Canevelli, 2018)

Estimating dementia cases in the immigrant population living in Italy. (Canevelli, 2018)





### DATI EPIDEMIOLOGICI

- Prevalenza
- Cause della migrazione
- Variabili socio-ambientali

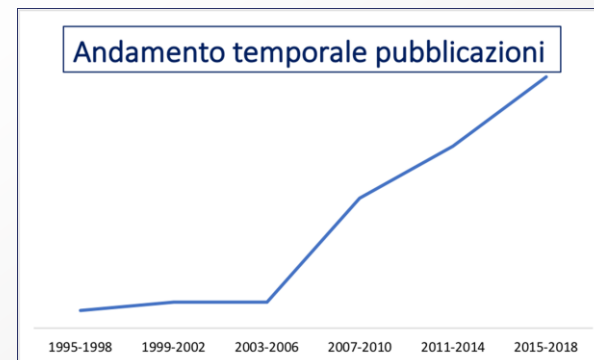
### ASPETTI TRANSCULTURALI

- Scarsa consapevolezza della patologia
- Stigma
- Barriere sanitarie

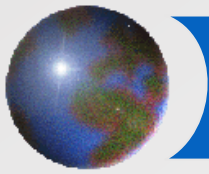
### TEST NEUROPSICOLOGICI

- Barriera linguistica
- Pochi hanno adattamento transculturale
- Nuovi test

*((cognition[Title/Abstract] OR dementia[Title/Abstract] OR neuropsychology[Title/Abstract] OR cognitive decline[Title/Abstract])) AND (migrants[Title/Abstract] OR immigrants[Title/Abstract] OR transcultural[Title/Abstract] OR strangers[Title/Abstract] OR foreigners[Title/Abstract])*



➡ **NESSUNO STUDIO IN ITALIA**



## Disegno dello studio

Tipo di studio

- osservazionale
- retrospettivo
- monocentrico

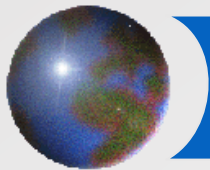
Setting:

- Ospedale Luigi Sacco

Area geografica di riferimento:

- Comuni di Milano, Baranzate, Bollate, Novate Milanese

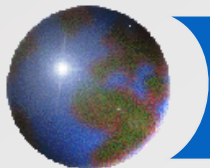




# *Il campione*

| Variabili considerate | Centro Disturbi Cognitivi * | Ambulatorio generale | Popolazione residente |
|-----------------------|-----------------------------|----------------------|-----------------------|
| Periodo               | 2001 - 2017                 | 2011; 2014; 2017     | 2017                  |
| Nati all'estero       | x                           | x                    | x                     |
| Età                   | x                           | x                    |                       |
| Genere                | x                           | x                    |                       |
| Paese di origine      | x                           | x                    |                       |

\* Inclusi se lingua madre diversa dall'Italiano



## *Centro Disturbi Cognitivi 2001 - 2017*

### **CARATTERISTICHE SOCIO-DEMOGRAFICHE**

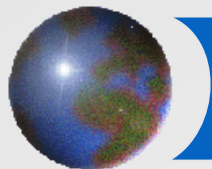
- Scolarità
- Occupazione (carico di lavoro mentale)
- Stato civile

### **CARATTERISTICHE CULTURALI**

- Area geografica e livello economico del paese di origine
- Lingua madre
- Livello di conoscenza dell'italiano (nessuno, base, autonomia, padronanza)
- Barriera linguistica
- Durata della presenza in Italia

### **CARATTERISTICHE CLINICHE**

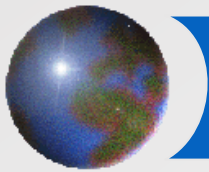
- Anno della prima visita
- Comorbidità (CIRS)
- Strumenti diagnostici utilizzati
- Diagnosi
- MMSE
- Gravità della demenza (CDR)
- Bisogno di assistenza (ADL e IADL)



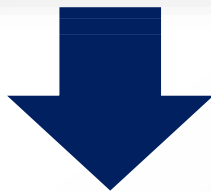
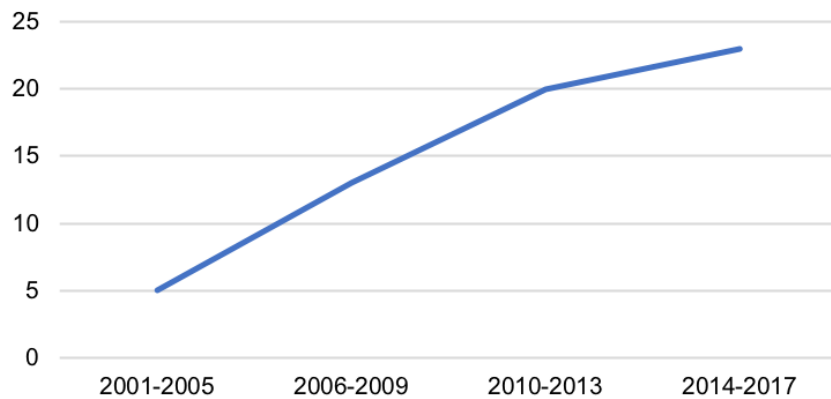
## RISULTATI: CARATTERISTICHE DEMOGRAFICHE

