Seleção e Extração de dados

3º passo da Revisão Sistemática

MPR5766 2023

Trilhas e Rotas

01 Spoiler do 2º passo

02 Seleção de estudos

03 Extração de dados

04 Concordância

Relembrar

1. Research Question and Identification (eletronic databases and others)
2. Study selection
3. Data extraction
4. *Certainty (*Quality) assessment
5. Data Synthesis
6. Report writing

Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols

(27 itens)

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	

01

Spoiler

estratégia de busca

Identificação dos artigos / materiais

Escolha das base

Construção das Estratégias

WHOA!

E agora?

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	

Research article | Open Access | Published: 22 January 2016

Effectiveness of interventions to directly support food and drink intake in people with dementia: systematic review and meta-analysis

Asmaa Abdelhamid, Diane Bunn, Maddie Copley, Vicky Cowap, Angela Dickinson, Lucy Gray, Amanda Howe, Anne Killett, Jin Lee, Francesca Li, Fiona Poland, John Potter, Kate Richardson, David Smithard, Chris Fox & Lee Hooper

BMC Geriatrics **16**, Article number: 26 (2016) | Cite this article

Review question –

https://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42014007611

what is the effectiveness of interventions to improve, maintain or facilitate oral food and drink intake, nutrition and hydration status, in people with dementia (in any setting, living independently in the community or with varying levels of care and support, and with different types and degrees of dementia)

Objectives: •To summarise the evidence of effectiveness of interventions in a rigorous way that minimises bias
•To address the specific questions raised by our stakeholc
•To highlight research priorities in this area

16 perguntas específicas

Participants/population

all studies involving a minimum of 3 adult humans with any type of dementia (Alzheimer's, vascular dementia, dementia with Lewy bodies or other rarer types) or any stage of dementia (mild to severe) or mild cognitive impairment, in any setting (community dwelling, hospital or residential care, using formal (including day care and peripatetic services) or informal care).

Intervention

Any intervention (including educational interventions with people with dementia and with carers, modification of foods, such as provision of finger foods, or liquidising of foods), stimulating appetite (such as wine, good food smells or exercise), equipment (including using contrasting colour, and cups to allow those with physical disabilities to drink independently), staffing (changing staff numbers or roles), environment (such as making dining rooms more homely), dealing with problems such as oral care and continence, and assessment and intervention for swallowing difficulties) aiming to increase or facilitate oral food and/or drink intake (in those who are experiencing difficulty) or maintain or food and/or drink intake (in those with no apparent difficulty), or improve, facilitate or maintain nutrition or hydration status.

Comparator(s)/control

Usual food and/or drink provision.

(main)Outcome

*Nutritional status (e.g. body mass index, weight, or any recognised nutrition marker)
*Hydration status (e.g. plasma osmolality, tonicity or osmolarity, urine volume, osmolality or specific gravity, admission to hospital with acute dehydration or acute kidney injury, or provision of intravenous or subcutaneous fluids)
*Meaningful activity and/or enjoyment of food and/or drink (activity around food or drink that is personally fulfilling, that people enjoy, look forward to or find important)?
*Measures of quality of life

We will search the following databases for relevant studies; MEDLINE, EMBASE, CINAHL, PsycINFO, the Cochrane Library the Cochrane Library (including Cochrane Central Register of Controlled Trials (CENTRAL), Cochrane Database of Systematic Reviews, Database of Abstracts of Reviews of Effects (DARE), Health Technology Assessment, NHS Economic Evaluation Database (NHS EED)), the meta-register of controlled trials (a trial register that includes the International Standard Randomised Controlled Trial Number Register, ISRCTN, and the NIH Clinical Trials Register), ALOIS (Cochrane Dementia and Cognitive Improvement Group comprehensive register of dementia trials), the International Alzheimer's Disease Research Portfolio (IADRP) and Dissertation and Thesis abstracts.

Bibliographies of included studies as well as list of included and excluded studies from relevant existing systematic reviews will be checked for other relevant studies. The search will not by limited by language or time period.

