Style & formatting checklist for Original Research papers in *BMJ Medicine*

Dear author, the turnaround time on your paper in production will be vastly improved if it follows the formatting and style requirements below. Please contact production.bmjmedicine@bmj.com if you have any questions on these items.

General:

- We do not have any limits to the paper length and numbers of tables and figures for Original Research. However, please note that you may be encouraged by the editors to move any relevant content to the supplementary materials, to improve the readability or turnaround time of your paper. Supplementary materials are easily accessed online with the article and published exactly as supplied by the authors (ie, would not need to go through any rigorous in-house copyediting).
- Include only **one** corresponding author.

Abstract (see Appendix 1):

- No more **than 400 words**
- **Structure** according to guidelines in Appendix 1
- Include a **registration number** for randomised controlled trials
- Include **absolute numbers and absolute risks** for the main results when possible (see https://www.healthnewsreview.org/toolkit/tips-for-understanding-studies/absolute-vs-relative-risk/). The main text should also contain these data.

Main body of manuscript:

- Include a section headed **Patient and public involvement** at the end of the methods. The information can be brief and tailored according to the study design (see The BMJ's requirements at "Mandatory patient and public involvement reporting" under "Research" in https://www.bmj.com/about-bmj/resources-authors/article-types). Please also add a statement on dissemination to participants and related patient and public communities: State how the results of the study were (or will be) sent to research participants and whether they are also being sent to relevant patient and public communities; include a lay summary (eg for funders), in a supplementary file when available; and if you have not disseminated information and have no plans to do so, state why.
- Provide **actual numbers** for percentages (numerators and denominators) in the text or in tables.
- Present **confidence intervals** as "xx to xx" through the text and tables (not "xx, xx" or "xx-xx").
- Follow the American Medical Association's recommendation for **P values**: express P values greater than 0.01 to a maximum of 2 decimal places and those less than 0.01 to a maximum of 3 decimal place (eg, P=0.4391 as P=0.44; and P=0.0083 as P=0.008). This refers to both significant and non-significant P values. No need to specify P values lower than 0.001 (eg, P=0.0009 or P<0.0001 would be expressed as P<0.001).
- Include a **summary box** following the guidelines in Appendix 2.

Tables and figures:

- Provide rows of data in separate table rows.
- Provide numbers and corresponding percentages together **in one table column or row**; this also applies to point estimates and corresponding confidence intervals.
- Ensure that each table **fits on up to two A4 landscape pages** when formatted as Times New Roman font at text size of 10 points. Larger tables will affect readability and processing times of the paper.
- Ensure that the table **column headings apply to the entire column** and do not change part way down the table.

- Ensure that appropriate **permissions** have been given to reproduce figures from another publication.
- **IMPORTANT FOR FOREST PLOT FIGURES:** Provide typed out data for any forest plots in a table format in a Word document (see Appendix 3), to avoid the introduction of errors when figures are redrawn. These data are **not** the underlying data that make up the plots themselves, but are the **actual numbers that appear next to the forest plots in the figure**. Do not provide typed out data for forest plots in web only material. Present confidence intervals in the format "xx to xx" (not "xx, xx" or "xx-xx").

Author endmatter statements:

- **Contributors**: State the role of each author in the work and provide the names of those to act as guarantors. Present the statement as full sentences in one paragraph. Please also confirm and add the following statements:
    - "The corresponding author attests that all listed authors meet authorship criteria and that no others meeting the criteria have been omitted." and
    - "Transparency: The lead author (the manuscript's guarantor) affirms that the manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained."
- **Funding**: Provide details of funding (or a statement that there was none) and include a statement about the independence of researchers from funders (eg, "The funders had no role in considering the study design or in the collection, analysis, interpretation of data, writing of the report, or decision to submit the article for publication."). Provide grant numbers whenever possible.
- The **competing interests** statement should use the following format:

  "Competing interests: All authors have completed the ICMJE uniform disclosure form at www.icmje.org/disclosure-of-interest/ and declare: no support from any organisation for the submitted work [or describe if any (eg, "support from [study funder name] for the submitted work")]; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years [or describe if any]; no other relationships or activities that could appear to have influenced the submitted work [or describe if any]."
- **Patient consent**: Provide signed patient consent form(s) if the article gives enough personal information about any patient(s). This can sometimes occur in research papers - for example, if a table gives personal and clinical information about a small subgroup in a trial or observational study, or in quotes/tables in a qualitative studies (see www.bmj.com/about-bmj/resources-authors/forms-policies-and-checklists/patient-confidentiality).
- **Ethical approval**: Provide details of ethical approval (ID of ethics committee approval and name of the ethics committee/IRB), or a statement that it was not required. If copyright protected materials, instruments, or tools have been used, include the sentence: "We attest that we have obtained appropriate permissions and paid any required fees for use of copyright protected materials."
- **Data availability**: Provide details of how to obtain additional data used in the study (eg, "Technical appendix, statistical code, and dataset available from the corresponding author at <email address or url>" or "No additional data available").
- **Provenance and peer review**: For transparency purposes and consistency with our other article types, the following statement must be included (or will be added by the editorial team otherwise) - "Provenance and peer review: Not commissioned; externally peer reviewed."