|                         | Centro Disturbi Cognitivi | Ambulatorio generale | Popolazione residente  |
|-------------------------|---------------------------|----------------------|--|
| <b>Totale</b>           | 4701                      | 3229                 |  |
| <b>Stranieri, # (%)</b> | 61 (3,1%)                 | 349 (10,8%)          | Milano: 18,9%<br>Baranzate: 31%<br>Bollate: 6,5 %<br>Novate M.se: 7,2% |
| <b>Femmine (%)</b>      | 38 (62,3%)                | 190 (54,4%)          |  |
| <b>Età</b>              | 67,5 ± 14,2               | 46,6 ± 14,4          |  |
| <b>Scolarità</b>        | 11 ± 5,2                  |                      |  |



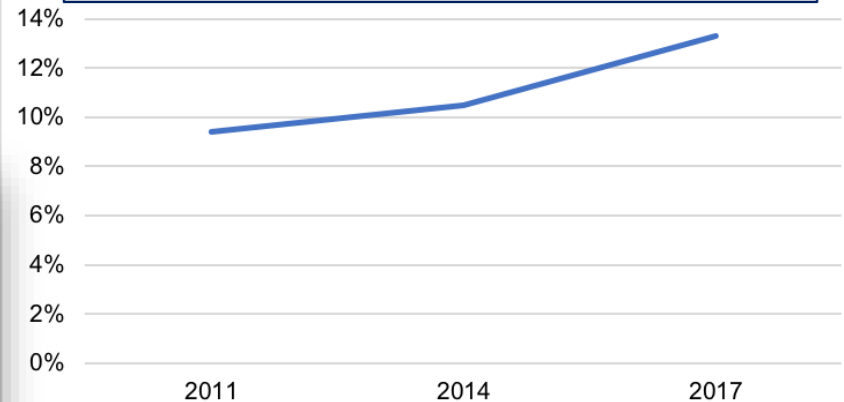


