Supplemental Methods & Results – ISMPP EU 2023

Supplement to: Lovibond A, et al. Practical guidance for social media posts on randomised clinical trial publications: A Delphi survey

Research goals

Our research goal was to determine which items should be included in social media posts about publications reporting interventional clinical trial data to retain the original article's transparency and integrity as much as possible in an abbreviated format.

Survey methodology

A modified Delphi consensus method[1] was used to select and reduce the number of possible checklist items; three Delphi rounds were used. A total of 22 participants who were part of a BOLDSCIENCE Publications Working Group based on their interest in publications were invited (by instant message) to participate in an electronic survey and rate the importance of suggested checklist items.

Invited survey participants included medical writers, client services, and creative team members of BOLDSCIENCE. After participants were invited to join, they were sent a copy of the survey, including instructions on completing it, along with a deadline for returning the completed forms. Participant responses were summarised and reported back to participants at the end of each round of the survey.

Items included in the Delphi survey were derived from the CONSORT checklist for abstracts[2] (given this was existing and validated guidance for summarising a manuscript), plus additional relevant topics for social media posts. Each item was listed with a concise definition of what was meant, for example, "Participants – Eligibility criteria for participants and the settings where the data were collected".

The definition of a consensus for items to include in the final checklist was a mean score of ≥5, or ≥75% agreement.

Round 1

Of the 22 participants invited to participate, 19 participants (86%) completed Round 1 of the survey. Respondents were from the Scientific (10, 53%), Client Services (7, 37%), Creative (1, 5%) and Management (1, 5%) Departments from within BOLDSICENCE. Respondents had a mean of 8.4 years of experience working in publications (range 1–25 years).

In Round 1 of the survey, participants were asked their views on the relative importance of the 24 items on the checklist. They were asked to score each item on a 6-point Likert scale (ranging from 1, not

important, to 6, very important, or not known). The mean score was then calculated for each item based on the participants' responses.

Participants also had the opportunity to comment on the checklist items or to suggest additional items. Content analysis was used to look through the comments made by participants in Round 1, characterise them under different headings and look for common themes to generate additional checklist items. Three themes came through quite strongly; the first was the recognition that it might not be possible to include a full title, and an abbreviated title would be of value; the second was a visual summary of the publication (image/GIF) to facilitate additional content and interest; the third was a question as to whether a clinical interpretation of results above that specified in the original publication should be included. These three items were added to Round 2 of the checklist.

Round 2

Round 2 of the survey was completed by 16/22 participants (73%). Round 2 included all the items from Round 1 re-grouped in order of importance, using the mean scores (for each checklist item) from Round 1. Checklist items with a mean score of ≥5 were grouped as 'Included'. Items with a mean score of 4 were grouped as 'Possible' checklist items. Participants were told that these items had been ranked as of moderate importance and might not be included in the final checklist. Items with a mean score of 1–3 were grouped as 'Rejected' checklist list items. Participants were told that these items had been ranked as having low importance and would not be included in the final checklist unless they received much higher scores in Round 2.

Participants were asked again to score the relative importance of each checklist item using the same scoring system. The mean score was then calculated for each checklist item based on the responses in Round 2.

After Round 2, a consensus was reached on 24/27 items (89%) – 11 items were grouped as 'Included' and 13 items were grouped as 'Rejected'. Three items were still inconclusive: the number of participants in each arm, trial status, and source of funding.

Round 3

Round 3 of the survey was completed by 18/22 participants (82%). The goal of Round 3 was to reach a consensus on the three items from Round 2 ranked as of moderate importance (i.e., those with a mean score of 4). Participants were asked specifically for their views on whether these items should be included, excluded, or optional in the final checklist. These items included the number of participants in each arm, trial status, and source of trial funding.

After Round 3, a consensus was reached on all 27 checklist items (12 items were grouped as 'Included' and 15 items were grouped as 'Rejected'). For one item (number of participants in each arm), the score didn't reach the ≥75% threshold; however, participants felt that it should be included as part of the existing checklist item "Number of participants randomised".

Item	Mean score R1	Mean score R2	% "yes"	Decision
Link to full publication	5.7	6.0	–	Included
Primary outcome	5.7	6.0	–	Included
Disease state and setting of participants	5.5	6.0	–	Included
Treatment arms/interventions	5.2	6.0	–	Included
Conclusions aligned with the publication	4.9	6.0	–	Included
Trial design (randomised, etc.)	4.9	6.0	–	Included
Safety summary	4.9	6.0	–	Included
Number of participants randomised	4.6	6.0	–	Included
A visual summary of the publication (image/GIF)	–	6.0	–	Included
Primary objective	5.3	5.3	–	Included
Trial registration number (e.g., NCT)	4.7	4.9	–	Included
Number of participants in each arm	4.1	4.3	67%	Rejected
Trial status (ongoing, recruiting, etc.)	4.1	4.0	33%	Rejected
Source of funding (e.g., trial sponsored by X)	3.6	3.5	100%	Included
Abbreviated title (vs full title)	–	2.4	–	Rejected
Abbreviated author list	3.7	2.0	–	Rejected
Secondary outcomes	3.8	1.8	–	Rejected
Secondary/exploratory objectives	3.5	1.0	–	Rejected
Objectives reported within the publication	3.4	1.0	–	Rejected
The full title of the original work	3.1	1.0	–	Rejected
Contact details for the corresponding author	2.0	1.0	–	Rejected
Full author list	1.8	1.0	–	Rejected
Acknowledgements	1.9	1.0	–	Rejected
Detailed safety information	2.3	1.0	–	Rejected
Exploratory outcomes/results	2.6	1.0	–	Rejected
Clinical interpretation of the results (above that specified in the original publication)	–	1.0	–	Rejected
Medical writing support	1.8	1.0	–	Rejected

References

1. Hasson F, Keeney S, McKenna H. Research guidelines for the Delphi survey method. *J Adv Nurs* 2000;32:1008–1015.

2. Hopewell S, et al. CONSORT for reporting randomised trials in journal and conference abstracts. Lancet 2008;371:281–283.