

The Impact of Language Barriers on Patient Understanding of Medical Information and Treatment Options

Dr. Bayan Ahmed Wafi¹, Fawziah Mohammed Hussain Sumayli², ³Mohammed Yahya Hussain Qahtani, ⁴Shikha Hamad Ahmad Awaji, ⁵Majidah Yahya Khalil Yahya, ⁶Ola Zayed Hammadi Ali AmalAli Ahmed Salem, ⁷ ⁸Manal Abdu Mohammed Zidan, Mohammed Ibrahim Ahmad Ajeebi⁹, Samsiyyah Abdallah Mousa JALAL¹⁰, ¹¹Salhah Ali Ibrahim Saddeg, ¹²Mariam Hussain Mohammed Alsalem, ¹³Ahmad Saleh Hothan Hothan, Hussain Yahya Abdu Safhi¹⁴, ¹⁵Mofareh Mohssan Zakan, ¹⁶Ershad Hussein Ali Alnemi, Khansa Eissa Mohd Hashroof ¹⁷Khansa Ali Ahmed¹⁸, Sultan Latif Mohammad Aldhafeeri¹⁹

Abstract

The presence of language barriers presents difficulties in attaining optimal levels of contentment among healthcare workers and patients, delivering healthcare of superior quality, and upholding patient safety. In order to tackle these difficulties, several prominent healthcare establishments provide interpreting services with the aim of enhancing healthcare accessibility, patient contentment, and communication. Nevertheless, these services contribute to the escalation of both the financial expenses and the length of the treatment process. The objective of this study is to examine the effects of language barriers on healthcare and provide strategies to overcome the difficulties. We conducted a search for relevant research on the impact of language barriers in healthcare by using two databases: PubMed and Medline. Our research revealed that language difficulties in healthcare result in communication breakdowns between healthcare providers and patients, leading to decreased satisfaction for both parties and compromising the quality of healthcare delivery and patient safety. Furthermore, the analysis determined that translator services had an indirect impact on both the cost and duration of treatment appointments. A research documented the use of online translation tools, such as Goo¹gle

¹Speciality /Senior Registrar Family Medicine

²Speciality / Technician Nursing

³Speciality /Technician-Nursing

⁴Speciality/Nursing Tecnchion

⁵Speciality /Technician-Operation Rooms

⁶Nursing technician speciality

⁷technician nurcing speciality

⁸Speciality /Technician-Nursing

⁹Speciality /Nursing Technician Employer /Al-Gharaa Primary Health Care Center In Sabya

¹⁰Speciality /Nursing - Technician

¹¹Speciality / Technician- Nursing

¹²Employer/ King Fahad Central Hospital Speciality /Technician-Nursing

¹³Speciality/ Dental Assistant

¹⁴Speciality /Dental Assistant

¹⁵Speciality /Dental Assistant

¹⁶Speciality / Dental Assistant

¹⁷Speciality: Nursing Technician

Translate and MediBabble, in hospitals. This deployment resulted in a 92% satisfaction rate among medical practitioners and patients, while also enhancing the quality of healthcare provision and patient safety. The presence of language barriers significantly diminishes the satisfaction levels of both medical practitioners and patients, while also compromising the quality of healthcare delivery and patient safety. Several healthcare organizations use translator services, which result in higher expenses and longer treatment appointments. Our research findings indicate that the use of online translation tools such as Google Translate and MediBabble might enhance healthcare quality and increase satisfaction levels for medical personnel and consumers.

