The Benefits of Plain Language Summaries in Public Health Publishing

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Introduction

In this article, we introduce the concept of Plain Language Summaries (PLS), offer a brief discussion on their use and highlight some key issues in their development. The authors of this feature article are all Editorial Board members of this journal (*Perspectives in Public Health*), and whole-heartedly support the introduction of PLS in this and other public health journals.

Briefly, in academic publishing, a PLS precedes the abstract in a published journal article reporting either original research or some form of review aiming to succinctly summarise the article so that anyone can understand the aims, methods and results of the research. The precise origins of PLS are difficult to pin down, however over the last ten years, the use of them has greatly increased. This has been assisted by the European Union Clinical Trial Regulations requiring the submission of lay summaries for all new clinical trials [1]. More recently, the Cochrane Community produced a template for PLS in Cochrane Reviews [2]. Take-up of the introduction of PLS in public health journals is slow but is increasing. The Health Research Authority [3] suggest that PLS should be accurate, clear and concise and should not assume any prior knowledge of the subject. Authors should use short sentences (up to 20 words) and construct short paragraphs (up to three sentences). They advise involving patients or their representatives, or members of the public in the development and review of summaries.

There are many published articles that discuss the merits and difficulties of the widespread use of PLS. For example, Dormer et al [4] outline the development of a 'How-To' Guide for multi-stakeholder co-creation of PLS for peer-reviewed publications, based on the principle that co-creation of PLS by the researchers and the intended audience is key to ensuring a successful outcome. Anchored in a set of 15 ethical principles (e.g. the need for balanced presentation, and the importance of using inclusive and respectful language), a

comprehensive and useful seven-step process for PLS development is described.

Structure, guidelines and consistency in reporting

Several research groups have explored the appropriate structure and content for effective PLS. Lobban et al[5] sought views of varied stakeholders on the development and use of PLS to explain sponsored medical research. Twenty-nine stakeholders contributed to surveys and group discussions using ten questions which included what PLS should contain, who they should target and how to assess quality. The study established broad agreement on what should be included in future guidance to support researchers to writing PLS. Maurer et al's [6] US study aimed to improve plain English summaries by co-developing a standard template with stakeholders including citizens and health professionals. Their template used a simple, short, question-and-answer format, which was tested over three years producing 272 summaries. Audience testing of the summaries demonstrated the importance of: 1) a consistent format – users liked the simple, short standard Q&A format; 2) careful prioritisation of content – ensuring it is relevant to consumers and 3) communicating impartiality and study limitations. The study concluded that for PLS to be effective there needs to be some consistency across publications. This evidence highlights inconsistences in terminology and in describing lay summaries and PLS.[7]

The use of artificial intelligence (AI) tools to automate the production of PLS has been the focus of recent research. While some studies suggest it holds substantial promise,[8,9] others indicate that major challenges remain[10,11]. Ovelman et al.,[12] reported that using an AI tool to assist in developing PLS for Cochrane trials also created several difficulties. Following the American Psychological Association's Inclusive Language guide[13], they describe training and assessing an AI tool using ten evidence reviews from 2021 to 2023 to prompt several variables, including plain language, reading level, active voice and inclusive language. They adjusted the versions created to increase the information within the summaries produced, e.g., to ensure the number of studies and/or patients were reported in summaries. They compared AI generated PLS to the ones published to assess accuracy. While the word limit was adhered to in all AI generated summaries, the need for human editing due to inconsistencies and errors in reporting e.g. the style across 50% of the AI generated summaries was inconsistent, impacting sentence construction. The authors therefore suggest using AI to generate PLS has the potential to assist

researchers; but the summaries require editing and tailoring for audiences to produce a final version. This feasibility study demonstrates that AI cannot replace the input and expertise of members of a target audience in developing a PLS. Digital technology may help build an initial summary document; however, the specific nuances of and for a target audience are absent, and consultation with people [with lived experience] is critical, using engaged methods.

Plain Language Summaries are important because they widen engagement with research articles by highlighting the key messages and their relevance to the potential reader. Many readers of *Perspectives in Public Health* do not work in academic settings and are challenged by colleagues and indeed politicians to provide clear and concise evidence for recommendations and decision-making. The inclusion of PLS supports the communication of public health messages for our communities and stakeholders, including through the use of social media.

Conclusion

In 2023, *Perspectives in Public Health* adopted guidelines for author creation PLS for all peer-review articles. As far as we are concerned, the language for PLS, should be accessible, jargon-free, non-technical and AI should not be used when constructing the text.

Writing a PLS requires a different set of skills from producing a scholarly article. Authors should use short concise sentences; use simplified terms and avoid jargon and acronyms and should not merely replace jargon with simplified terms. The PLS should have a different tone to the abstract and appeal to lay-readers and preferably be co-written with patients and/or public representatives. We ask for the following questions to be answered using no more than 300 words:

- Why is this work important?
- What question did you want to answer?
- How was the question answered?
- Who took part?
- What did you find?
- What will the findings mean to the public/patients?

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