

A readability assessment of plain language summaries and abstracts before and after Cochrane guidance

Madrid E, Briceño F, Meza N, Bracchiglione J, Metzendorf MI, Navarro-Lazárraga M, Escobar-Liquitay C, Casino G, Cervera A, Urrútia G, Franco JVA.

X: @eva_madrid_aris





Instituto Universitario Hospital Italiano de Buenos Aires

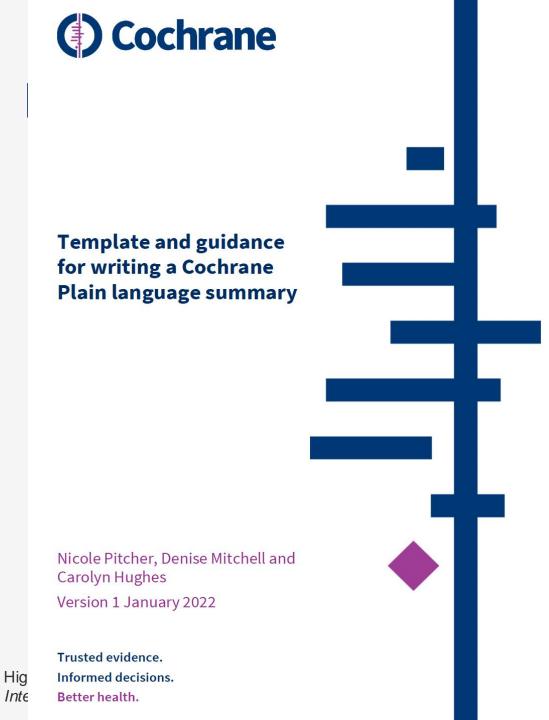




I have no actual or potential conflict of interest in relation to this presentation

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Objective

- To analyse the readability of PLSs and abstracts of CSRs of interventions before and after the implementation of the newest Cochrane guidance
- English
- Spanish

tors). Cochrane Handbook for Systematic Reviews of www.training.cochrane.org/handbook.



Methods

- Cross-sectional study: CSRs of intervention published in 2019 and 2023
- Excluded protocols, withdrawn, non-intervention reviews, overviews
- English: Simple Measure of Gobbledygook Index (SMOG)
- Spanish: Inflesx scale (syllables/word, words/phrase)
- We compared the readability index 2019 versus 2023
- Analysis of how current PLSs adjust to the 2022 Cochrane Guidance for PLS
- We analysed whether readability differs if the main author comes from a native English-speaking country.



RESULTS: English

Table 1: SMOG readability index for abstracts and PLS

	Before guidance (n=541)		After guidance (n=386)		
	SMOG index	Grade level (age range)	SMOG index	Grade level (age range)	
Abstract ¹	13.13 ±1.16	College level (18-20)	12.84 <u>+</u> 1.25	College level (18-20)	
PLS ²	11.35 <u>+</u> 1.47	11th grade (16-17)	10.80 <u>+</u> 1.27	11th grade (16-17)	
			 P-value =0.004 P-value < 0.0001 		

Table 2: SMOG index values for PLS per authors' country of affiliation

English native speaking countries	Non-English native speaking countries	p-value
11.14 <u>+</u> 1.37	11.40 <u>+</u> 1.44	0.6890

No abstract or PLS published after the release of Cochrane Guidance met Cochrane's recommendation of being readable for an 11-year-old.



Results: Spanish

INFLESZ readability index

	Before guidance (n=541)		After guidance (n=384)		
	INFLESZ	Interpretation	INFLESZ	Interpretation	
Abstracts	56.6 <u>+</u> 0.28	Normal	57.2 <u>+</u> 0.36	Normal	p=0.164
PLS	50.9 <u>+</u> 0.28	Moderately hard	54.0 <u>+</u> 0.29	Moderately hard	P<0.001

INFLESZ scale score	Interpretation
0-40	Very hard
40-55	Moderately hard
55-65	Normal
65-80	Moderately easy
80-100	Very easy



Barrio-Cantalejo IM et al.. Validación de la Escala INFLESZ para evaluar la legibilidad de los textos dirigidos a pacientes [Validation of the INFLESZ scale to evaluate readability of texts aimed at the patient]. An Sist Sanit Navar. 2008 May-Aug;31(2):135-52. Spanish. doi: 10.4321/s1137-66272008000300004. PMID: 18953362.

Conclusions

- Readability indices in English have improved for both abstracts and PLS
- This improvement does not downgrade the schooling level and still fails to comply with Cochrane's Guidance recommendation
- There are no significant differences between PLS readability when written by native English-speakers and non-native English-speakers
- Readability indices in Spanish have improved in PLSs
- This improvement does not downgrade the difficulty level.





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