We developed the systematic review protocol collaboratively, and the review team included lay stakeholders, subject experts and methodological experts. Lay stakeholders included members from AgeUK Norfolk and NorseCare (residential homes group). We worked with two patient and public involvement groups (the Public & Patient Involvement in Research, PPIRes, from Norfolk and Suffolk and the Public Involvement in Research Group, PIRG, from the University of Hertfordshire) to develop additional specific questions for the review.

https://training.cochrane.org/resource/patient-and-public-involvement-research-what-why-and-how

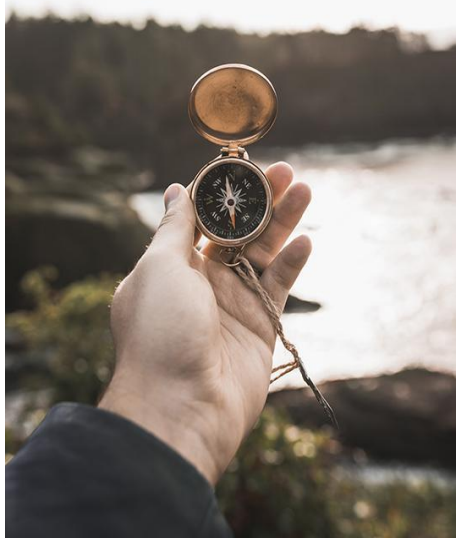
02

Seleção

Seleção

- registros potencialmente elegíveis serão avaliados para inclusão a partir de critérios predeterminados
- apenas uma pequena proporção pode ser incluída na revisão.

SCREN



SELECT

Os métodos usados para essas decisões devem ser transparentes - Documentar as decisões!

- Deve ser feito por pelo menos duas pessoas, de forma independente
- Formulários de coleta de dados

Estudos e não artigos como unidades de interesse

- Identificar vários artigos do mesmo estudo
- nomes dos autores (a maioria dos relatórios duplicados tem autores em comum, embora nem sempre seja o caso);
- localização e ambiente (particularmente se instituições, como hospitais, forem nomeadas);
- detalhes específicos das intervenções (por exemplo, dose, frequência);
- número de participantes e dados de linha de base; e
- data e duração do estudo

Como

1.Mescle os resultados da busca, usando softwares e remova as duplicatas

2.Examine Títulos e resumos para remover artigos (obviamente) irrelevantes (melhor ser super inclusivo)

3.Recupere o texto completo dos relatórios potencialmente relevantes.

4.Agrupe os artigos de um único estudo

5. Leia os artigos na íntegra para selecionar os que preenchem os critérios de inclusão

6. Faça contato com pesquisadores para esclarecer a elegibilidade (e requisitar mais informações, caso necessário)

7. Decisão final sobre inclusão e parta para a extração dos dados

Vários estudos descobriram que mascarar o autor, a instituição, o nome do periódico e os resultados do estudo tem valor limitado na seleção do estudo.

Portanto, a opinião geral é que a avaliação não mascarada por dois pesquisadores independentes é aceitável

Liste os estudos excluídos e forneça o motivo principal da exclusão - Documentando as decisões

MECIR Box 4.6.d Relevant expectations for conduct of intervention reviews

C41: Documenting decisions about records identified (**Mandatory**)

Document the selection process in sufficient detail to be able to complete a flow diagram and a table of 'Characteristics of excluded studies'.

Decisions should be documented for all records identified by the search. Numbers of records are sufficient for exclusions based on initial screening of titles and abstracts. Broad categorizations are sufficient for records classed as potentially eligible during an initial screen. Studies listed in the table of 'Characteristics of excluded studies' should be those that a user might reasonably expect to find in the review. At least one explicit reason for their exclusion must be documented. Authors will need to decide for each review when to map records to studies (if multiple records refer to one study). Lists of included and excluded studies must be based on studies rather than records.

