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# Translating Healthcare Simulationist Code of Ethics into Urdu: bridging gaps in Pakistani healthcare simulation

Maria Bajwa[1], Maliha Zeba Khan[2]

[1]*Health Professions Education, MGH Institute of Health Professions, Boston, MA, USA*
[2]*Department of International Relations, National University of Modern Languages, Islamabad, Pakistan*

**Corresponding Author:** Maria Bajwa, maria1bajwa@gmail.com, mbajwa@mgh.harvard.edu

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## ABSTRACT

This paper detailed the translation process of the Healthcare Simulationist Code of Ethics from English to Urdu, Pakistan's national language, addressing the need for healthcare simulation in the country's native language. Pakistan, a lower–middle-income country, faces challenges accessing healthcare education in Urdu. The systematic translation by bilingual simulation and social sciences experts considered linguistic and cultural nuances by combining translation by committee and back-translation of selected text. Bilingual experts in linguistic research and healthcare practice verified this translation from healthcare, healthcare simulation and linguistics perspectives. This research contributes to the theoretical understanding of ethical values in healthcare simulation, positively influencing healthcare professionals and educators in Pakistan. The translation sought to enhance access to responsible healthcare training initiatives, specifically targeting remote regions and underserved rural communities. This includes health workers, who serve as the primary conduits for health-related initiatives in these areas.

### What this essay adds:

- Establishes the significance of translating healthcare simulation-related documents into other languages, such as Urdu.
- Provides a comprehensive description of the translation process of the Simulationist's Code of Ethics (The Code) while preserving the inspirational values of The Code and cultural and linguistic nuances of the language.
- Sets up precedence for translations of other simulation-related documents from English to Urdu.
- Presents the Urdu translation for The Code, and the words 'simulation' and 'Simulationist'.
- Promotes the understanding and compliance with ethical guidelines and professionalism with simulation-based education and practice.

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## Introduction

Pakistan, a developing country, is gradually embracing more advanced, evidence-based healthcare educational practices, including simulation. Pakistan faces substantial challenges, including restricted human resources and tangible assets for healthcare education and practice [1], antiquated curricula [2], and scarcity of healthcare simulation resources in Urdu, the nation's native language [3]. These challenges impede high-quality, easily accessible healthcare education and care [1]. Additionally, these challenges hinder the adoption of simulation-based healthcare education, an established technique for improving patient outcomes [4]. Despite the growing recognition of the effectiveness of healthcare simulation, its utilization in Pakistan remains limited due to the scarcity of Urdu-language simulation education, research and practice materials, [3] impeding its widespread adoption. It ultimately hinders improved patient care in Pakistan, highlighting a critical area for improvement in advancing healthcare simulation education and practice in Pakistan.

### Healthcare simulation

Healthcare simulation, or simulation, is an educational technique that replaces or amplifies real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner [5]. As simulation has evolved, most of the work was generated and published in the global north [6], indicated by major simulation initiatives, such as simulation societies [7,8], Simulation Glossary [9], Healthcare Simulation Standards of Best Practice [10] and the Simulationist's Code of Ethics (The Code) [11]. English is the primary research language, driven by its global ubiquity [12] and its status as the native language in the geographical regions where these initiatives originated.

### The Simulationist's Code of Ethics

Under Dr. Park's leadership, the Code was developed with the help of 55 experts from six continents to ensure the ethical practice of healthcare simulation [11]. Adapting an ethical code requires accepting the responsibilities and accountabilities associated with that field [13]. Healthcare simulation practitioners realized the need for an overarching governing document containing ethical constructs and guidelines for the expanding field of healthcare simulation. While the Code was written in English, the need for its translation into various languages has emerged to facilitate its effective utilization and dissemination worldwide, leading to its translation to 11 languages to the date of starting this project. The Code presents six aspirational values: (1) Integrity, (2) Transparency, (3) Mutual Respect, (4) Professionalism, (5) Accountability and (6) Results Orientation [11].

### History of Urdu language

Pakistan's bilingual education system, rooted in pre-independence history from British Colonial Rule, traces back to Lord Macaulay's 1835 decree favoring English for administration, judiciary, and education, sidelining indigenous languages [14, p. 47; 15, p. 7]. The colonial regime developed local vernaculars to placate indigenous language speakers, fostering linguistic identities [16]. This linguistic dichotomy persisted post-independence (1947), leading to continued divided education into English for elites and Urdu for the rest of the population [14]. English's prominence, tied to job prospects and social status, has persisted, exemplifying the enduring legacy of colonial language policies in post-independence Pakistan [16].

