http://sure.sunderland.ac.uk/policies.html or alternatively contact sure@sunderland.ac.uk.

Health literacy: reducing inequalities in healthcare access through changing the reading age of healthcare material: a mixed-methods pilot study

Jo Dunnett, Lorna Dawson, Ryan Swiers, Anastasia Trebacz, Jack Holkham, Floor Christie-de Jong

Published Online November 28, 2024

Sunderland University, Sunderland, UK (J Dunnett PhD, J Holkham, A Trebacz PhD, F Christie-De Jong PhD)**; South Tyneside and Sunderland Foundation Trust, Sunderland, UK** (L Dawson MA, R Swiers MSc)

Correspondence to: Dr Jo Dunnett, School of Medicine, Sunderland University, Office 305, Murray Health Building, City Campus, Chester Road, Sunderland SR1 3SD, UK **Jo.dunnett@sunderland.ac.uk**

Abstract

Background The World Health Organization defines Health Literacy as the skills and resources necessary to access, understand, evaluate, and utilise health information. Individuals with low health literacy often struggle to understand medical information, leading to frequent healthcare utilisation, reduced preventive care, higher chronic disease, and premature mortality. Many adults in England have a reading age of 9–11 years, with 1 in 6 as low as 5–7 years. This study evaluates patient and staff perspectives on an intervention modifying healthcare materials' reading age in a hospital trust in North-East England.

Methods Guided by the Theoretical Framework of Acceptability, a pre-post mixed-methods design assessed modified appointment letters and leaflets for routine outpatient clinics, adjusted to a reading age of 9 years. Phase 1 and 2 qualitatively explored stakeholders' views on unmodified and modified healthcare materials respectively. Purposive sampling recruited 25 participants (n=12 healthcare providers; n=13 service users of low and middle-income with varying educational experiences) from three specialties within the trust (6 males, 19 females; aged 18–60). Semi-structured interviews were audio recorded and analysed using Thematic Analysis. We will collect pre-post routine attendance and cancellation data, calculating group differences and effect sizes using repeated measures t-tests and Cohen's d.

Findings Preliminary qualitative findings suggest participants felt the intervention was acceptable. Modified materials were preferred, reducing stigma by using simpler language. Therefore, participants felt empowered to manage their health and address concerns with their healthcare provider. Healthcare providers saw modifying information as vital.

Interpretation Preliminary findings indicate acceptability and perceived impact of modifying healthcare information's readability. Rising health inequalities require preventative measures. Changing the readability of healthcare materials could be a cost-effective way to improve health outcomes and reduce health inequalities. Study is limited by small sample size; however this pilot will underscore further investigation of the intervention's feasibility in larger cohorts.

Funding This work is funded by South Tyneside and Sunderland Foundation trust.

Contributors

FC and RS developed the concept of the study; JD, FCD-J, RS, LD, designed the study together and engaged in the funding acquisition; JD and AT collected data; JD conducted the analysis. JD wrote the abstract, all contributed to reviewing and editing.

Declaration of interests

This work is funded by South Tyneside and Sunderland Foundation trust. Payments to carry out the work were made to the institution. Payments cover the costs of the research assistant (employed by the University of Sunderland) and expenses relating to carrying out the work. STSFT employs two contributors RS & LD who were involved in the concept and design of the study. STSFT has had no role in the writing of the manuscript. The authors declared no conflicts of interests.