

Citation

Moritz Schoenfeld, Stefanie Pfisterer-Heise, Corinna Bergelt. Self-reported health literacy and treatment adherence in older adults: a systematic review. PROSPERO 2019 CRD42019141028 Available from: https://www.crd.york.ac.uk/prospERO/display_record.php?ID=CRD42019141028

Review question

The overall objective of this study is to systematically review all published evidence on the levels and associations of self-reported health literacy and treatment adherence in older adults (over 60 years old).

It specifically aims to:

1. Examine the levels of self-reported health literacy and treatment adherence in (if available, different subgroups of) older adults
2. Evaluate the associations of self-reported health literacy and treatment adherence in older adults
3. Identify how self-reported health literacy and treatment adherence in older adults are measured
4. Investigate moderator and mediator effects of other psychosocial and sociodemographic factors (may include: Quality of life, socioeconomic status, illness perception, physical activity, age, sex)

Searches

A research librarian was consulted for advice on databases prior to the literature search.

The following five electronic databases will be searched:

PubMed, CINAHL, Cochrane Library, Epistemonikos, LIVIVO.

All databases will be searched (adapted searches) from July, 15, 2019 to July 30, 2019. Search was updated in October 2020. Searches will be limited to human subjects.

All eligible literature published until July 2019 will be included (Updated search: October 2020, included as well). Articles must be written in English or German.

In addition, articles will be searched by hand for cross-references. References will be exported to Endnote and duplicates deleted.

Search terms:

"health literacy", "illiteracy", "treatment adherence and compliance", "patient compliance", "compliance", "patient adherence", "adherence", "non-adherence", "nonadherence", "medication adherence", "discontinuation", "non-compliance", "noncompliance", "termination", "refill", "aged", "old", "older", "elderly", geriatric, "oldest", "elders".

Keywords: "health literacy", "adherence", "patient adherence", "patient compliance", "compliance", "aged", "old", "older", "elderly".

Types of study to be included

Primary research (quantitative only, baseline data) will be included. Included study types will be: Randomized controlled trials, prospective and retrospective cohort studies, and cross-sectional studies. Articles must be written in English or German.

Only original, peer-reviewed studies will be included. No systematic reviews, commentaries, conference abstracts, books, meta-analyses or grey literature will be included.

Condition or domain being studied

Levels and associations of self-reported health literacy (subjective measures) and treatment adherence in older (60+ years) adults will be assessed as primary outcomes.

Other psychosocial and sociodemographic factors will be investigated for possible moderator or mediator effects. Currently, there are no reviews that specifically focus on the associations of self-reported (subjective) outcome measures of health literacy and treatment adherence in older adults.

Participants/population

Studies that examined older adults aged 60 years and older will be included. Only studies with at least 2/3 of older adults in samples will be included.

Intervention(s), exposure(s)

Included studies must contain at least one (validated) measure of self-reported health literacy and treatment adherence and must provide at least one measure (e.g. mean) to calculate associations (i.e. correlation, effect size) between health literacy and treatment adherence.

Only studies that assessed health literacy with self-report (subjective) measures will be included. Studies that assessed health literacy with performance-based (objective) tests/ measures will not be included.

Comparator(s)/control

Different baseline levels and associations of health literacy and treatment adherence will be analyzed.

Main outcome(s)

Health literacy (subjective measure only)

Treatment adherence (including medication adherence). Treatment adherence may include pill counts, self-reports, questionnaires, screeners, and refill records.

Measures of effect

Baseline.

Additional outcome(s)

None.

Measures of effect

Not applicable.

Data extraction (selection and coding)

All search results will be exported to Endnote X8 reference management software and screened for duplicates.

Titles and abstract will be screened by two reviewers independently using a standardized checklist that will be developed for this purpose. Both reviewers will then assess full-text articles for eligibility based on clearly stated criteria. Cases of missing consensus will be discussed and, if necessary, resolved by a third reviewer. Inclusion and exclusion of all studies will be documented and presented according to PRISMA guidelines.

A data extraction sheet for data extraction from eligible studies will be developed and pilot tested, and data will be documented in Microsoft Excel.

Data extraction will include the following criteria: Title, authors, year published, journal title, assessment of health literacy and treatment adherence, psychosocial and sociodemographic outcomes with moderator and mediator effects, statistical measures to calculate associations between health literacy and treatment adherence, population and setting details, sample size, age groups, statistical significance if available.

Risk of bias (quality) assessment

Quality assessment of included full-text studies will be conducted by both reviewers using the NIH Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies (<https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools>).

The NIH was deemed appropriate, since only baseline data (levels and associations of health literacy and treatment adherence) will be analyzed.

Strategy for data synthesis

Data synthesis will be conducted in accordance to PRISMA guidelines (Liberati et al., 2009).

Since only studies with subjective measures of health literacy will be included, high heterogeneity (e.g. different measures of health literacy and treatment adherence) is expected. Accordingly, a narrative synthesis will be conducted to summarize the studies thematically.

Analysis of subgroups or subsets

If available, subgroup analyses of the levels and associations of health literacy and treatment adherence in different age groups (e.g. 60-64, 65-69, 70-74, 75-79, over 80) will be conducted.

Contact details for further information

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Review team members and their organisational affiliations

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Type and method of review

Narrative synthesis, Systematic review

Anticipated or actual start date

01 May 2019

Anticipated completion date

30 September 2020

Funding sources/sponsors

None.

Conflicts of interest

Language

English

Country

Germany

Stage of review

Review Completed not published

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

Health Literacy; Humans; Medication Adherence; Self Report

Date of registration in PROSPERO

24 October 2019

Date of first submission

12 July 2019

Stage of review at time of this submission

Stage	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	Yes
Data extraction	Yes	Yes
Risk of bias (quality) assessment	Yes	Yes
Data analysis	Yes	Yes

Revision note

Search was updated in October 2020 and slightly adapted to possibly include newer and relevant literature. Age inclusion criteria were slightly adapted to include studies with (at least 2/3 of) participants 60 years and older, since we noticed some dissimilarities in definitions of "old age" in the studies found in our preliminary search, and decided to also include those studies as they appeared relevant to our research question. The review is now being prepared for dissemination and publication.

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

24 October 2019
13 October 2020
10 March 2021