Methodological Expectations of Cochrane Intervention Reviews (MECIR)

Cochrane Methods

Methodological Expectations of Cochrane Intervention Reviews (MECIR)
Standards for the conduct and reporting of new Cochrane Intervention Reviews, reporting of protocols and the planning, conduct and reporting of updates

Julian PT Higgins, Toby Lasserson, Jackie Chandler, David Tovey, James Thomas, Ella Flemyng and Rachel Churchill

Version February 2021

https://community.cochrane.org/sites/default/files/uploads/MECIR%20Version%20February%202022.pdf

1.7 Collecting data from included studies

Cochrane Training resources: collecting data and Covidence webinar (online tool for review production)

Cochrane Interactive Learning (CIL): module 4 - selecting studies and collecting data

Standard	Rationale and elaboration
C43 Using data collection forms	**Mandatory**
Use a data collection form, which has been piloted.	Review authors often have different backgrounds and level of systematic review experience. Using a data collection form ensures some consistency in the process of data extraction, and is necessary for comparing data extracted in duplicate. The completed data collection forms should be available to the CRG on request. Piloting the form within the review team is highly desirable. At a minimum, the data collection form (or a very close variant of it) must have been assessed for usability. See Handbook Section 5, 5.4.1
C44 Describing studies	**Mandatory**
Collect characteristics of the included studies in sufficient detail to populate a table of 'Characteristics of included studies'.	Basic characteristics of each study will need to be presented as part of the review, including details of participants, interventions and comparators, outcomes and study design. See Handbook Section 5, 5.3.1
C45 Extracting study characteristics in duplicate	**Highly desirable**
Use (at least) two people working independently to extract study characteristics from reports of each study, and define in advance the process for resolving disagreements.	Duplicating the data extraction process reduces both the risk of making mistakes and the possibility that data selection is influenced by a single person's biases. Dual data extraction may be less important for study characteristics than it is for outcome data, so it is not a mandatory standard for the former. See *Handbook* Section 5, 5.5.2
C46 Extracting outcome data in duplicate	**Mandatory**
Use (at least) two people working independently to extract outcome data from reports of each study, and define in advance the process for resolving disagreements.	Duplicating the data extraction process reduces both the risk of making mistakes and the possibility that data selection is influenced by a single person's biases. Dual data extraction is particularly important for outcome data, which feed directly into syntheses of the evidence, and hence to the conclusions of the review. See *Handbook* Section 5, 5.5.2
C47 Making maximal use of data	**Mandatory**
C48 Examining errata	**Mandatory**
Examine any relevant retraction statements and errata for information.	Some studies may have been found to be fraudulent or may have been retracted since publication for other reasons. Errata can reveal important limitations, or even fatal flaws, in included studies. All of these may lead to the potential exclusion of a study from a review or meta-analysis. Care should be taken to ensure that this information is retrieved in all database searches by downloading the appropriate fields, together with the citation data. See *Handbook* Section 4, 4.4.6; Section 5, 5.2
C49 Obtaining unpublished data	**Highly desirable**
Seek key unpublished information that is missing from reports of included studies.	Contacting study authors to obtain or confirm data makes the review more complete, potentially enhances precision and reduces the impact of reporting biases. Missing information includes details to inform risk of bias assessments, details of interventions and outcomes, and study results (including breakdowns of results by important subgroups). See *Handbook* Section 5, 5.2.3
C50 Choosing interventionsin multi-arm studies	**Mandatory**
If a study is included with more than two intervention arms, include in the review only the interventions that meet the eligibility criteria.	There is no point including irrelevant interventionsin the review. Authors, however, should make it clear in the 'Table of characteristics of included studies' that these interventions were present in the study. See *Handbook* Section 5, 5.3.6
C51 Checking accuracy of numeric data in the review	**Mandatory**

INCLUSION CRITERIA:

We included randomised (RCTs) and non-randomised (Controlled Clinical Trials) intervention studies that fulfilled the following criteria:

Participants: ≥3 adults diagnosed with any type/stage of dementia or mild cognitive impairment (MCI) or where the mean Mini Mental State Examination (MMSE) score plus one standard deviation was ≤26, in any setting.

2) Interventions: aimed to modify food and/or drink, provide food- or drink-based supplements, assist with eating or drinking or manage swallowing problems (pharmacological and pill-based supplements were excluded). Duration: ≥5 consecutive days.

