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Copper intrauterine contraception discontinuation in nulliparous and young women

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Citation

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Review question

Which copper intrauterine devices are associated with higher discontinuation rates in young and nulliparous women?

Searches

Databases [including the Cochrane Library, the Database of Abstracts and Reviews of Effects (DARE), MEDLINE (Ovid), Excerpta Medica Database (EMBASE), Turning Research into Practice (TRIP) database and National Electronic Library of Health] and relevant websites [including Bandolier, Medicines and Healthcare products Regulatory Agency, Faculty of Sexual and Reproductive Healthcare, Royal College of Obstetricians and Gynaecologists, Department of Health, Medical Defence Unions, National Institute for Health and Care Excellence, Scottish Intercollegiate Guidelines, World Health Organisation and Google Scholar] will be searched using MeSH terms combined with key words for relevant articles published from 1966 to date. Reference lists of relevant articles will also be searched to identify more articles. The full texts of relevant articles will be screened, duplicates excluded and then data from selected articles included in the review.

Randomised controlled trials (RCTs) involving copper intrauterine devices (IUDs) available or comparable to those in the UK published in English will be included. Other studies that report on the main outcome (observational and qualitative studies) will be included and/or summarised if the number of RCTs eligible for inclusion are too few to answer the review question.

Key words

Copper intrauterine device related: copper intrauterine device, copper intrauterine contraceptive device, copper intrauterine contraception, copper coil, IUD

Nulliparous related: nulliparous, nulligravid, never pregnant, never delivered

Young women related: young women, adolescent, aged under, teenage

Types of study to be included

Inclusion criteria: Articles published in English on studies in women who are nulliparous and aged under 30 that involved copper intrauterine devices available, or of the same design and size to those available, in the UK.

Exclusion criteria: Articles not published in English, studies solely in parous women aged 30 or over, or that involved copper intrauterine devices not available, or not of the same design and size to those available, in the UK.

Condition or domain being studied

Copper intrauterine contraception in nulliparous and young women

Participants/population

Women who are nulliparous and aged under 30

Intervention(s), exposure(s)

Copper intrauterine devices available or comparable to those in the UK

Comparator(s)/control

Any IUD, other contraceptive or no contraception where applicable

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Context
Copper intrauterine devices (IUDs) are of various shapes, sizes, copper surface area and copper distribution on the frame of the device. There are many types of IUDs available in the UK but none shown to be associated with better outcomes in nulliparous and young women. The identification and use of those IUDs associated with less discontinuation could improve outcomes including satisfaction and continuation rates of intrauterine contraception in nulliparous and younger women.

Main outcome(s)
Copper intrauterine contraception discontinuation rates in nulliparous and young women based on type of IUD

Timing and effect measures

Additional outcome(s)
Reasons for IUD discontinuation

Timing and effect measures

Data extraction (selection and coding)
The abstracts of published articles obtained from the literature and websites searches will be reviewed by two authors to assess eligibility for inclusion in the systematic review based on the inclusion/exclusion criteria. All retrieved full texts of published articles will be reviewed to agree which studies to include in the systematic review, with disagreements resolved by the third author. All retrieved articles to be included in the systematic review will undergo a quality assessment using a risk of bias tool applicable to the type of study.

Main data to be extracted:

type of copper intrauterine device (IUD)

age of women

gravidity/parity of women

place/time of IUD insertion

IUD discontinuation rate(s)

reason(s) for IUD discontinuation

Risk of bias (quality) assessment
All retrieved articles to be included in the systematic review will undergo a quality assessment. One author will complete the inclusion criteria checklist while the second author will review the checklist, with disagreements resolved by the third author/consensus. Retrieved articles with a high risk of bias will be excluded from the systematic review.

Strategy for data synthesis
Data from the included studies will be extracted using a standardised form by one author while the second author will check these. Disagreements will be resolved by a further review of the study with the third author and consensus. One author will enter the extracted data into Review Manager (RevMan®) Software while the second author will again check these for accuracy. It is planned that aggregate data will be used. However, individual data on the intervention and population of interest (IUDs in nulliparous and young women aged under 30) will be extracted where studies have reported on this subgroup their outcomes in conjunction with other population subgroups or study outcomes.
A quantitative synthesis is planned based on the expected homogeneity of the data to be obtained for the main outcome to be studied. This homogeneous data will be combined for meta-analysis. Heterogeneous

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data, some of which is expected to be obtained on the additional outcome, will be narratively synthesised.

Analysis of subgroups or subsets
IUDs of same size and design will be grouped and discontinuation rates presented based on IUD type.

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England

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Review_Ongoing

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Subject indexing assigned by CRD

Subject index terms
Contraception; Copper; Female; Humans; Intrauterine Devices; Parity; Pregnancy

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

Stage of review at time of this submission

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

Versions

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