### Stranieri ambulatorio demenze

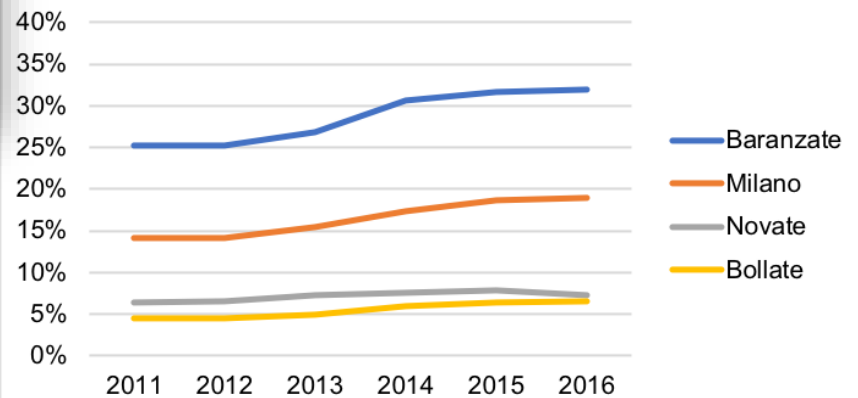


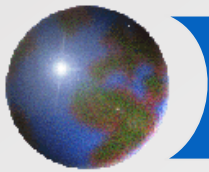
Tasso di crescita = 400%

### Stranieri ambulatorio generale

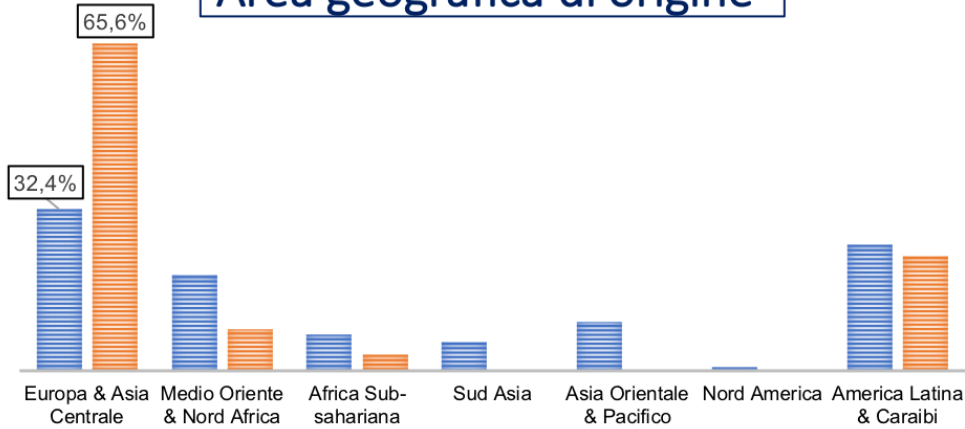


### Stranieri residenti





### Area geografica di origine

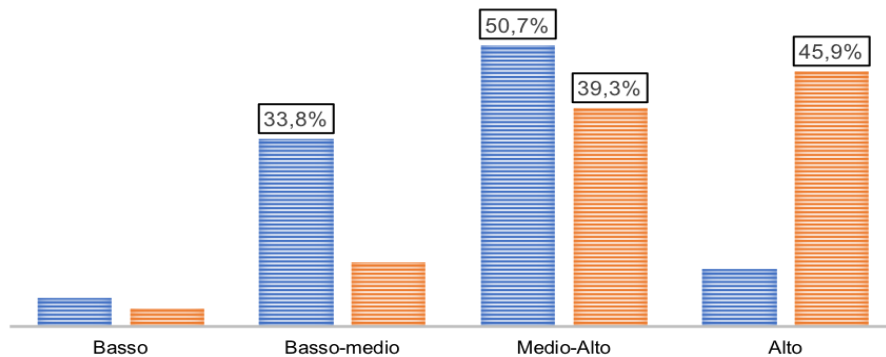


AMBULATORIO DEMENZE

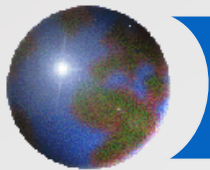


AMBULATORIO GENERALE

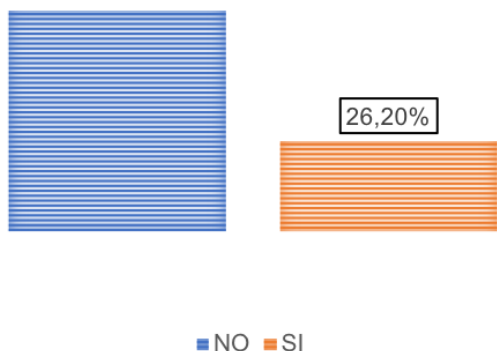
### Stato socio-economico paese di origine



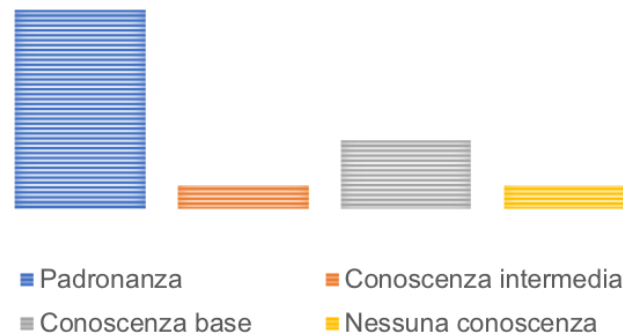
Classificazione World Bank Country and Lending Groups (<http://www.worldbank.org>)



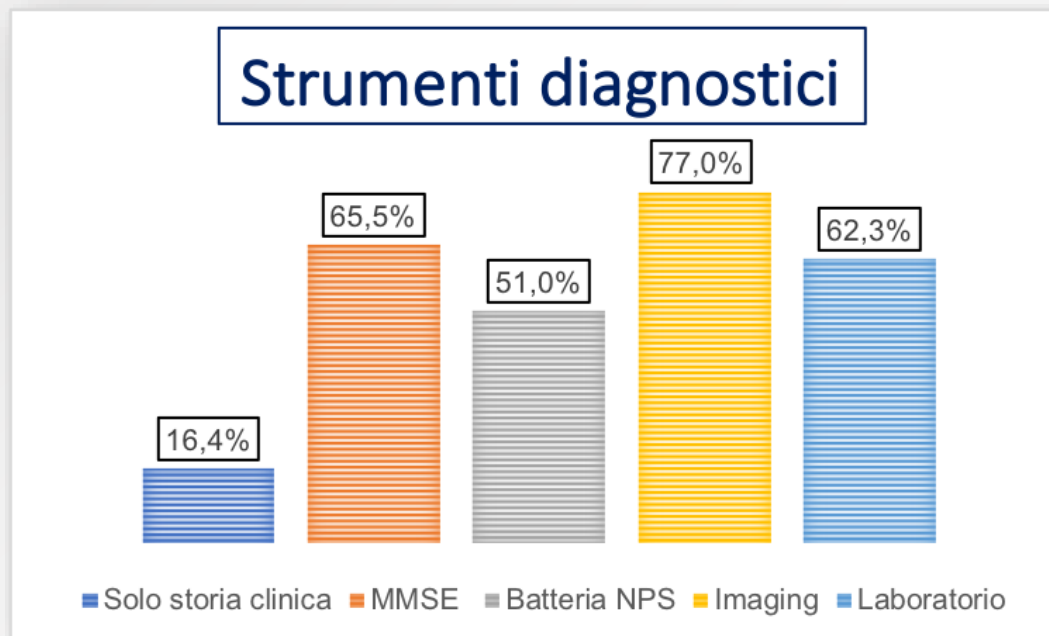
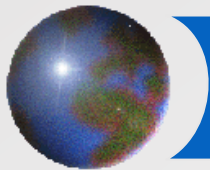
## Barriera linguistica