3) Outcomes: nutrition or hydration status ; quantity, quality or adequacy of food or fluid intake, ability to eat independently, swallow without aspirating, enjoyment of food or drink or meaningful activity (activity around food or drink that is personally fulfilling, that people enjoy, look forward to or find important). Note - studies were only included if they collected at least one of these outcomes, but where studies were included we also extracted, and report, data provided on the following outcomes: quality of life, functional or cognitive status, views or attitudes, cost effectiveness, resource use, mortality and health outcomes.

SELECTION

Titles and abstracts were screened and full-text papers obtained if either reviewer considered it potentially eligible;

Full text papers were grouped into studies, and the review assessed interventions (some studies tested more than one intervention, while some interventions were described in several published papers) and assessed for inclusion.

Corresponding authors were contacted where papers were published in languages other than English or there were insufficient data to assess suitability for inclusion or outcomes.

http://prisma.thetacollaborative.ca/

PRISMA Flow Diagram

The flow diagram depicts the flow of information through the different phases of a systematic review. It maps out the number of records identified, included and excluded, and the reasons for exclusions. Different templates are available depending on the type of review (new or updated) and sources used to identify studies.

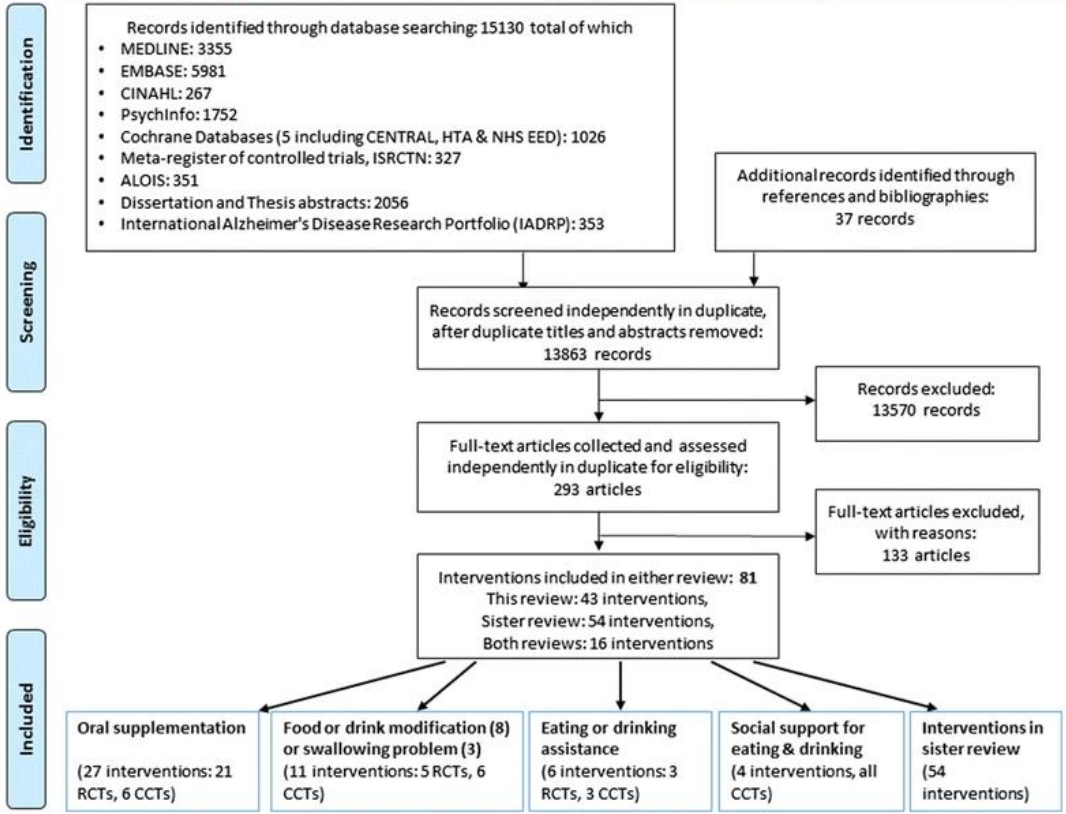
- PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only
- PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources
- PRISMA 2020 flow diagram for updated systematic reviews which included searches of databases and registers only
- PRISMA 2020 flow diagram for updated systematic reviews which included searches of databases, registers and other sources

Flow diagrams can also be generated using a Shiny App available at https://www.eshackathon.org/software/PRISMA2020.html

For more information about citing and using PRISMA click here.

