



Closing the Language Gap in Rural Health: Improving Communication and Shaping Policy for Equitable Care

Sadia Zaman ^{1,2} 

¹ Department of English, Faculty of Humanities & Social Sciences, Daffodil International University, Daffodil Smart City (DSC), Savar, Dhaka-1216, Bangladesh

Corresponding author*

Sadia Zaman

Department of English,
Faculty of Humanities & Social
Sciences, Daffodil International
University, Dhaka 1216,
Bangladesh.
Email: pinky10-1196@s.diu.edu.bd

Article info

Received: 2 August 2025

Revised: 26 August 2025

Accepted: 5 September 2025

Published: September 7, 2025

Keywords

Health literacy; Patient-provider communication; Medication errors; Electronic prescribing; Rural health (Bangladesh).

One of the core aspects of healthcare is communication. How medical professionals communicate with their patients often heavily impacts the successfulness of the medical procedure. However, the frequent use of medical jargon and handwriting can be two of the major barriers while communicating with patients that ultimately continues to disrupt the flow of information between doctors and patients. These issues are often overlooked but it has profound implications globally, in South Asia and in Bangladesh, where health literacy levels are relatively low (Brits et al., 2017; Castro et al., 2007). Medical jargon means the language which is used by medical professionals that are difficult for the regular patients to understand while it serves the purpose of precise communication among professionals. The use of these terms in doctor-patient consultation often creates confusion. Terms like “idiopathic thrombocytopenic purpura” or “benign neoplasm” are rarely understood by common people. Even common terms like “hypertension” or “negative result” can be misinterpreted (Castro et al., 2007). Doctors are often infamous for illegible and sloppy handwriting that is very hard to decipher by a common person and even for a pharmacist. Misleading handwriting can lead to misinterpretation of a medical prescription that will ultimately result in wrong medication and treatment. These are gravely dangerous for each and every person involved. Including the patients and doctors involved (Brits et al., 2017).

Across the world, health literacy meaning the ability to understand basic health information is very much important for successful medical treatment and recovery. Systematic reviews show that limited health literacy is strongly associated with worse health outcomes and greater use of healthcare services (Berkman et al., 2011; Schillinger et al., 2003). According to the World Health Organizations. (WHO), communication errors are among the leading causes of preventable patient harm worldwide (Donaldson et al., 2017). Even in first world countries, although education levels are higher than most, miscommunication due to medical jargon prevails even in present days. A U.S.-based study by (Schillinger et al., 2003) on diabetic patients with low health literacy showed that poor communication directly leads to worse health outcomes, including increased hospitalization and complications.

Though South Asia is considered as home to a quarter of the world’s population, it faces even greater challenges due to linguistic diversity, high illiteracy rates, and under-resourced health systems. In multilingual clinical encounters (e.g., Bengali, Hindi, Urdu, Tamil), providers frequently use untranslated medical terms, and language barriers can degrade shared decision-making. Evidence from English general practices shows that offering a language concordant option substantially improves reported doctor-patient communication for South Asian patients; when concordant language was not offered,



Copyright: © by the authors. This article is an open access article distributed under the terms and conditions of the [Creative Commons Attribution 4.0 \(CC BY 4.0\) International license](https://creativecommons.org/licenses/by/4.0/).

experiences were worse, particularly for Bangladeshi and Pakistani patients (Ahmed et al., 2015a). There are many South Asian countries where patients often hesitate to ask questions or admit they don't understand what the doctor is saying. This occurs miscommunication and reduces shared decision-making in healthcare.

Bangladesh exemplifies how critical this issue can be in a developing country context. Even though the national literacy rate has increased (now around 75%), rural populations still suffer from poor health literacy. However, despite Bangladesh's population growing by almost two percent annually, the number of people using public hospitals has been declining over time. For instance, between 1993 and 1996, attendance dropped by 30 percent (DGHS 1998: 69). This trend is attributed to several factors: a lack of available doctors and medications, overcrowding, longer wait and travel times, and poor communication between healthcare professionals and patients. Due to this dissatisfaction, more people are now seeking medical care from private healthcare facilities (Rahman, 2022). Doctors in Bangladesh often use prescriptions which are filled with Latin abbreviations (e.g., "TDS", "OD", "PO"), which are difficult for patients to understand. The lack of digital health infrastructure leads to frequent errors that are rarely corrected. Even in rural hospitals and union health centers, pharmacists often struggle to interpret prescriptions even if they are properly written.