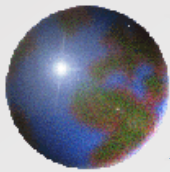
## Livello di conoscenza dell'italiano



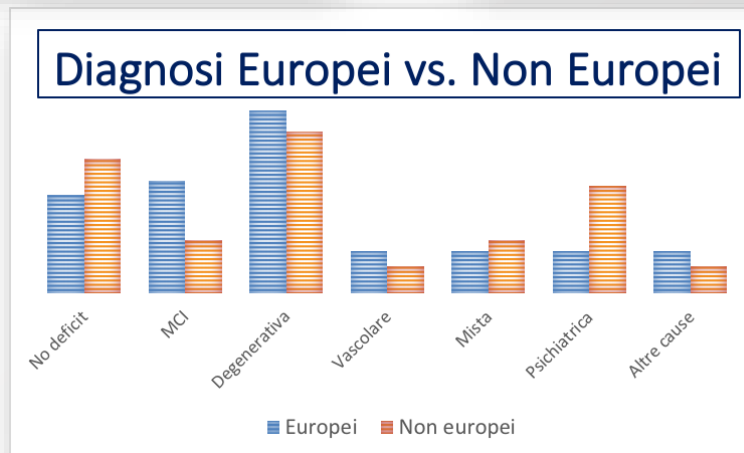
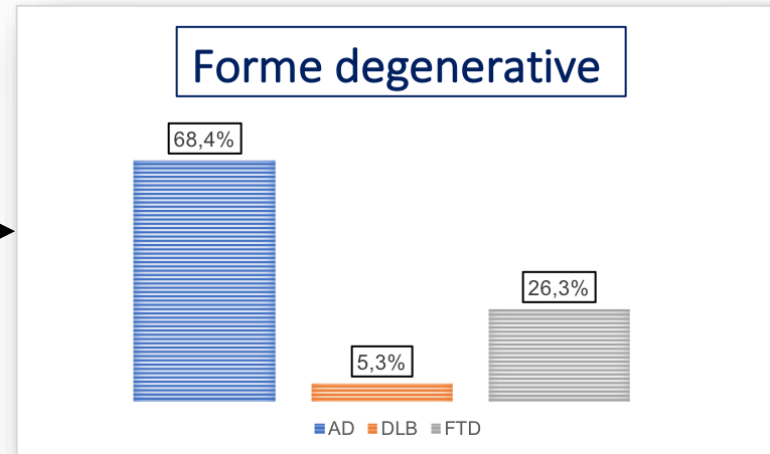
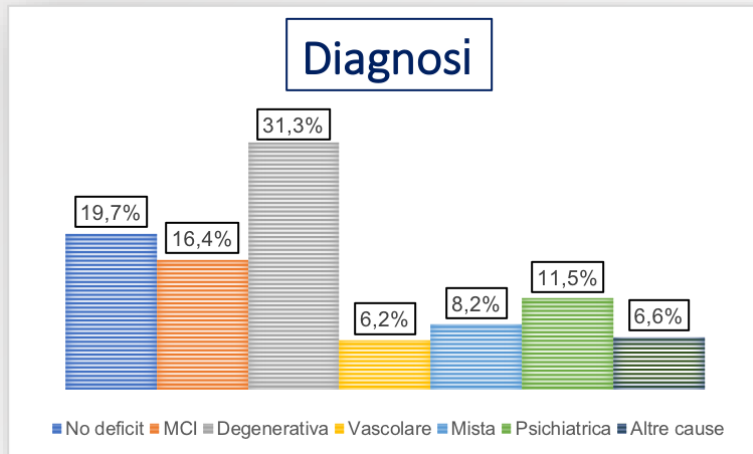
- La presenza di una barriera linguistica era correlata allo stato socio-economico del paese di origine ( $p=0,005$ )
- I soggetti provenienti da paesi ad alto reddito mostravano una maggior padronanza della lingua italiana ( $p<0,05$ )
- La scolarizzazione, il tipo di lavoro (inteso come impegno cognitivo), l'età e il genere non hanno mostrato relazione con il livello conoscenza dell'italiano e di conseguenza non sono apparsi parametri influenti sulla scelta degli strumenti diagnostici ( $p = NS$ )