Appendix 1: **Abstract guidance**

Ensure that the structured abstract is as complete, accurate, and clear as possible—but not unnecessarily long—and has been approved by all authors. Original research articles might be screened by reading only the abstract. For randomised controlled trials provide all the information required for a CONSORT style abstract. Note the general rules for abstracts:

- 250-300 words long: you might need up to 400 words, however, for a CONSORT or PRISMA style abstract. Medline can now handle up to 10,000 characters.
- use active voice but avoid personal pronouns
- do not spell out numbers over 10 at the start of sentences
- Ensure that P values are always accompanied by supporting data and that denominators are given for percentages
- do not include references
- The first few items (objective, design, setting) can be note-like and need not form full sentences. The results and conclusions sections should be written proper narrative prose with complete sentences . Do not mix notes and full sentences in one section.
- Include absolute numbers in the main results

If the standard headings do not suit the type of study, substitute something sensible such as "population" as a heading instead of "participants" in an economics article. Do not delete headings.

Provide the following headings and information for standard original research articles (for RCTs add the trial registration details - there is no need to provide the additional subheadings used in the CONSORT statement on abstracts, as long as the required information is included, and the same applies to the PRISMA statement):

- **Objective(s)** - a clear statement of the main aim(s) of the study and the major hypothesis tested or research question posed. This section should not include background information, and should be restricted to one sentence beginning with “To…”
- **design** - includes factors such as prospective, randomisation, blinding, placebo control, case-control, cross over, criterion standards for diagnostic tests etc. Should be in notation form and mirror the study descriptor in the article title
- **setting** - include the level of care (eg primary, secondary) and number of participating centres. Be general rather than give the name of a specific centre, but give the geographical location if this is important
- **participants** (instead of patients or subjects) – include numbers of participants entering and completing the study, and sex and ethnic group if appropriate. Give clear definitions of how they were selected, and entry and exclusion criteria
- **interventions** - what, how, when, and for how long. This heading can be deleted if there were no interventions but should normally be included for randomised controlled trials, cross over trials, and before and after studies.
- **main outcome measures** – include those planned in the protocol, and those finally measured (if different, explain why)
- **results** - main results with (for quantitative studies) 95% confidence intervals and, when appropriate, the exact level of statistical significance and the number need to treat/harm. Whenever possible, state absolute rather than relative risks. **Present confidence intervals** in the format “xx to xx” (not “xx, xx” or “xx-xx”).
- **conclusions** - primary conclusions and their implications, suggesting areas for further research if appropriate. Do not go beyond the data in the article. Conclusions are important because this is often the only section looked at by readers.
- **trial registration -** registry name and number (for clinical trials and, if available, for observational studies and systematic reviews)

Include the following headings in abstracts for meta-analyses and systematic reviews along with the items recommended in the PRISMA statement:

- **objective** - what the review set out to determine
- **design** - type of meta-analysis, systematic review and study appraisal and synthesis methods
- **data sources** - the provenance of included studies

- **eligibility criteria for selecting studies** - inclusion and exclusion criteria (specifying participants and interventions, as appropriate)
- **results** - main findings with 95% confidence intervals. **Present confidence intervals** in the format "xx to xx" (not "xx, xx" or "xx-xx").
- **conclusions** - primary conclusions and their implications
- **systematic review registration** - registry name and number (if registered)

Abstracts for qualitative research articles should follow the standard style but may need fewer headings:

- **objective**
- **design**
- **participants**
- **setting**
- **results**
- **conclusions**

Summary statistics to clarify your message

To ensure that an article is easy to read and also scientifically accurate state absolute rather than relative risks whenever possible. In the results section of both the structured abstract and the main text include the following terms, as appropriate:

For a clinical trial:

- Absolute event rates among experimental and control groups
- RRR (relative risk reduction)
- NNT or NNH (number needed to treat or harm) and the corresponding 95% confidence interval (or, if the trial is of a public health intervention, number helped per 1000 or 100,000) **Present confidence intervals** in the format "xx to xx" (not "xx, xx" or "xx-xx").