Fig. 1

From: Effectiveness of interventions to directly support food and drink intake in people with dementia: systematic review and meta-analysis



EDWINA systematic review PRISMA flow diagram for studies of direct interventions*. *The number of interventions by category adds up to more than 43 (the total number of interventions in this paper) as several interventions were multicomponent, and so represented in several categories

NEWS

QCTSTAR: Quality Control Tool for Screening Titles and Abstracts by second Reviewer

Description
A flexible sampling methodology to be used in the context where it is impractical to have two reviewers screening all citations at the title and abstract stage of a systematic review.

More info
https://www.hilarispublisher.com/open-access/quality-control-tool-for-screening-titles-and-abstracts-by-seco-nd-reviewer-qctstar-2155-6180-1000230.pdf

Review family
- Systematic
- Rapid
- Qualitative
- Scoping
- Mapping
- Mixed Methods
- Reviews of reviews
- Other
- Multiple

Cost
- Open access

Cochrane

Screen4Me: what is it?

A results screening workflow that uses…

Known assessments

RCT classifier

Cochrane Crowd

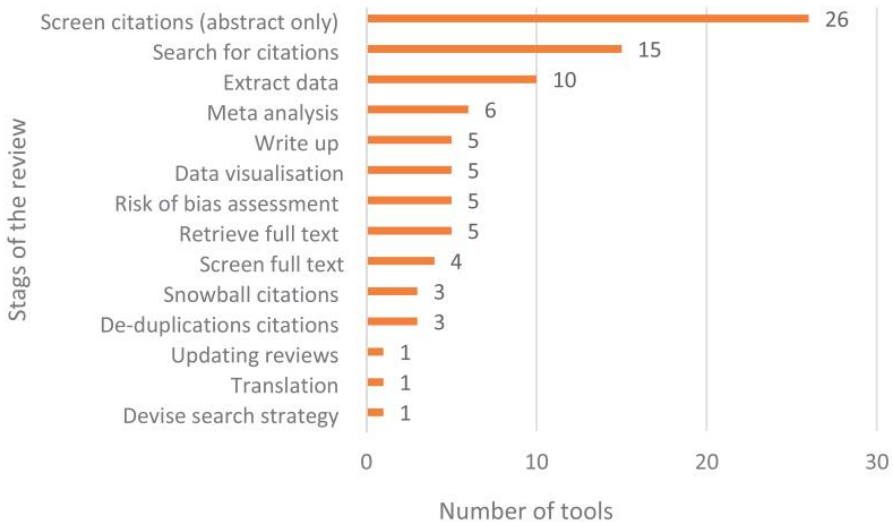


Fig. 3. Number of tools found for independent stages of the review. "(For interpretation of the references to color in this figure legend, the reader is referred to the Web version of this article.)"

Khalil, H., Ameen, D., & Zarnegar, A. (2022). Tools to support the automation of systematic reviews: a scoping review. *Journal of Clinical Epidemiology*, *144*, 22-42.

Rice *et al. Systematic Reviews* (2021) 10:175
https://doi.org/10.1186/s13643-021-01733-2

Systematic Reviews

COMMENTARY Open Access

Dealing with predatory journal articles captured in systematic reviews

Danielle B. Rice[1,2,3*], Becky Skidmore[2] and Kelly D. Cobey[2,4]

Abstract

Background: Systematic reviews appraise and synthesize the results from a body of literature. In healthcare, systematic reviews are also used to develop clinical practice guidelines. An increasingly common concern among systematic reviews is that they may unknowingly capture studies published in "predatory" journals and that these studies will be included in summary estimates and impact results, guidelines, and ultimately, clinical care.

Findings: There is currently no agreed-upon guidance that exists for how best to manage articles from predatory journals that meet the inclusion criteria for a systematic review. We describe a set of actions that authors of systematic reviews can consider when handling articles published in predatory journals: (1) detail methods for addressing predatory journal articles a priori in a study protocol, (2) determine whether included studies are published in open access journals and if they are listed in the directory of open access journals, and (3) conduct a sensitivity analysis with predatory papers excluded from the synthesis.

