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#### Commentary

Bridging the Language Divide in UK Paramedic Care: An Atomic Article Reviewing Challenges, Strategies, and Emerging Innovations

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This review synthesises evidence on how language barriers impact UK paramedic care, leading to reduced on-scene assessment times, delays in treatment, and potential errors in clinical decision-making. Paramedics often rely on strategies such as body language, basic keywords, and ad hoc interpreters, which may compromise care quality. Research highlights the need for professional interpretation services and digital communication tools to support accurate, equitable patient assessment and treatment. Emerging technologies, including translation apps, show promise but require further evaluation. Addressing language barriers is essential to ensuring fair, high-quality prehospital care for patients with limited English proficiency in the UK.

### Introduction

Language barriers pose significant challenges for paramedics in providing high-quality prehospital care<sup>[1][2][3]</sup>. Studies have shown that paramedics tend to spend less on-scene time with patients who lack language congruency, and they are more likely to transport these patients quickly to the emergency department<sup>[1]</sup>. This can lead to delays in care and a lower quality of care once the patient reaches the hospital<sup>[1]</sup>.

### Discussion

Paramedics have reported that language barriers are a daily issue in their work and can hinder their ability to perform optimal assessments and provide appropriate treatment<sup>[<u>L</u>]</sup>. To overcome these barriers, paramedics have described using a variety of strategies, such as

using body language, keywords, and ad hoc interpreters (e.g., bystanders or family members)<sup>[4]</sup>. <sup>[5]</sup>. However, the use of ad hoc interpreters has been associated with more dissatisfaction and a higher likelihood of errors that could impact clinical care<sup>[5]</sup>.

Researchers have highlighted the importance of professional language interpretation services to provide equitable and high-quality care for patients with limited English proficiency  $(\text{LEP})^{[6][6]}$ . However, access to prehospital trained interpreters is often limited, and connecting to remote interpretation services can be challenging for paramedics in the field<sup>[2]</sup>.

To address these challenges, some studies have explored the development and evaluation of digital communication tools, such as fixed-phrase translation apps, to support paramedics in communicating with foreign-language patients<sup>[7,1][6]</sup> <sup>[8]</sup>. These studies have shown promising results in improving communication and care delivery, but more research is needed to fully understand the impact of such technologies<sup>[7][6][9]</sup>.

Additionally, studies have identified other factors that can affect the quality of care for patients with language barriers, such as delayed or inaccurate dispatching, and the distribution of different levels of resources (e.g., advanced life support vs. basic life support) based on the caller's language proficiency<sup>[10]</sup>.

# Conclusion

Overall, the literature highlights the significant challenges that language barriers pose for paramedics in the UK and the need for more research and interventions to improve the level of care for patients with limited English proficiency<sup>[1][6]</sup>.

## References

- 1. <sup>a, b, c, d</sup>Sterling M, Echeverria S, Merlin M (2013). "T he effect of language congruency on the out-of-hos pital management of chest pain." World Medical & Health Policy. 5 (2): 111-123. doi:10.1002/wmh3.46.
- 2. <sup>a, b</sup>Stadeli K, Sonett D, Conrick K, Moore M, Riesenbe rg M, Bulger E, Vavilala M (2023). "Perceptions of pr ehospital care for patients with limited english profi ciency among emergency medical technicians and p aramedics." Jama Network Open. 6 (1): e2253364. d oi:10.1001/jamanetworkopen.2022.53364.
- 3. <sup>△</sup>Noack E, Kleinert E, Müller F (2020). "Overcoming language barriers in paramedic care: a study protoc ol of the interventional trial 'dictum rescue' evaluati ng an app designed to improve communication betw een paramedics and foreign-language patients." B

MC Health Services Research. 20 (1). doi:10.1186/s12 913-020-05098-5.

- 4. <sup>a</sup>, <sup>b</sup>Alm-Pfrunder A, Falk A, Vicente V, Lindström V (2018). "Prehospital emergency care nurses' strategi es while caring for patients with limited swedish-en glish proficiency." Journal of Clinical Nursing. 27 (19 -20): 3699-3705. doi:10.1111/jocn.14484.
- 5. <sup>a</sup>, <sup>b</sup>Turner A, Choi Y, Dew K, Tsai M, Bosold A, Wu E, Meischke H (2019). "Evaluating the usefulness of tra nslation technologies for emergency response comm unication: a scenario-based study." JMIR Public Hea lth and Surveillance. 5 (1): e11171. doi:10.2196/11171.
- 6. <sup>a</sup>, <sup>b</sup>, <sup>c</sup>, <sup>d</sup>, <sup>e</sup>Müller F, Schröder D, Schäning J, Schmid S, Noack E (2023). "Lost in translation? information q uality in pediatric pre-hospital medical emergencies with a language barrier in germany." BMC Pediatric s. 23 (1). doi:10.1186/s12887-023-04121-y.
- 7. <sup>a, b</sup>Müller F, Schröder D, Noack E (2022). Overcomin g language barriers in paramedic care with an app d esigned to improve communication with foreign-la nguage patients: nonrandomized controlled pilot stu dy (preprint).. https://doi.org/10.2196/preprints.432 55
- <sup>A</sup>Noack E, Schulze J, Müller F (2021). "Designing an app to overcome language barriers in the delivery of emergency medical services: participatory developm ent process." JMIR Mhealth and Uhealth. 9 (4): e215 86. doi:10.2196/21586.
- <sup>A</sup>Müller F, Schröder D, Noack E (2023). Overcoming l anguage barriers in paramedic care with an app desi gned to improve communication with foreign-lang uage patients: nonrandomized controlled pilot stud y. JMIR Form Res. 7:e43255. https://doi.org/10.2196/ 43255
- 10. <sup>△</sup>Müller F, Hummers E, Noack E (2020). "Medical ch aracteristics of foreign language patients in parame dic care." International Journal of Environmental Re search and Public Health. 17 (17): 6306. doi:10.3390/ ijerph17176306.

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