Keywords: *Obstacles to Communication, Patient Contentment, Inadequate Language Skills, Healthcare Excellence.*

1. Introduction

Language difficulties significantly affect the financial and qualitative aspects of healthcare. Interactions between healthcare workers and patients can arise when there is a lack of shared native language.¹ treatment professionals must give high-quality treatment that upholds the values of human rights and fairness to all patients, regardless of language obstacles.²

Health inequalities, such as discrepancies in treatment due to linguistic challenges, are linked to uneven healthcare access and disparate health outcomes.³ For example, a recent research showed that patients who are not fluent in the local language have disadvantages when it comes to accessing healthcare services.⁴ Multiple studies have shown that patients who encounter language obstacles have worse health outcomes in comparison to those who are fluent in the local language. ^{5,6}

There is increasing evidence to support the notion that language barriers have an indirect effect on the quality of healthcare received by patients. Language difficulties diminish patient and medical provider satisfaction, as well as impede communication between medical practitioners and patients. Patients who encounter language problems are more prone to use a greater number of healthcare services and encountering a higher number of adverse outcomes.⁷ A recent research done at six US hospitals revealed a higher occurrence of adverse outcomes among patients with poor English proficiency compared to those who were fluent in English.⁸⁻¹⁰ This study examines the effects of language barriers on healthcare and proposes methods to tackle the difficulties.

2. Effective healthcare

Effective healthcare relies on the fundamental aspect of communication between patients and medical practitioners.¹¹⁻¹⁷ In Pytel, a staggering 94.3% of nurses emphasized the utmost importance of understanding their patients' language for effective work environment and communication. Physicians have challenges in comprehending patients who do not speak their language, resulting in incorrect diagnosis and prescription of drugs.¹⁸ Medical practitioners in Norway reported difficulties comprehending 36% to 43% of patients who are not fluent in the local language, therefore requiring the assistance of translators.¹⁵ 37% of clinicians reported that patients conceal information due to linguistic problems.¹⁵ Furthermore, South African nurses in Saudi Arabia had significant challenges in effectively

¹⁸Speciality / Dental Assistant

interacting with patients, their family members, and nurses from other nationalities due to language issues.¹⁹

The presence of language barriers has adverse effects on the provision of healthcare services and the level of satisfaction experienced by patients. A research revealed that when patients were treated by nurses who were not fluent in the local language, 30% had challenges comprehending medical instructions, 30% encountered issues with the trustworthiness of information, and 50% thought that the language barrier played a role in mishaps.¹⁰ A study revealed that a significant percentage of patients who were not fluent in the local language faced difficulties in various aspects of healthcare. Specifically, 49% had difficulty comprehending medical situations, 34.7% were confused about medication usage, 41.8% struggled with understanding medication labels, 15.8% experienced adverse reactions to medication due to misunderstanding their healthcare provider's instructions, 66.7% encountered barriers when trying to access healthcare, and 20% refrained from seeking healthcare services if they were not easily accessible out of fear of not understanding their healthcare provider.¹⁴

Moreover, a significant number of patients with poor fluency in the local language had detrimental health incidents that led to noticeable physical injury (49.1% of patients) or moderate and transitory damage (46.8%), or faced difficulties in effectively communicating with healthcare professionals (52.4%). Patients who have inadequate competence in the local language are more likely to skip medical visits and have difficulty in scheduling appointments because of the language barrier.⁹ Consequently, many patients have a low degree of satisfaction with their treatment. ^{14,18}

In order to enhance patient satisfaction with healthcare, it is essential to provide interpretation services. Two studies indicated that 43.2% of patients required translator services, while a range of 21-76% of medical practitioners reported inadequate access to these services. ^{12,15} In addition, a significant majority of patients with limited English proficiency (LEPPs), namely 70.7%, said that interpretation services were not readily accessible. Furthermore, 26.4% of these patients reported a complete absence of interpreters in their healthcare facilities. Additionally, the use of interpreting services by 2 LEPPs indirectly increases the expenses associated with health care.

A total of 12 Limited English Proficient Patients (LEPPs) who used interpretation services got a higher number of inpatient services and attended a greater number of office visits compared to LEPPs who did not utilize interpreter services.¹¹ The study's authors estimated the cost of interpreting services for Medicaid beneficiaries to be about \$4.7 million per year. Several healthcare institutions use internet translation tools like Google Translate and MediBabble to overcome the difficulties posed by language boundaries. These tools are readily available at no cost and easily accessible. They play a significant role in enhancing healthcare delivery, ensuring patient safety, and substantially increasing the happiness of medical personnel and patients, with satisfaction rates reaching up to 92%.⁸