Conclusion: Encountering eligible articles published in presumed predatory journals when conducting a review is an increasingly common threat. Developing appropriate methods to account for eligible research published in predatory journals is needed to decrease the potential negative impact of predatory journals on healthcare.

Keywords: Predatory journals, Systematic reviews, Meta-analysis, Open access

Rice, D. B., Skidmore, B., & Cobey, K. D. (2021). Dealing with predatory journal articles captured in systematic reviews. *Systematic reviews*, *10*, 1-4.

LITERATURE REVIEW

Retraction of Neurosurgical Publications: A Systematic Review

Justin Wang[1], Jerry C. Ku[1], Naif M. Alotaibi[1,2], James T. Rutka[1,3]

Key words
- Neurosurgery
- Plagiarism
- Publications
- Research ethics
- Retractions

Abbreviations and Acronyms
COPE: Committee on Publication and Ethics

From the [1]Division of Neurosurgery, Department of Surgery and [2]Institute of Medical Science, Faculty of Medicine, University of Toronto, Toronto, Ontario, Canada and Department of Neurosurgery, National Neuroscience Institute, King Fahad Medical City, Riyadh, Saudi Arabia; and [3]Division of Neurosurgery, Department of Surgery, Hospital for Sick Children, Toronto, Ontario, Canada

To whom correspondence should be addressed: Naif M. Alotaibi, M.D. [E-mail: naif.alotaibi@mail.utoronto.ca]

Supplementary digital content available online.
Citation: World Neurosurg. (2017) 103:809-814.
http://dx.doi.org/10.1016/j.wneu.2017.04.014
Journal homepage: www.WORLDNEUROSURGERY.org
Available online: www.sciencedirect.com

OBJECTIVES: Despite the increasing awareness of scientific fraud, no attempt has been made to assess its prevalence in neurosurgery. The aim of our review was to assess the chronologic trend, reasons, research type/design, and country of origin of retracted neurosurgical publications.

METHODS: Three independent reviewers searched the EMBASE and MEDLINE databases using neurosurgical keywords for retracted articles from 1995 to 2016. Archives of retracted articles (**retractionwatch.com**) and the independent Web sites of neurosurgical journals were also searched. Data including the journal, impact factor, reason for retraction, country of origin, and citations were extracted.

RESULTS: A total of 97 studies were included for data extraction. Journal impact factor ranged from 0.57 to 35.03. Most studies (61) were retracted within the last 5 years. The most common reason for retraction was because of a duplicated publication found elsewhere (26), followed closely by plagiarism (22), or presenting fraudulent data (14). Other reasons included scientific errors/mistakes, author misattribution, and compromised peer review. Articles originated from several countries and some were widely cited.

CONCLUSIONS: Retractions of neurosurgical publications are increasing significantly, mostly because of issues of academic integrity, including duplicate publishing and plagiarism. Implementation of more transparent data-sharing repositories and thorough screening of data before manuscript submission, as well as additional educational programs for new researchers, may help mitigate these issues in the future.

INTRODUCTION

Wang, J., Ku, J. C., Alotaibi, N. M., & Rutka, J. T. (2017). Retraction of neurosurgical publications: a systematic review. *World neurosurgery*, *103*, 809-814.

Extração

- Projeto
- Conteúdo
- Software / papel
- Extração de dados de pilotagem
- Processo de extração de dados


DOIS PESQUISADORES INDEPENDENTES

Table 7.3.a: Checklist of items to consider in data collection or data extraction

Source

- Study ID (created by review author).
- Report ID (created by review author).
- Review author ID (created by review author).
- Citation and contact details.

Eligibility

- Confirm eligibility for review.
- Reason for exclusion.

Methods

- Study design.
- Total study duration.
- Sequence generation*.
- Allocation sequence concealment*.
- Blinding*.
- Other concerns about bias*.

