

Impact of Cultural Biases and Language Barriers in Emergency Care

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Abstract

As patient populations continue to diversify, the need for culturally competent medical care is increasingly important. Emergency departments serve diverse populations, making it essential to deliver equitable, high-quality care to all patients, regardless of their cultural or ethnic backgrounds. However, the fast-paced, high-stress environment of EDs, combined with challenges such as language barriers and cultural biases, often impedes this goal. These obstacles have been widely recognized as significant barriers to effective care. Addressing these challenges, as highlighted in the literature, can empower EDs and emergency care providers to enhance patient care quality, promote equity, and ultimately reduce adverse patient outcomes.

Introduction

As patient populations continue to diversify, the need for culturally competent medical care is increasingly important, especially in settings where prompt and accurate care is critical. Emergency departments (ED) often serve as the first point of contact for vulnerable populations, including those from different cultural and linguistic backgrounds. However, language barriers and cultural differences in marginalized groups may create significant delays in care, leading to miscommunication and less favourable health outcomes. Furthermore, implicit biases shaped by cultural stereotypes can complicate care in these high-stakes environments, leading to poorer outcomes. It is crucial to address these challenges and find solutions beyond point-of-care services like simple translation—and instead, find ones that encourage trust and improve communication, equity, and cultural knowledge among healthcare providers. Addressing research gaps by including culturally diverse populations in research can help ensure that emergency care is equitable to all screening.

Cultural Biases in Emergency Care

"Medical intuition", a key feature utilized for diagnosing in clinical practice, is, by nature, highly subject to the implicit biases of an examining practitioner. Implicit bias concerns the influence of unconscious attitudes and associated stereotypes that alter an individual's judgement, behaviour and decisions.¹ While unconscious biases regarding race and cultural norms are not limited to a single medical speciality or level of experience, emergency medicine requires physicians to treat patients under conditions that have been shown to exacerbate this bias. This includes conditions such as significant time constraints, fatigue, increased cognitive stressors and diagnostic uncertainty, which in turn increases the incidences of racial stereotyping and

prejudice.^{2,3}

A study by Johnson et al. found that the cognitive "overload" experienced by physicians during an ED shift was associated with increased implicit bias, particularly with ED overcrowding.⁴ However, this paper did not investigate how situational factors in the ED influenced the application of bias through mediums, including poor communication or diagnostic errors. While no current studies conclusively indicate how implicit bias directly relates to poor patient outcomes in minority groups, there are many studies noting overarching racial disparities in ED care.^{5,6} Given the implications of practitioner bias in patient outcomes, further investigation of the racial and cultural biases in emergency medicine is important, considering that EDs are often the primary treatment centres accessed by vulnerable populations with varying ethnic and socioeconomic backgrounds.

The Health Service Executive (HSE) currently delivers intercultural awareness training through online learning modules.⁷ However, these programs lack direct educational strategies to address or assess healthcare professionals' implicit biases related to cultural norms. Instead, the focus remains on promoting cultural sensitivity within patient-centered care. Although there is limited literature evaluating the effectiveness of these specific modules, a systematic review has shown that patient-centered care models incorporating cultural competence enhance practitioners' knowledge, awareness, and cultural sensitivity but no significant improvements in patient health outcomes were observed.⁸

Language Barriers

Communication is key in medicine, especially emergency medicine. However, communication is limited when the patient and healthcare provider do not share the same language. As countries become increasingly multicultural, language barriers pose an additional challenge to providing prompt medical care.



Studies have shown that individuals who speak languages other than English (LOE) will experience longer hospital stays, more misdiagnoses and are more likely to revisit the hospital.^{9,10} Barriers imposed by language differences can also affect the status of a pre-alert. 999 calls are made in high-stress situations, but with the additional challenge of language nuances and interpretation, critical information can be missed. In an Australian study, where English is spoken predominantly, dispatchers were more likely to miss critical cardiac arrest signs if the caller were LOE speakers, which delayed care.¹¹ This is a significant concern, given the time-sensitive nature of treating a cardiac arrest. Which is one of many reasons why non-English speakers are more hesitant to attend the hospitals and thus have poorer health outcomes.¹²

Although professional translators are an option, this is limited by funds and time. EDs are one of the highest users of translation services, with 25% of hospital requests¹⁰; however, not all requests are fulfilled in a timely manner. Thus, digital systems such as Tranlatyl have emerged. Tranlatyl is a digital real-time translator covering over 20 languages, including Farsi and Arabic. Unlike Google Translate, its accuracy is higher. When Tranlatyl is paired with medical students or professionals, patients report feeling more informed about their care.¹⁰ Although in-person interpreters are often preferred, the use of online translation tools may enhance healthcare quality and increase satisfaction for both patients and providers.¹³

Gaps in Research & Future Directives

Existing research has highlighted global health inequities in emergency care for racially and ethnically marginalized individuals, particularly in areas such as pain management, diagnosis, and transport.¹⁴ Yet, few studies have explored strategies to reduce disparities in prehospital care based on patient demographics (e.g., underrepresented race, ethnicity, sex, gender, or sexual orientation) and addressed clinician bias to ensure high-quality, equitable care for all patient populations. These gaps often stem from the underrepresentation and limited participation of marginalized groups in research. For instance, ethnic minorities and those from lower socioeconomic backgrounds are more likely to be lost to follow-up, which can introduce bias into data analysis.^{15,16} Hence, clinical research in prehospital care is essential for developing evidence-based guidelines; however, significant gaps persist due to limited resources, ethical considerations, and prioritizing patient care over research. All these complexities hinder the ability to conduct high-quality studies in emergency medicine, particularly for marginalized groups.

Emergency care is frequently the first point of medical contact for many seriously ill or injured patients, making it an essential link in the healthcare delivery continuum. Evidence suggests that care from physicians who share a patient's racial and cultural background may enhance exam participation, self-advocacy, and doctor-patient trust.¹⁷ The rapport established in these interactions can improve communication, resulting in more accurate diagnoses and tailored treatment plans. Thus, increasing diversity among healthcare practitioners can help marginalized groups increase their trust and use of such services, which improves health outcomes and reduces disparities.

Conclusion

Emergency medicine operates under time pressures that can exacerbate implicit biases in clinicians, particularly in environments with cognitive overload and diagnostic uncertainty. These biases often lead to inequities in care, leaving marginalized groups facing miscommunication, diagnostic errors, and worse health outcomes. While existing research highlights these disparities, there is still a need to explore solutions which address the underlying causes. Increasing diversity within healthcare teams is one potential step, as shared cultural perspectives can foster trust and improve patient-provider communication. Another major challenge is language barriers, which can delay critical care and lead to misunderstandings, especially for non-English speakers. Tools like real-time translation systems offer ways to bridge these gaps and enhance the patient experience. Addressing bias, improving diversity, and adopting innovative technologies are all critical to making emergency care more equitable and accessible for everyone.

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