3. Language barriers

The presence of language barriers significantly contributes to misunderstanding between healthcare practitioners and patients, resulting in a detrimental impact on the quality of healthcare services and patient satisfaction.^{19,20} Medical staff at hospitals consider language problems to be a cause of stress in the job and a hindrance to providing healthcare of excellent quality.²¹ Abundant data indicates a substantial correlation between working stress and reduced satisfaction among medical practitioners. ²²⁻²⁴ Furthermore, research suggests that language limitations have a role in medical practitioners' limited comprehension of patients' circumstances, delayed provision of therapy or incorrect

diagnoses, inadequate patient evaluation, and partial adherence to recommended treatment.^{14,25}

In order to surmount linguistic obstacles, several healthcare establishments provide interpreting services; yet, these services present significant difficulties in terms of availability and financial strain. Prior research has shown that the majority of healthcare facilities suffer from limited or nonexistent availability of interpretation services.^{12, 14} Utilizing interpretation services enhances patient satisfaction and enhances the quality of treatment for individuals with language problems.²⁸ Interpreter services are strongly correlated with higher rates of medical visits, prescription medicine use by doctors, and the utilization of preventive care by patients.²⁹ Nevertheless, the provision of translator services also results in longer and more expensive medical appointments.

4. Conclusion

The presence of language limitations might pose significant challenges in providing healthcare of exceptional quality. They have a detrimental influence on the caliber of healthcare, the safety of patients, and the contentment of medical practitioners and individuals. Although several health organizations provide translator services to tackle these issues, these services indirectly raise the cost of health care and prolong the duration of treatment appointments. Online translation tools like Google Translate and MediBabble provide potential answers for addressing these difficulties. It is advisable to do further research on the consequences of language barriers and the efficacy of online translation technologies. Additionally, it is advisable to provide fresh updates to Google Translate that include additional medical terminology, as well as expand the range of languages available in the MediBabble program.

References

1. Slade S, Sergent SR. Language barrier. In: StatPearls [Internet]: StatPearls Publishing; 2018.
2. Bischoff A, Denhaerynck K. What do language barriers cost? An exploratory study among asylum seekers in Switzerland. *BMC Health Serv Res* 2010. Aug;10(1):248. 10.1186/1472-6963-10-248
3. Hilfinger Messias DK, McDowell L, Estrada RD. Language interpreting as social justice work: perspectives of formal and informal healthcare interpreters. *ANS Adv Nurs Sci* 2009. Apr-Jun;32(2):128-143. 10.1097/ANS.0b013e3181a3af97
4. Floyd A, Sakellariou D. Healthcare access for refugee women with limited literacy: layers of disadvantage. *Int J Equity Health* 2017. Nov;16(1):195. 10.1186/s12939-017-0694-8
5. Divi C, Koss RG, Schmaltz SP, Loeb JM. Language proficiency and adverse events in US hospitals: a pilot study. *Int J Qual Health Care* 2007. Apr;19(2):60-67. 10.1093/intqhc/mzl069
6. Squires A. Evidence-based approaches to breaking down language barriers. *Nursing* 2019 2017;47(9):34-40.
7. Cohen AL, Rivara F, Marcuse EK, McPhillips H, Davis R. Are language barriers associated with serious medical events in hospitalized pediatric patients? *Pediatrics* 2005. Sep;116(3):575-579. 10.1542/peds.2005-0521
8. Albrecht U-V, Behrends M, Schmeer R, Matthies HK, Von Jan U. Usage of Multilingual Mobile Translation Applications in Clinical Settings. 2013.
9. Ali PA, Watson R. Language barriers and their impact on provision of care to patients with limited English proficiency: Nurses' perspectives. *J Clin Nurs* 2018. Mar;27(5-6):e1152-e1160. 10.1111/jocn.14204
10. Al-Khathami AM, Kojan SW, Aljumah MA, Alqahtani H, Alrwaili H. The effect of nurse-patient language barrier on patients' satisfaction. *Saudi Med J* 2010. Dec;31(12):1355-1358.