For a cohort study:

- Absolute event rates over time (eg, 10 years) among exposed and non-exposed groups
- RRR (relative risk reduction)

For a case-control study:

- OR (odds ratio) for strength of association between exposure and outcome

For a study of a diagnostic test:

- Sensitivity and specificity
- PPV and NPV (positive and negative predictive values)

The summary box (see Appendix 2) should also reflect accurately the above information. Under the "what this study adds" section, give the one most useful summary statistic (eg, NNT).

Avoid the term "negative" to describe studies that have not found statistically significant differences, perhaps because they were too small. There will always be some uncertainty, and we hope you will be as explicit as possible in reporting what you have found in your study. Using wording such as "our results are compatible with a decrease of this much or an increase of this much" or "this study found no effect" is more accurate and helpful to readers than "there was no effect/no difference". Use such wording throughout the article, including the structured abstract, and the box stating what the study adds.

Appendix 2: **Summary box**

Provide a box offering a thumbnail sketch of what the study adds to the literature, for readers who would like an overview of the article. Divide the box into two short sections, each with 1-3 brief sentences and with no end points. This box should not include references. Aim for each sentence to be a maximum of 30 words.

Section 1: "What is already known on this topic"

In two or three single sentence bullet points, summarise the state of scientific knowledge on this subject before the study was conducted and why this study needed to be done. Be clear and specific, not vague.

For example: "Numerous observational studies have suggested that tea drinking might be effective in treating depression" or "Evidence from trials of tea treatment for depression have given conflicting results"

Section 2: "What this study adds"

In one or two single sentence bullet points, give a simple answer to the question "What do we now know as a result of this study that we did not know before?" Be brief, succinct, specific, and accurate.

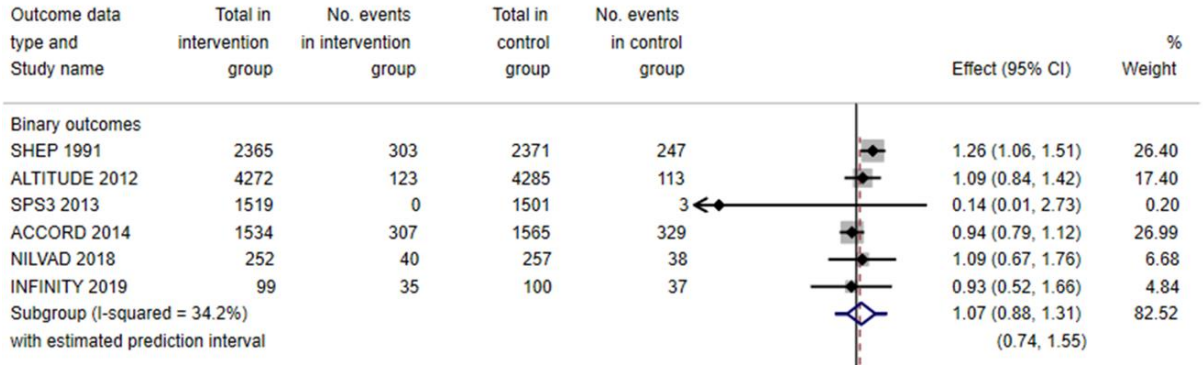
For example: "Our study suggests that tea drinking has no overall benefit in depression"

Ensure that concluding statements are supported by statistically significant findings.

Section 3: "How this study might affect research, practice, or policy"

You might use this section to summarise any implications for practice, research, policy, or public health. For example, your study might have asked and answered a new question (the relevance of which has only recently become clear); contradicted a belief, dogma, or previous evidence; provided a new perspective on something that is already known in general; or provided evidence of higher methodological quality for a message that is already known.

Appendix 3: Example of forest plot figure and typed data required for redrawing



Typed out data

Outcome data type and study name	Intervention group		Control group		Effect size (95% CI)	Weight (%)
	Total population	Number of events	Total population	Number of events		
Binary outcomes						
ACCORD 2010	1534	307	1565	329	0.94 (0.79 to 1.12)	26.99
ALTITUDE 2012	4272	123	4285	113	1.09 (0.84 to 1.42)	17.40
INFINITY 2019	99	35	100	37	0.93 (0.52 to 1.66)	4.84
NILVAD 2018	252	40	257	38	1.09 (0.67 to 1.76)	6.68
SHEP 1991	2365	303	2371	247	1.26 (1.06 to 1.51)	26.40
SPS3 2013	1519	0	1501	3	0.14 (0.01 to 2.73)	0.20
Subgroup (I^2 = 34.2%)					1.07 (0.88 to 1.31)	82.52
With estimated prediction interval					0.74 to 1.55	