In matters of a patient's safety and health outcomes, miscommunication can result in medication errors like, a patient can not only take the wrong dose of a certain medicine, but also, the medicine itself can be wrong entirely. Prescribing errors are a prevalent issue, frequently leading to adverse events and patient harm. However, effective prevention strategies are difficult to establish because recommendations are often based on speculative rather than empirical evidence. A review of studies on this topic, predominantly from university-affiliated hospitals in the U.S. and the U.K. (10 out of 16 studies, or 62%), highlighted significant inconsistencies. The definition of a prescribing error varied widely, and the included studies were highly heterogeneous. Causes were classified using Reason's model of accident causation, categorizing them into active failures, error-provoking conditions, and latent conditions (Tully et al., 2009). On the other hand, complicated language may discourage patients from following the instructions. Even treatment can get delayed by this. The problem of higher healthcare costs will arise from this. Repeat visits, hospitalizations, and complications increase both patient himself and entire nations healthcare expenditures. Emotional and Psychological Impact is also evident. Patients who don't understand their health conditions often feel anxious, excluded, and helpless. They may avoid further treatment because of embarrassment or fear and anxiety. Poor communication can lead to community-wide issues, such as the misuse of antibiotics, fear of vaccination, and failure to comply with public health guidelines in a community. There are several Policy and Institutional retaliations where several international efforts have attempted to develop communication in the healthcare sector. The Plain Language Action and Information Network (PLAIN) promotes clean and easy to access language in public health communication. Their guidelines help decrease jargon and increase understanding for a mass population.

The United States Centers for Disease Control and Prevention [CDC] & The United Kingdom National Health Service [NHS] have developed many health literacy frameworks to make sure that health messages are not complex, visually vivid, and culturally appropriate. The World Health Organization [WHO] emphasizes patient safety and encourages countries under the organization to adopt transparent

communication policies. There are various regional and national efforts in South-Asia. In India, the National Health Policy (2017) really admitted the importance of patient-centered care and communication but wasn't able to provide actionable strategies for enforcing plain language or digital prescriptions. Also in Pakistan and Sri Lanka, few pilot programs in urban hospitals have adopted e-prescription systems and communication training modules for doctors. However, these remain fragmented and are often absent in rural or government-run facilities and in some cases, private hospitals. Bangladesh lacks an entire national policy addressing communication in the healthcare sector. Where the Ministry of Health and Family Welfare has taken steps toward urbanization & digitalization [e.g., e-health cards, telemedicine], these moves are not yet fully spread. Many public health centres still continue to rely on paper-based, handwritten, unreadable prescriptions.

The Bangladesh Medical and Dental Council [BMDC] has no particular guidelines requiring doctors to use plain language or understandable writing (BMDC, 2020). Communication training is not integrated in medical education, and continuing professional development rarely includes language or empathy training. So it's obvious for us to integrate communicational courses. To address these challenges strategies are required. Like- reformation of medical education which may include lessons on communication, competency in certain cultures, health literacy in all medical fields. Conduction of regular workshops on plain-language usage for doctors and nurses can help overcome these limitations. Mandating E-Prescriptions by the Government should roll out digital prescription systems in all public hospitals in Bangladesh. Additionally, "E-Prescription: A practical application of information and communication technology in healthcare" (2023) discusses electronic prescription management systems and their role in transforming prescription processes, which can be relevant to understanding the benefits and rationale for government-mandated e-prescription rollouts (Khan et al., 2025).

This will save a lot of time. Bangladesh should develop a clear health communication policy. Translating essential medical terms into Bangla and other local languages is a very effective way to overcome the issue. Leaflets, charts, and infographics that explain common health conditions should be available for the public. A research team from Columbia University investigated the efficacy of infographics as a primary care communicative tool in the Washington Heights neighborhood of Northern Manhattan (McCrorie et al., 2016). Educating people about their right to understand their health-related information will also encourage patients to ask questions during consultations. Also, collaborating with NGOs and global bodies will help spread awareness. For example, the existing GOB and BRAC, the world-leader xiii Bangladeshi NGO, partnerships in TB-control, EPI, FP, and Maternal, Newborn and Child Survival Projects manifest the success stories of GO-NGO collaboration in the health sector of Bangladesh (Maruf, 2013).

To sum up, the use of complex medical jargon and unreadable handwriting continues to hinder effective healthcare delivery globally, and especially in South Asia and countries like Bangladesh. When healthcare providers offered a concordant language (a shared language), Pakistani patients reported an experience that was not significantly worse than that of White British patients (mean difference -0.2, 95% CI -1.5 to +1.0). For Bangladeshi patients, the experience was potentially much better (+4.5, 95% CI -1.0 to +10.1). This outcome is in stark contrast to the experiences of Bangladeshi and Pakistani respondents when a concordant language was not offered, with reported experiences being significantly worse (-3.3, 95% CI -4.6 to -2.0 and -2.7, 95% CI -3.6 to -1.9,

respectively) (Ahmed et al., 2015b). These seemingly minor issues have significant effects in the long run. This leads to issues like, compromise of patient safety, increased healthcare costs, damage trust as well. Battling these issues needs commitment at every level beginning from the very bottom. From policy reforms to medical training, digitalization, community engagement. We can find these in "Regional strategy for patient safety in the WHO South-East Asia Region" (2016–2025) (WHO, 2015). Clear communication is not just curtsy, it is a fundamental right of a human. As Helen Osborne stated, "Health literacy is a stronger predictor of a person's health than age, income, employment status, education level, race" (Staff, 2007).