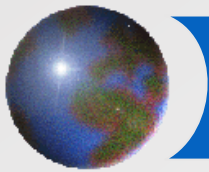


- Diversa modalità diagnostica in rapporto al livello di conoscenza dell'italiano ( $p=0,079$ )
- La possibilità di somministrazione di test neuropsicologici era correlata alla conoscenza dell'italiano ( $p<0,001$ ) e all' assenza di una barriera linguistica ( $p<0,001$ )
- L'applicabilità del MMSE è invece risultata valida anche nei pazienti con scarsa conoscenza della lingua italiana ( $p=NS$ ), con un punteggio medio di  $23,4 \pm 6,2$  punti



# Diagnosi ...

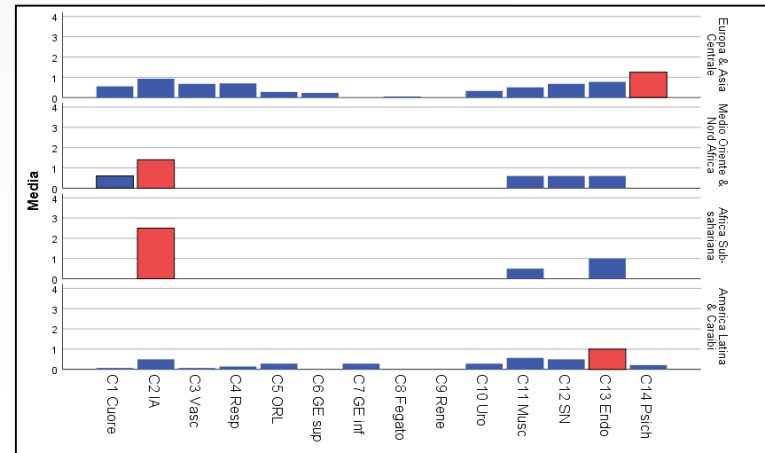




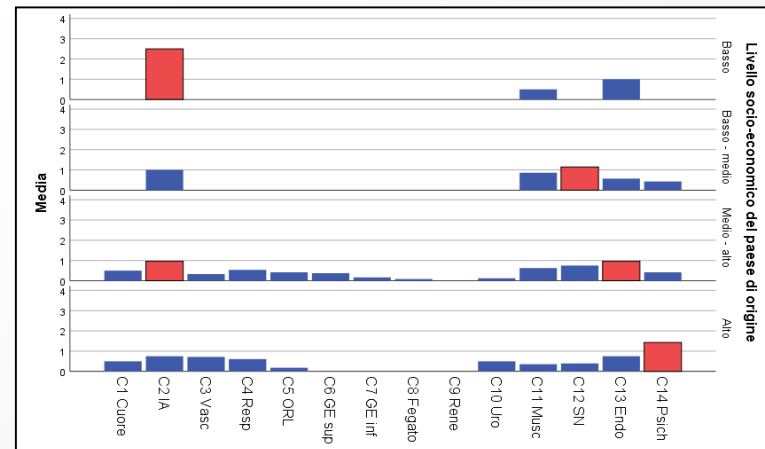
# Comorbilità

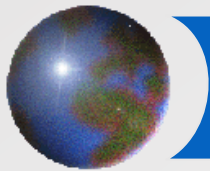
- Comorbilità più frequenti:  
ipertensione  
arteriosa, patologie a carico del sistema nervoso, endocrino e patologie psichiatriche
- Importanti differenze considerando il paese di origine

### CIRS - Area geografica del paese di origine



### CIRS - Stato socio-economico del paese di origine





# DISCUSSIONE

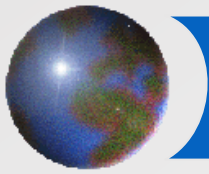
- I pazienti stranieri con declino cognitivo rappresentano ancora una quota minima ma inevitabilmente destinata a crescere
- L'età media era inferiore rispetto a quella dei pazienti italiani in entrambi gli ambulatori
- La presenza di una barriera linguistica è risultata essere il principale ostacolo all'applicazione degli strumenti diagnostici disponibili
- Diagnosi più frequenti: demenza degenerativa, MCI (soprattutto negli europei), demenza mista, demenza vascolare e demenza secondaria ad altre cause
- In circa 1/5 dei casi non è stato riconosciuto alcun deficit oggettivo



