

## Non-adherence to antihypertensive medication in asian countries

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## Non-adherence to antihypertensive medication in Asian countries: a systematic review and meta-analysis

*Sajid Mahmood, Kifayat Ullah Shah, Zahraa Jalal, Tahir Mehmood Khan, Una Martin, Mamoona Dar*

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### Review question

What is an average value for non-adherence to antihypertensive therapies across the entirety of Asia?

What is the rate of non-adherence according to gender in such populations?

### Searches

The following electronic bibliographic databases: MEDLINE, EMBASE, PubMed, Scopus, Google Scholar, Cochrane Library (Cochrane database for systematic reviews), CINAHL (The Cumulative Index to Nursing and Allied Health Literature).

Studies published in English language on hypertensive patients between 2000 and 2018 will be included in our review.

The Different search terms will be used like Medication Compliance OR Medication adherence OR Medication non compliance OR Medication non adherence AND Morisky medication adherence scale OR MMAS AND Antihypertensive therapy AND using patient self reported questionnaire AND name of each country in Asia to limit our search.

### Types of study to be included

All studies types will be included except the ones that fulfilled the exclusion criteria.

### Condition or domain being studied

Non-adherence to anti-hypertensive therapies

### Participants/population

Inclusion: All original cross sectional studies published in English language on hypertensive patients between 2000 and 2018 will be included in our review.

Exclusion: We will exclude all studies that reported inconsistent data or incomplete data with respect to our review. Studies published in language other than English will also not included. Studies on Asian population residing outside Asia were also not in our review. Studies on Children and adolescents (under 18 years of age) and pregnant women, if any will also be excluded..

### Intervention(s), exposure(s)

Measurement of non-adherence to prescribed anti-hypertensive therapies by using different questionnaires/tools e.g. Morisky medication adherence scale etc.

### Comparator(s)/control

Not Applicable

### Context

Patients with hypertension using anti-hypertensives as major treatment for the hypertension.

### Main outcome(s)

Degree/extent of Non-adherence to prescribed therapy (percentage).

### Additional outcome(s)

None

### Data extraction (selection and coding)

The searching will be done in two steps. first, studies will be identified by initial screening of titles and abstract. then full text screening will be done for the selected articles. the screening process will be carried out independently by two reviewers any conflict regarding the selected articles will be resolved by consulting the third reviewer. A standardized pre-pilot data extract form will be used for data extraction.

### Risk of bias (quality) assessment

Since different types of studies will be included, the assessment will be carried out using the suitable checklist for each study design. For this purpose National Institute of Health (NIH) quality assessment tool will be used. The process will be done by two reviewers independently.

### Strategy for data synthesis

Narrative synthesis of the quantitative data along with thematic data synthesis of the qualitative data will be done. The synthesis process will be done in three stages. the quantitative and the qualitative synthesis will be carried out in parallel and then third synthesis where combining the results of the two previous synthesis will take place.

### Analysis of subgroups or subsets

If necessary data is available, subgroup analysis will be performed for the degree of non-adherence in different regions of Asia (East Asia, South Asia and Middle East) Gender wise magnitude of non-adherence to prescribed anti-hypertensive therapies will be also analysed.

### Contact details for further information

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### Organisational affiliation of the review

Quaid-i-Azam University Islamabad Pakistan

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### Anticipated or actual start date

10 November 2018

### Anticipated completion date

31 December 2018

### Funding sources/sponsors

None

### Conflicts of interest

### Language

English

**Country**

Pakistan

**Stage of review**

Review\_Ongoing

**Subject index terms status**

Subject indexing assigned by CRD

**Subject index terms**

Antihypertensive Agents; Asia; Humans; Hypertension; Medication Adherence

**Date of registration in PROSPERO**

13 December 2018

**Date of publication of this version**

13 December 2018

**Details of any existing review of the same topic by the same authors**

**Stage of review at time of this submission**

<b>Stage</b>	<b>Started</b>	<b>Completed</b>
Preliminary searches	Yes	No
Piloting of the study selection process	No	No
Formal screening of search results against eligibility criteria	Yes	No
Data extraction	No	No
Risk of bias (quality) assessment	Yes	No
Data analysis	No	No

**Versions**

13 December 2018

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