



Aphasia-friendly health information: Text formatting facilitators and barriers

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Introduction

The benefits of providing people with written health information are well documented¹. Much of the written information received by people with aphasia, however, is inappropriately formatted to meet the needs of a person with language difficulties²⁻³.

“Oh re ridiculous...Well ah you think you're a ...university student before you can understand them...it's just beyond. Throw it away because I can't understand...too complicated!³”

We know:

- Text modifications can significantly assist people with aphasia to comprehend written information^{1,4}.
- People with aphasia post-stroke appear to have more specific design preferences compared to people without aphasia⁵.
- People with aphasia and speech pathologists have shown considerable differences regarding their perceptions of communicative accessibility⁶.
- There is a limited evidence base for “best practice” formatting guidelines for stroke patients in general.

Aim

- To explore the text formatting preferences of people with aphasia by asking participants to consider what makes written patient education materials easier and harder to read.

Method

Participants

40 adults with aphasia caused by stroke

Age	32 years – 84 years	Education	2 years – 20 years
Gender	24 males / 16 females	Western Aphasia Battery Aphasia Quotient	6.58 – 93.1
Time Post-Onset	2 months – 14;8 years	Reading Comprehension Battery for Aphasia -2	$\frac{13}{100}$ – $\frac{98}{100}$

Method of Data Collection and Analysis

Semi structured in-depth interviews: Quantitative Content Analysis

Verbal survey: Descriptive Statistics

Pearson Chi Square Tests

Mann Whitney U Tests

Research Questions and Results

What font size and type did people with aphasia prefer?

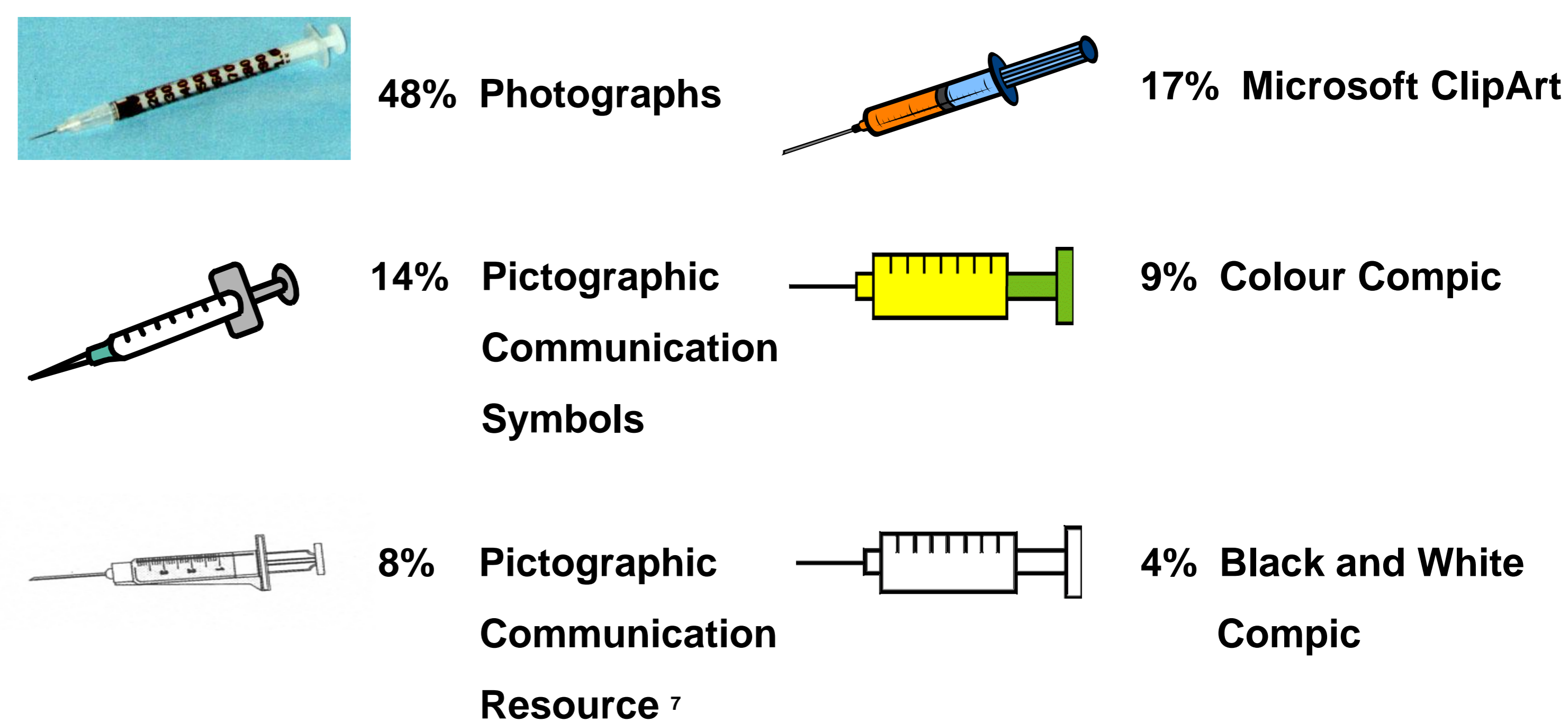
- Larger fonts i.e., 14 point
- San serif fonts e.g., Arial and Verdana

What line spacing did people with aphasia prefer?

Easiest to read		Hardest to read	
1.5 line spacing	41%	Single line spacing	69%
Double line spacing	21%	3.5 line spacing	28%

Research Questions and Results

What picture type did people with aphasia prefer?



What were the reactions to pictures?

Helpful	95%	Childish	40%
Appealing	85%	Embarrassing	35%
Considerate	83%	Offensive	13%

- 4 of the 5 participants who were offended by pictures were from the group of participants with greater reading difficulties

“It’s very obvious. It’s very good...but on my own...not on the bus. At least I would know. Not in public. Well I think...cookoo man ...people could just glance over and they could see...”

[statement made by participant when looking at written health information containing several pictures]

How did people with aphasia prefer numbers to be represented?

- No clear overall preference for either orthographic or numeric representations

Stroke affects over 40 000 Australians.	59%
Stroke affects over forty thousand Australians.	41%

- Preference for orthographic representations of fractions

One third will recover.	67%
$\frac{1}{3}$ will recover.	33%

- 88% of participants said no one else had asked them about how to make health information easier to read
- It is important to ask people with aphasia about what formatting helps them

Conclusions

- Current practice in health education is not meeting the needs of people with aphasia post stroke.
- This research provides evidence based formatting recommendations for the provision of written health information in more comprehensible and welcomed formats.

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