**Aumento di afferenza di pazienti stranieri nel prossimo futuro**



**Necessari strumenti applicabili in contesti transculturali**



## ***PUNTI DI FORZA***

- Ampiezza dell'afferenza al Centro (4701 pazienti in 17 anni)
- Studio innovativo tra i primi condotti con questi obiettivi

## ***LIMITI***

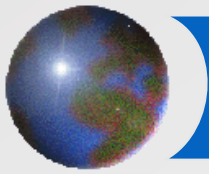
- Studio retrospettivo: solo alcuni dati relativi alle caratteristiche cliniche e culturali
- Periodico aggiornamento dei criteri e degli strumenti diagnostici
- Studio monocentrico in una grande città multiculturale

## ***PROSPETTIVE***

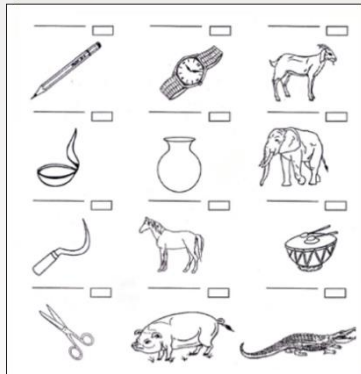
- Validazione e adozione di strumenti diagnostici transculturali
- Ricerche di respiro nazionale o sovranazionale
- Progetto *ImmiDem*



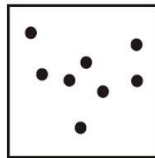




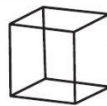
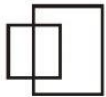
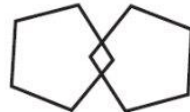
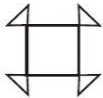
# ACE-X



目を閉じてください



Close your eyes



## Reporting the Translation and Cultural Adaptation of the Addenbrooke's Cognitive Examination (ACE-III) and its predecessors: A Systematic Review

Nadine Mirza<sup>1</sup>, Maria Panagioti<sup>1</sup>, Muhammed Wali Waheed<sup>2</sup>, Waqas Waheed<sup>1</sup>

<sup>1</sup>The Centre for Primary Care, The University of Manchester, <sup>2</sup>The University of Leicester

### BACKGROUND

- The Addenbrooke's Cognitive Examination (ACE) – a screening tool for cognitive impairment (CI) that incorporates the MMSE<sup>1</sup>
- The ACE Revised (R) – an update of the ACE for cross cultural usage and improved sensitivity<sup>4</sup>
- The ACE-III – an update of the ACE-R to remove copyrighted items of the MMSE and correct items that incorrectly indicate CI<sup>5</sup>
- It's a gold standard for the diagnostic accuracy of CI<sup>6</sup>
- It has 29 items that assess 5 cognitive domains: attention, memory, fluency, language and visuospatial abilities<sup>8</sup>
- It retains ACE and ACE-R items<sup>7</sup>
- The ACE was designed for English speakers aware of cultural norms of European countries. Some items require participants to read and write English text<sup>8</sup>
- The ACE has been translated into various languages but there is no standard procedure to translate and culturally adapt them.
- We conducted a systematic review that lists publications on culturally adapted versions of the ACE, summarising them to show what cultural adaptations steps were under taken.

### METHODS

**Search Criteria**  
 Searched EMBASE, Medline and PsycINFO (Jan 2013-Dec 2016) and included studies of a recent meta-analysis<sup>9</sup>.

**Eligibility Criteria**  
 Publications that referred to translated and/or culturally adapted versions of the ACE, ACE-R and ACE-III, from English into any language.

**Study Selection and Data Extraction**  
 Titles and abstracts were screened. Full-texts of were accessed and assessed against eligibility criteria. The section that described the cultural adaptation process was extracted.

**Analysis**  
 The adaptation procedures were broken down into mutually exclusive steps. A list of translation steps was determined. The reported cultural adaptation procedures showed which items of the ACE, ACE-R and ACE-III were culturally dependent.

### RESULTS

Our search identified 32 publications for analysis; 12 ACE, 17 ACE-R, 3 ACE-III.

