

Exploring Patient Experiences of Using



Long-term Prophylaxis for the Management of Hereditary Angioedema



Sarah Olaluyi, Dr Amy Burton PhD, Dr Sarah Dean PhD, Centre for Psychological Research Staffordshire University, Leek Road Stoke-on-Trent, United Kingdom, ST4 2DF

BACKGROUND

- Hereditary Angioedema (HAE) is a rare inherited disorder causing recurrent, painful swelling in various body parts (1). These episodes can disrupt daily life- affecting work, education, mental health, and quality of life (2,3,4).
- Effective disease management, including prophylactic treatment, is essential. However, patient experiences beyond clinical outcomes are underexplored
- Clinical trials (e.g., lanadelumab and C1-INH) report improved quality of life and general health (5, 6). Yet, how patients experience these treatments in day-to-day life is less understood.
- UK study: Found treatment barriers and psychological challenges (7). US study: Reported reduced anxiety and improved functioning with C1-INH (8). These findings show the importance of combining clinical data with patient perspectives.
- This qualitative study explores how patients experience long-term prophylaxis, focusing on perceived benefits, fears, practicality and challenges. Research question: How do patients experience using longterm prophylaxis for the management of hereditary angioedema?

FINDINGS

Three themes were developed relating to patient experiences of using LTP for HAE: treatment availability and accessibility, facilitators and barriers to adherence and the individualhealthcare system interface.

METHOD Design

 Qualitative design using online semi-structured interviews, analysed with reflective thematic analysis

Participants

Fourteen adults (7 male, 7 female) living with HAE and prescribed prophylaxis were recruited via purposive sampling through HAE UK. Most identified as White (93%), with one participant identifying as Asian.

Materials

 A semi-structured interview guide was used flexibly to explore participants' experiences with HAE and its treatment.

Procedure

- consent was obtained, and participants completed a demographic questionnaire on Qualtrics before an online interview via Microsoft Teams. They received a £20 gift voucher for their time and were debriefed.
- Ethical approval was granted Ethics Staffordshire University's Committee, and the study adhered to the BPS Code of (2021).



Treatment availability and accessibility: "I was stressing because I had no medication- what if I had a flare up?"

Despite advancements in treatment options, UK access remained inconsistent due to systemic and geographic factors, supply chain delays, prescribing criteria, self-administration ability, and varying support from HCPs and the NHS.

Facilitators and barriers to adherence: "It's difficult to find time and space..."

Participants shared varied and unique experiences around following their LTP treatment regime. The experiences highlight the complexity of adherence which is influenced by various factors including: individual characteristics, lifestyle, practicality and support networks, including the healthcare infrastructure, either facilitating or hindering consistent LTP use.

The individual healthcare system interface: "I know I could get the care if I needed it..."

This theme explores how individuals experience, navigate and are treated by the healthcare system while using LTP. Subtheme 1: Navigating Systems: 'there can be a lack of coordination between the consultant and the GP...' Participant accounts reflected generally patient-centred care, but highlighted systemic issues, particularly poor continuity, coordination, and communication between primary and secondary care, leading to prescription delays. Subtheme 2: Relational Care: 'it was always a discussion'. Many participants emphasised the value of continuity of care in managing HAE, enabling informed decisions, adaptive approaches, and more personalised care.

> Allergy Asthma Clin Immunol. 2021;17:12. https://doi.org/10.1186/s13223-021-00531-4 9. Braun V, Clarke V. Thematic analysis: A practical guide. London: Sage Publications; 2022.



- This study explored patient experiences with longterm prophylaxis (LTP) for managing hereditary angioedema (HAE).
- Despite advancements in treatment and increased drug options, systemic barriers continue to limit
- Both individual and structural factors affect consistent treatment use.
- Improving access is essential, as autonomy, accessibility, and control are key to effective HAE management.
- Participants valued strong relationships with specialists, which supported collaborative decisionmaking.
- Proactive, patient-centred approaches should be continually adopted to improve HAE care and outcomes.



REFERENCES: 1. Busse PJ, Christiansen SC. Hereditary angioedema. N Engl J Med. 2020;382(12):1136–48. https://doi.org/10.1056/NEJMra1808012

- 2. Bygum A, Aygören-Pürsün E, Beusterien K, Hautamaki E, Sisic Z, Wait S, et al. Burden of illness in hereditary angioedema: A conceptual model. Acta Derm Venereol. 2015;95(6):706-10. https://doi.org/10.2340/00015555-2076
- 3. Caballero T, Prior N. Burden of illness and quality-of-life measures in angioedema conditions. Immunol Allergy Clin North Am. 2017;37(3):597–616.
- 4. Fouche AS, Saunders EF, Craig T. Depression and anxiety in patients with hereditary angioedema. Ann Allergy Asthma Immunol. 2014;112(4):371–5.
- 5. Lumry W, Craig T, Anderson J, Riedl M, Li H, Tachdjian R, et al. Patient outcomes associated with subcutaneous C1INH prophylaxis for hereditary angioedema: A retrospective analysis. Allergy Asthma Clin Immunol. 2023;19(1):105. https://doi.org/10.1186/s13223-023-00844-z 6. Zanichelli A, Azin GM, Cristina F, Vacchini R, Caballero T. Safety, effectiveness, and impact on quality of life of self-administration with plasma-derive nanofiltered C1 inhibitor (Berinert®) in patients with hereditary angioedema: The SABHA study. Orphanet J Rare Dis. 2018;13:99
 - Burton AE, Lindsay-Wiles I, Herron D, Owen A, Elliott J, Metcalfe A, et al. Hereditary angioedema patient experiences of medication use and emergence. care. Int Emerg Nurs. 2023;71:101339. https://doi.org/10.1016/j.ienj.2023.101339. å. Anderson J, Levy DS, Lumry W, Koochaki P, Lanar S, Li H. Letting the patients speak: An in-depth, qualitative research-based investigation of factors relevant to health-related quality of life in real-world patients with hereditary angioedema using subcutaneous C1 inhibitor replacement therapy.

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Contact: Sarah Olaluyi, Trainee Health Psychologist Email: sarah.olaluyi@research.staffs.ac.uk

