Title

The efficacy of anti-stigma initiatives in reducing dementia stigma in young people: A systematic review protocol

Authors

Mahfuza Ali (MA), Brighton and Sussex Medical School

Esra Hassan (EH), Centre of Dementia Studies, Brighton and Sussex Medical School

Nicolas Farina (NF), Centre of Dementia Studies, Brighton and Sussex Medical School

Rationale

The aim of this study is to identify and describe the available published research on anti-stigma initiatives aimed at young people that seek to reduce dementia stigma.

Stigma in the context of health is defined as a negative association towards an individual or group who share certain characteristics and a specific disease (1). Stigma towards those diagnosed with dementia is a recognised problem. The World Health Organisation (WHO) have devised a Global action plan that aims to improve the lives of people with dementia, so they can live with dignity and respect (2). Integrated into the plan is a focus on dementia awareness and friendliness which aims to reduce stigma using planned programmes that target a range of communities within the general public, including school students (2).

Initiatives to reduce stigma have been described in previous papers however, this has previously not been limited to adolescents (3). This is despite the WHO targeting namely school students amongst the communities who would benefit from dementia awareness and friendliness programmes (2). Therefore, this systematic review will focus on adolescents aged 10-18 years old, to understand whether such interventions are effective in reducing dementia stigma.

Objectives

1. To describe the efficacy of anti-stigma initiatives at reducing dementia stigma in young people.
2. To understand whether certain interventions are more effective at reducing dementia stigma in young people

Where possible we will describe whether certain intervention types are more effective at reducing dementia stigma in young people.

Methods

Sample	Adolescents between the ages 10-18 years old.
Phenomenon of Interest	Efficacy of intervention on dementia stigma.

Design	Interventional research either with or without comparators.
Evaluation	Dementia stigma and perceived stigma towards dementia.
Research type	Quantitative, qualitative, mixed methods

Criteria

Table 1 – Inclusion and exclusion criteria

Inclusion	**Exclusion**
Papers written in English language.	Exclude papers that only measure ageism and age-related stigma
Only papers from peer-reviewed journals.	Cohorts that are primarily composed of carers, or other specialist groups.
Studies with an anti-stigma intervention	
Quantitative studies that report pre and post (or change) data on dementia stigma.	
Qualitative studies that report the perceived impact of the intervention on dementia stigma.	
Studies in which the average age of participants is within 10-18 years old.	
Papers that measure outcomes using qualitative, quantitative, and mixed methods.	

The criteria do not include restriction on year of publication or country of publication. This is to ensure that the selected papers are comprehensive to ensure enough evidence to answer the research question.

Outcomes and prioritisation

	Outcome	**Rationale**
Primary outcome	The efficacy of the anti-stigma initiative on dementia stigma.	This data collated from all eligible papers will demonstrate whether interventions to reduce stigma towards dementia in young people are generally effective. Dementia stigma refers to negative attitudes and beliefs that lead to discrimination and prejudice towards people living with dementia. Dementia stigma encapsulates related terms such as ‘attitudes’, 'stereotypes', ‘beliefs’ and 'prejudice' (4, 5).
Secondary outcomes	Perceived efficacy of intervention on dementia stigma	Qualitative data will often not directly capture stigma but may ask

		how interventions have influenced their perceptions.
Additional outcome	Descriptive information about anti-stigma intervention.	This data will allow comparison between types of interventions. Namely education, contact, education and contact, and protest (3).

Search strategy

Table 2 shows an example search string based on my SPIDER methods breakdown.

	Search component	Search strategy
1	Dementia	Dement* OR Alzheimer*
2	Adolescents	Adoles* OR Child* OR teen* OR “young people” OR School OR Pupils
3	Stigma	Prejudice OR Rejection OR Social OR Attitudes OR Discrimination OR Stigma
4	Interventions	Strateg* OR Program* or Action* OR initiative* OR intervention*
		1 AND 2 AND 3 AND 4

Information sources

The following databases have been chosen to conduct the search: Web of science, Pubmed, PsychInfo, SCOPUS

Search strategy

Data management

- Zotero (or equivalent) will be used to manage searches. Excel will be used for data extraction.

Selection process

- Searches from all databases will be exported onto Zotero where duplicates will be removed.
- The de-duplicated studies will then be exported to ASReview to undergo title and abstract screening using machine learning, led by MA.

- Whilst there is no consensus about the best approach, a minimum of 10% of the papers will be screened, and screening will continue until 10 consecutive irrelevant papers are displayed (6).
- Title and abstracts that meet the inclusion criteria will then undergo full text screening.
- Full text screening will be done independently by MA and at least 20% of these papers will be reviewed in duplicate by a second reviewer (EH).
- Any conflicts will be resolved through discussion which should result in a decision whether to include or exclude the paper. Any unresolved conflicts will be handled by a third reviewer (NF).
- Decisions made to include or exclude a paper will follow the pre-defined inclusion/exclusion criteria.
- The PRISMA study flow chart will then be used to demonstrate the screening process

Data Extraction

An example table for data extraction is shown in Table 3. The data will be extracted independently by MA and independently checked by ES.

Missing data will be recorded as unreported however, study investigators will not be contacted for additional data.

Table 3 – Characteristics that will be extracted from included studies.

Characteristics	**Description**
Author	
Year of publication	
Country of study	
Largest ethnicity/nationality group (n/%)	
Description of Intervention	
Intervention type (e.g., contact, education, protest)	
Intervention duration	
Intervention frequency	
Sampling method	
Age range	
Average age (mean and SD)	
Sample size	
Method of data collection	
Measures used	
Pre-test data (mean and SD)	
Post-test data (mean and SD)	
Change scores, if presented (mean and SD)	
P Value	
Whether improvement in attitudes (Y/N)	
Main strengths	
Main limitations	

Risk of bias score	

Risk of bias in individual studies

The Mixed Methods Appraisal Tool (MMAT) version 2018 will be used to identify any risk of bias in individual studies (7). This will be described in the results section and will be used to contextualise findings. When interpreting findings, risk of bias will be used to weight interpretations.

Data synthesis

A narrative synthesis using the Cochrane Handbook for Systematic Reviews of Interventions will be conducted to analyse quantitative and qualitative study results from pre and post intervention (8). Studies will be grouped into themes based on the intervention type, this will be driven by themes identified in an existing scoping review (i.e., education, contact, education and contact, and protest) (3). Qualitative data (e.g., quotes) will be used to either support or oppose quantitative data in narrative synthesis.

Meta-biases

There are no plans to assess meta-biases across the eligible papers.

Amendments

NA

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