**ACE-III ITEMS CULTURALLY ADAPTED**

| Item       | Chinese | English | French | German | Italian | Japanese | Malay | Portuguese | Russian | Spanish | Tamil | Thai | Urdu | Yiddish |
|------------|---------|---------|--------|--------|---------|----------|-------|------------|---------|---------|-------|------|------|---------|
| Attention  |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Pen        |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Watch      |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Goat       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Pen        |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Vase       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Elephant   |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Drum       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Horse      |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Comb       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Scissors   |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Pig        |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Lizard     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Book       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Anchor     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Camel      |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Harp       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Rhinoceros |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Barrel     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Crown      |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Lizard     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Book       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Pen        |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Vase       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Elephant   |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Drum       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Horse      |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Comb       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Scissors   |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Pig        |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Lizard     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Book       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Anchor     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Camel      |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Harp       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Rhinoceros |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Barrel     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Crown      |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Lizard     |         |         |        |        |         |          |       |            |         |         |       |      |      |         |
| Book       |         |         |        |        |         |          |       |            |         |         |       |      |      |         |

ACE-III Item: 1 Attention; 2 Attention; 3 Attention; 4 Memory; 5 Fluency; 6 Memory; 7 Memory; 8 Language; 9 Language; 10 Language; 11 Language; 12 Language; 13 Language; 14 Language; 15 Attention; 16 Attention; 17 Attention; 18 Attention; 19 Memory

### TRANSLATION STEPS

- Translation:** Direct translation without cultural adaptation, from English into the target language.
- Back Translation:** Creating a retroversion of the initial translation back to English.
- Users in co-production:** Potential users providing feedback on the development of the assessment.
- Expert Recommendation:** Experts on translation providing feedback on the development of the assessment.
- Revisions based on step-by-step feedback:** Revisions of the assessment whenever change is approved.
- Involvement of original Authors:** Authors of the original assessment providing feedback.
- Pilot Study:** Assessing the scales feasibility and acceptability amongst potential users.

### EXAMPLES OF CULTURAL ADAPTATION

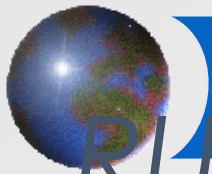
| Original ACE item  | Arabic | Chinese | Hindi |
|--|--------|---------|-------|
| Name the woman who was Prime Minister<br>Malaysian             |        |         |       |
| Name of the Indian currency<br>Spanish                         |        |         |       |
| Name of the previous Pope of the Catholic Church               |        |         |       |
| "All that glitters is not gold"<br>Arabic                      |        |         |       |
| "only stretch your legs as much as your duvet allows"<br>Hindi |        |         |       |
| "what does a monkey know of the taste of ginger?"              |        |         |       |

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### DISCUSSION

- This review summarises all existing publications on translations and cultural adaptations of the ACE-III until 2017, resulting in 32 publications.
- We have shown which of the 29 items have been culturally adapted by which authors across publications. This shows which items would most likely need cultural adaptation by future adapters. Items that assess language are most likely to need cultural adaptation whereas items that assess visuospatial abilities rarely, if at all, require cultural adaptation.
- We have also shown the possible translation steps that can be undertaken by future adapters.
- Finally, we have shown examples of cultural adaptation that has been conducted across certain language and memory items. We have been able to collate such examples for every item of the ACE-III.
- This review has the potential to assist future adapters of the ACE-III and its predecessors as it provides information on culturally adapting this assessment and is the only existing review of its kind for the ACE-III.
- Future directions would require using this systematic review to develop a set of guidelines on adapting the ACE-III.



# RUDAS

## (Rowland Universal Dementia Assessment Scale)

### Memoria

- Ripetizione
- Apprendimento

### Identificazione di parti del corpo

- Comprensione verbale
- Indicazione

### Prassia

- Imitazione di gesti
- Sequenze

### Disegno

- Cubo

### Giudizio

- Descrizione di una situazione

### Memoria

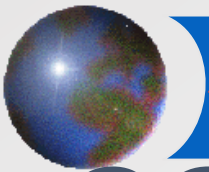
- Rievocazione differita

### Linguaggio

- Fluenza verbale (animali)

Componente verbale molto rilevante

Consentito (previsto) l'impiego di interpreti



# CCD

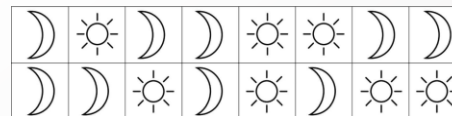
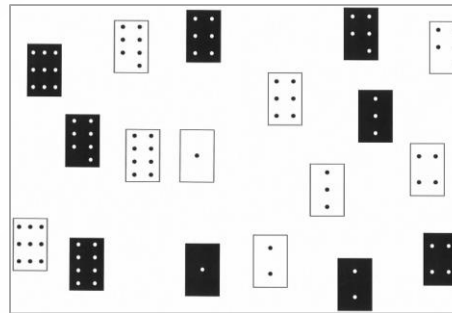
(Cross cultural dementia test)