Table 7.3.a: Checklist of items to consider in data collection or data extraction

- **Participants**
  - Total number.
  - Setting.
  - Diagnostic criteria.
  - Age.
  - Sex.
  - Country.
  - [Co-morbidity].
  - [Socio-demographics].
  - [Ethnicity].
  - [Date of study].
- **Interventions**
  - Total number of intervention groups.
  - *For each intervention and comparison group of interest*:
  - Specific intervention.
  - Intervention details (sufficient for replication, if feasible).
  - [Integrity of intervention].
- **Outcomes**
  - Outcomes and time points (i) collected; (ii) reported*.
  - *For each outcome of interest*:
  - Outcome definition (with diagnostic criteria if relevant).
  - Unit of measurement (if relevant).
  - For scales: upper and lower limits, and whether high or low score is good.

Data extraction (protocol)

- Bibliographic information (study authors, year and country of publication, details of multiple publications)
- study design
- details of study participants (inclusion criteria, number, age, sex, type of dementia, diagnostic criteria, stage of dementia, setting)
- interventions (description of intervention, duration, details of comparator)
- outcomes.

For each study we will extract numbers of events and numbers of participants in each arm (which will allow us to calculate the relative risk and 95% confidence interval) for categorical data. For continuous data we will extract change data (change from baseline to the end of study) and the standard deviation of the change, and number of participants for each arm, to allow us to calculate the mean difference or standardised mean difference and the 95% CI. Where change data are not provided then we will use end data (outcome data at the end of the intervention).

Differences between reviewers will be resolved through discussion and if needed a third reviewer will arbitrate.

We **will attempt** to contact researchers to clarify data on validity, participant characteristics, intervention or control characteristics or outcomes as needed

Table 2 Characteristics and results of included oral nutrition supplementation (ONS) interventions

From: Effectiveness of interventions to directly support food and drink intake in people with dementia: systematic review and meta-analysis

Study	Design	Setting, supplement type	Number completed	Dementia stage	Dementia type	Effect on nutrition or hydration status	Effect on intake of nutrients or fluid	Quality and Other outcomes	Duration
ONS (including energy, protein and often other nutrients) plus usual food vs. usual food (with or without placebo ONS)									
Abalan 1992 France [30]	RCT	Geriatric inpatients. Proprietary ONS ('Tonexis') vs usual food	I = 15 C = 14	NR	AD	N/A	→ E intake	↑ Cognitive function	15 weeks
Beck 2002 Denmark [32]	RCT	Nursing home (risk of malnourishment). Home-made ONS vs usual food	I = 8 C = 8	NR	NR	→ Weight	→ E intake	N/A	2 months
Carlsson 2009 Sweden [34]	CCT (BA)	Group-living facilities for people with dementia. Drinkable yogurt	13	NR	Mixed	↓ Weight	→ E intake → Fluid intake	→ Functional status	6 months
Carver 1995 UK [36]	RCT	Psychiatric hospital/elderly ward (under-weight). Proprietary ONS ('Fortisip') vs placebo	I = 20 C = 20	NR	NR	↑ Weight ↑* BMI →TSF ↑ MAMC	N/A	N/A	12 weeks
de Sousa 2012 Portugal [37]	RCT	Psychiatric hospital, geriatric unit, mild dementia patients (malnourished). ONS vs usual care & advice	I = 20 C = 15	Mild	AD	↑ Weight ↑ BMI	↓ Nutritional risk	→ Functional status → Cognitive function	3 weeks
Faxen-Irving 2002 Sweden [38]	CCT	Group-living for people with dementia. ONS & diet advice vs usual care	I = 21 C = 12	Mixed	Mixed	↑[a] Weight ↑[a] BMI ↑‡ TSF → AMC	N/A	→ ADL ↓ Cognitive function	5 months
FICSIT Fiatarone Singh 2000 USA [39,	RCT	Nursing home (long term rehabilitation centre). ONS vs placebo	I = 24 C = 26	NR	NR	↑ Weight ↑ BMI	→ E intake → Fluid intake	→Functional status	10 weeks

AMSTAR 2

1. Did the research questions and inclusion criteria for the review include the components of PICO?

For Yes:

- ☐ Population
- ☐ Intervention
- ☐ Comparator group
- ☐ Outcome

Optional (recommended)

- ☐ Timeframe for follow up

- ☐ Yes
- ☐ No

2. Did the report of the review contain an explicit statement that the review methods were established prior to the conduct of the review and did the report justify any significant deviations from the protocol?