ACKNOWLEDGMENTS

We would like to express our sincere gratitude to all participants who contributed their time and insights to this study. Moreover, this article has not been published anywhere else.

FUNDING

No specific fund was received.

DECLARATION OF COMPETING INTEREST

The authors declare that no conflict of interest exists.

REFERENCES

- Ahmed, F., Abel, G. A., Lloyd, C. E., Burt, J., & Roland, M. (2015a). Does the availability of a South Asian language in practices improve reports of doctor-patient communication from South Asian patients? Cross sectional analysis of a national patient survey in English general practices. *BMC Family Practice*, 16(1), 55. <https://doi.org/10.1186/s12875-015-0270-5>
- Ahmed, F., Abel, G. A., Lloyd, C. E., Burt, J., & Roland, M. (2015b). Does the availability of a South Asian language in practices improve reports of doctor-patient communication from South Asian patients? Cross sectional analysis of a national patient survey in English general practices. *BMC Family Practice*, 16, 55. <https://doi.org/10.1186/s12875-015-0270-5>
- Berkman, N. D., Sheridan, S. L., Donahue, K. E., Halpern, D. J., & Crotty, K. (2011). Low Health Literacy and Health Outcomes: An Updated Systematic Review. *Annals of Internal Medicine*, 155(2), 97–107. <https://doi.org/10.7326/0003-4819-155-2-201107190-00005>
- BMDC. (2020). BMDC Telemedicine Guidelines: Implementation and Best Practices (Jul 2020) -. <https://www.studocu.com/row/document/jessore-medical-college/medical-study-result/bmdc-telemedicine-guidelines-july2020/67572443>
- Brits, H., Botha, A., Niksch, L., Terblanché, R., Venter, K., & Joubert, G. (2017). Illegible handwriting and other prescription errors on prescriptions at National District Hospital, Bloemfontein. *South African Family Practice*, 59(1), 52–55. <https://doi.org/10.1080/20786190.2016.1254932>
- Castro, C. M., Wilson, C., Wang, F., & Schillinger, D. (2007). Babel babble: Physicians' use of unclarified medical jargon with patients. *American Journal of Health Behavior*, 31 Suppl 1, S85-95. <https://doi.org/10.5555/ajhb.2007.31.suppl.S85>
- Donaldson, L. J., Kelley, E. T., Dhingra-Kumar, N., Kieny, M.-P., & Sheikh, A. (2017). Medication Without Harm: WHO's Third Global Patient Safety Challenge. *The Lancet*,

- 389(10080), 1680–1681. [https://doi.org/10.1016/S0140-6736\(17\)31047-4](https://doi.org/10.1016/S0140-6736(17)31047-4)
- Khan, M. A., Islam, Md. R., Rahman, A., Mim, A., & Ahmmed, R. (2025). E-Prescription: A practical application of information and communications technology in perspective of Bangladesh. *Health Policy and Technology*, 14(4), 100810. <https://doi.org/10.1016/j.hlpt.2023.100810>
- Maruf, M. H. (2013). GO-NGO collaboration in health sector management of Bangladesh: An evaluation of BRAC's health programme [Thesis, BRAC University]. <https://dspace.bracu.ac.bd:8443/xmlui/handle/10361/3535>
- McCrorie, A. D., Donnelly, C., & McGlade, K. J. (2016). Infographics: Healthcare Communication for the Digital Age. *The Ulster Medical Journal*, 85(2), 71–75.
- Rahman, A. M. (2022). Do doctors work for patients in today's business-mentality world: Looking through consumer choice theory lens? *Frontiers in Management and Business*, 4(1), 263–275. <https://doi.org/10.25082/FMB.2023.01.002>
- Schillinger, D., Piette, J., Grumbach, K., Wang, F., Wilson, C., Daher, C., Leong-Grotz, K., Castro, C., & Bindman, A. B. (2003). Closing the Loop: Physician Communication With Diabetic Patients Who Have Low Health Literacy. *Archives of Internal Medicine*, 163(1), 83. <https://doi.org/10.1001/archinte.163.1.83>
- Staff, R. T. (2007, June 27). Health Literacy: A Critical Patient Safety Tool. *Respiratory Therapy*. <https://respiratory-therapy.com/public-health/healthcare-policy/home-care/health-literacy-a-critical-patient-safety-tool/>
- Tully, M. P., Ashcroft, D. M., Dornan, T., Lewis, P. J., Taylor, D., & Wass, V. (2009). The Causes of and Factors Associated with Prescribing Errors in Hospital Inpatients: A Systematic Review. *Drug Safety*, 32(10), 819–836. <https://doi.org/10.2165/11316560-000000000-00000>
- WHO. (2015). Regional strategy for patient safety in the WHO South-East Asia Region (2016–2025). *World Health Organization*. <https://www.who.int/publications/i/item/9789290224921>

PUBLISHER'S NOTE

Daffodil International University maintains neutrality with respect to jurisdictional claims in published maps and institutional affiliations, as well as the findings and interpretations presented in this publication.