11. Bagchi A, Stevens B. Estimates for the cost of interpretation services for Connecticut medicaid recipients. *Mathematica Policy Research*; 2006.
12. Bischoff A, Bovier PA, Rrustemi I, Gariazzo F, Eytan A, Loutan L. Language barriers between nurses and asylum seekers: their impact on symptom reporting and referral. *Soc Sci Med* 2003. Aug;57(3):503-512. 10.1016/S0277-9536(02)00376-3
13. de Moissac D, Bowen S. Impact of language barriers on quality of care and patient safety for official language minority francophones in Canada. 2018.
14. de Moissac D, Bowen S. Impact of language barriers on quality of care and patient safety for official language minority francophones in Canada. *J Patient Exp* 2019. Mar;6(1):24-32. 10.1177/2374373518769008
15. Kale E, Syed HR. Language barriers and the use of interpreters in the public health services. A questionnaire-based survey. *Patient Educ Couns* 2010. Nov;81(2):187-191. 10.1016/j.pec.2010.05.002
16. Ngo-Metzger Q, Sorkin DH, Phillips RS, Greenfield S, Massagli MP, Clarridge B, et al. Providing high-quality care for limited English proficient patients: the importance of language concordance and interpreter use. *J Gen Intern Med* 2007. Nov;22(2)(Suppl 2):324-330. 10.1007/s11606-007-0340-z
17. Pytel C, Fielden NM, Meyer KH, Albert N. Nurse-patient/visitor communication in the emergency department. *J Emerg Nurs* 2009. Sep;35(5):406-411. 10.1016/j.jen.2008.09.002
18. Schlemmer A, Mash B. The effects of a language barrier in a South African district hospital. *S Afr Med J* 2006. Oct;96(10):1084-1087.
19. Van Rooyen D, Telford-Smith CD, Strümpher J. Nursing in Saudi Arabia: reflections on the experiences of South African nurses. *Health SA Gesondheid*. 2010; 15(1).
20. Wilson E, Chen AH, Grumbach K, Wang F, Fernandez A. Effects of limited English proficiency and physician language on health care comprehension. *J Gen Intern Med* 2005. Sep;20(9):800-806. 10.1111/j.1525-1497.2005.0174.x
21. Bernard A, Whitaker M, Ray M, Rockich A, Barton-Baxter M, Barnes SL, et al. Impact of language barrier on acute care medical professionals is dependent upon role. *J Prof Nurs* 2006. Nov-Dec;22(6):355-358. 10.1016/j.profnurs.2006.09.001
22. Fiabane E, Giorgi I, Musian D, Sguazzin C, Argentero P. Occupational stress and job satisfaction of healthcare staff in rehabilitation units. *Med Lav* 2012. Nov-Dec;103(6):482-492.
23. Salam A. Job stress and job satisfaction among health care professionals. *Qatar Foundation Annual Research Conference Proceedings*; 2016 HBKU Press Qatar p. HBOP2571.
24. Srivastava BDP, Singh MM. Job satisfaction among healthcare professional in public and private healthcare setup in India. 2018;6(1).
25. Karliner LS, Kim SE, Meltzer DO, Auerbach AD. Influence of language barriers on outcomes of hospital care for general medicine inpatients. *J Hosp Med* 2010. May-Jun;5(5):276-282. 10.1002/jhm.658
26. Bowen S. The impact of language barriers on patient safety and quality of care. *Société Santé en français*. 2015.
27. Al-Harasis S. Impact of language barrier on quality of nursing care at armed forces hospitals, Taif, Saudi Arabia. *Middle East Journal of Nursing* 2013;7(4):17-24 . 10.5742/MEJN.2013.74304
28. Squires A. Strategies for overcoming language barriers in healthcare. *Nurs Manage* 2018. Apr;49(4):20-27. 10.1097/01.NUMA.0000531166.24481.15
29. Brach C, Fraser I, Paez K. Crossing the language chasm. *Health Aff (Millwood)* 2005. Mar-Apr;24(2):424-434. 10.1377/hlthaff.24.2.424