For Partial Yes:
The authors state that they had a written protocol or guide that included ALL the following:

- ☐ review question(s)
- ☐ a search strategy
- ☐ inclusion/exclusion criteria
- ☐ a risk of bias assessment

For Yes:
As for partial yes, plus the protocol should be registered and should also have specified:

- ☐ a meta-analysis/synthesis plan, if appropriate, and
- ☐ a plan for investigating causes of heterogeneity
- ☐ a plan for investigating causes of heterogeneity

- ☐ Yes
- ☐ Partial Yes
- ☐ No

3. Did the review authors explain their selection of the study designs for inclusion in the review?

For Yes, the review should satisfy ONE of the following:

- ☐ Explanation for including only RCTs
- ☐ OR Explanation for including only NRSI
- ☐ OR Explanation for including both RCTs and NRSI

- ☐ Yes
- ☐ No

4. Did the review authors use a comprehensive literature search strategy?

For Partial Yes (all the following):

- ☐ searched at least 2 databases (relevant to research question)
- ☐ provided key word and/or search strategy
- ☐ justified publication restrictions (e.g. language)

For Yes, should also have (all the following):

- ☐ searched the reference lists / bibliographies of included studies
- ☐ searched trial/study registries
- ☐ included/consulted content experts in the field
- ☐ where relevant, searched for grey literature
- ☐ conducted search within 24 months of completion of the review

- ☐ Yes
- ☐ Partial Yes
- ☐ No

https://amstar.ca/Amstar_Checklist.php

5. Did the review authors perform study selection in duplicate?

For Yes, either ONE of the following:

- ☐ at least two reviewers independently agreed on selection of eligible studies and achieved consensus on which studies to include
- ☐ OR two reviewers selected a sample of eligible studies and achieved good agreement (at least 80 percent), with the remainder selected by one reviewer.

☐ Yes
☐ No

6. Did the review authors perform data extraction in duplicate?

For Yes, either ONE of the following:

- ☐ at least two reviewers achieved consensus on which data to extract from included studies
- ☐ OR two reviewers extracted data from a sample of eligible studies and achieved good agreement (at least 80 percent), with the remainder extracted by one reviewer.

☐ Yes
☐ No

7. Did the review authors provide a list of excluded studies and justify the exclusions?

For Partial Yes:

- ☐ provided a list of all potentially relevant studies that were read in full-text form but excluded from the review

For Yes, must also have:

- ☐ Justified the exclusion from the review of each potentially relevant study

☐ Yes
☐ Partial Yes
☐ No

8. Did the review authors describe the included studies in adequate detail?

For Partial Yes (ALL the following):

- ☐ described populations
- ☐ described interventions
- ☐ described comparators
- ☐ described outcomes
- ☐ described research designs

For Yes, should also have ALL the following:

- ☐ described population in detail
- ☐ described intervention in detail (including doses where relevant)
- ☐ described comparator in detail (including doses where relevant)
- ☐ described study's setting
- ☐ timeframe for follow-up

☐ Yes
☐ Partial Yes
☐ No

9. Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) in individual studies that were included in the review?

RCTs

For Partial Yes, must have assessed RoB from

- ☐ unconcealed allocation, and
- ☐ lack of blinding of patients and assessors when assessing outcomes (unnecessary for objective outcomes such as all-cause mortality)

For Yes, must also have assessed RoB from:

- ☐ allocation sequence that was not truly random, and
- ☐ selection of the reported result from among multiple measurements or analyses of a specified outcome

☐ Yes
☐ Partial Yes
☐ No
☐ Includes only NRSI

NRSI

For Partial Yes, must have assessed RoB:

- ☐ from confounding, and

For Yes, must also have assessed RoB:

- ☐ methods used to ascertain exposures and outcomes, and

☐ Yes
☐ Partial Yes

Contemplar

Thanks