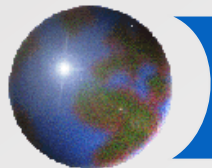
Test degli  
oggetti

Test dei punti

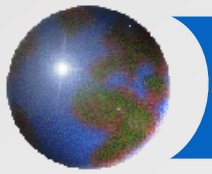
Test Sole / Luna

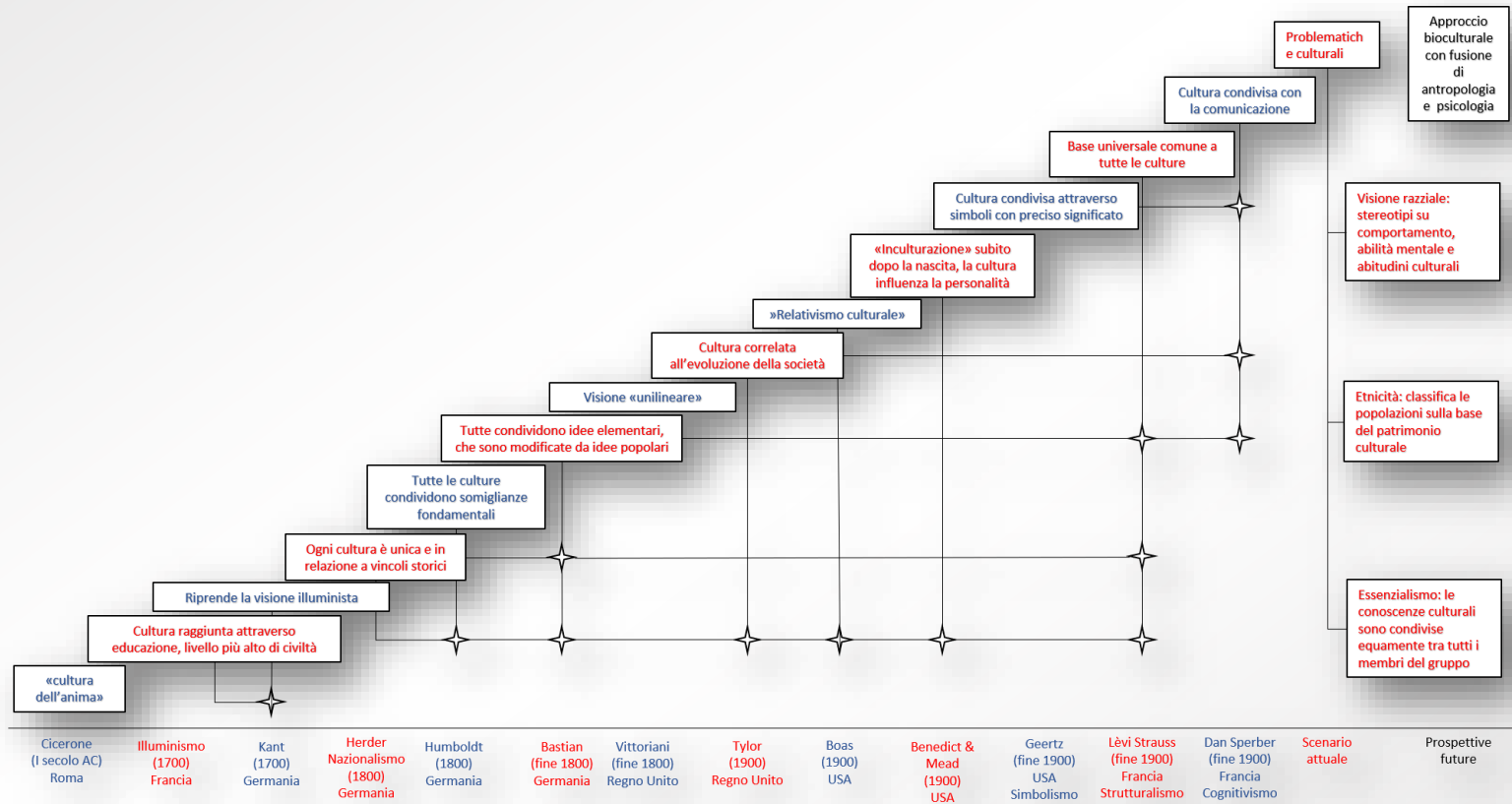
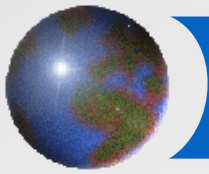
Fotografie a  
colori





# DANKONI VIN POR ATENTO





Cultura e culture. Di cosa stiamo parlando?