Currently, in early education, Urdu serves as the main instructional medium in public educational institutions; at the same time, high-priced private schools and colleges, mostly in urban areas, primarily use English [14]. Higher education syllabi are in English, but teaching occurs in Urdu. This linguistic dynamic persists in healthcare settings, where Urdu is comfortably employed due to lifelong usage [14]. Non-urban regions predominantly use Urdu, emphasizing the need for text and education in the same language for optimal comprehension, adaptation and accessibility [14]. Inaccessibility to English-medium private institutions compounds educational disparities for most of the population in urban and non-urban regions. Consequently, the healthcare professionals originating from these areas and working in those areas find it difficult to comprehend the text provided in the English language.

### Significance of translation

Individuals grasp information more effectively in their native language [17]. Translating content into the local language empowers local experts to apply knowledge in their context, fostering experimentation and knowledge building [18, p. 2–21]. This intervention facilitates global sustainable social development, engaging the public in exploring new constructs [18, p. 2–21]. Translation also proves vital for policy-makers, expanding document outreach and accessibility to the wider population [19]. In essence, translation emerges as a powerful tool, advancing research, societal engagement and policy effectiveness in a global context. At the same time, translating healthcare documents can be costly [20]. While services like artificial intelligence, Microsoft Translator [21] and Google Translator [22] exist, they lack linguistic and cultural nuances, risking meaning loss [17,23]. Precise human translation is imperative for maintaining the integrity of critical documents like the Code.

### Aim

This project aimed to translate the Code into Urdu, ensuring cultural and linguistic precision while accurately representing ethical principles. This research paper documents the English-to-Urdu translation process, offering insights into challenges, guiding similar translations of significant documents and contributing to cross-cultural communication.

## Methods

The literature provides diverse methods for translating documents, ranging in rigor. Evaluation and assessment instruments demand heightened accuracy and precision in

their translation processes [17]. Our research was informed by the communication translation model because it relies on linguistic and cultural word collection to convey intended meaning and contextual elements, aiming for communication with minimal loss of meaning [17]. We conducted this project in three phases: planning, execution and the final review.

## Planning phase

### *Consulting experts*

We consulted multiple international simulation practitioners well versed in the Code and its translation several months before and during the International Meeting of Simulation in Healthcare in January 2023 [24]. These conversations and the literature search concluded that the translation is an iterative process with multiple steps.

### *Literature review*

We conducted an abridged literature review focusing largely on (1) translating the Code into any other language, (2) translating healthcare-related documents from English into another language and (3) translating any document from English to Urdu. This literature review helped identify key steps and considerations for this project [17,19,25,26].

### *Establishing team*

Using a committee approach [17], we established a robust team comprising (1) two bilingual authors, one with simulation and healthcare experience and the other with linguistic research and translation experience, (2) a core translator team to do the initial translation, and (3) three bilingual experts to provide a critical review of the final translated document. We recruited these final reviewers using purposeful sampling and outside the original translator team to add rigor and reliability to the process. These included an experienced surgeon with over 40 years of experience working in Pakistan and abroad and two linguistic specialists with over 20 years of bilingual social sciences research experience.

### *Establishing communication*

Considering the constraints of working across continents and multiple time zones, we established a weekly meeting among the authors and translator team. We also used a free texting phone application for instant notification as a backup communication method because of its capabilities for texting, leaving a voice note, and adaptability to multiple devices, such as mobile phones, iPads, laptops and desktops.

### *Establishing the translation process*

These steps included initial translation, review by authors, establishing a list of disputed words, back-translation of disputed words, re-translation or readjustment of those words, harmonization of the entire document, final expert review and integration of the expert feedback to ensure fidelity to the original content [17].

## Execution phase

### *Initial translation*

A bilingual translator team, proficient in English as well as different dialects of Urdu, engaged in the initial translation and ensured its accuracy and cultural appropriateness by considering the population for which the document was being translated [19].

### *Linguistic validation*

Both authors met several times and critically reviewed the initial translation line by line. They verified each word separately, in both languages, for linguistic validation purposes before critically reviewing the translated document for flow and content validation [17]. They discussed the concepts of the original Code (English version) in the context of simulation, outside of simulation and even outside of the healthcare world. This scholarly debate, punctuated by fact checking from the literature, proved significant as both authors belonged to healthcare and non-healthcare fields, and this discussion elaborated on each foundational concept of the Code in both languages from a healthcare and non-healthcare perspective. This step alone took more than 15 hours of video conferencing between the authors.

### *Back-translation of certain terms and phrases: Linguistic delicacies*

The in-depth discussion described in the previous step of 'linguistic validation' resulted in identifying a cluster of words we named 'Linguistic Delicacies'. These were the words whose translation was not straightforward, had more than one meaning according to the context, or whose translation was not found in the Urdu language. These words needed special care and warranted a detailed discussion and back-translation [17]. The authors documented the alternate terms for these linguistic delicacies, searched various digital and paper English-to-Urdu and Urdu-to-English dictionaries, and consulted other linguistic experts. The proposed Urdu translation of these terms underwent multiple rounds of discussion between the translator team and authors. Disagreements were addressed through dialogue, culminating in a final decision achieved through consensus among all parties.

As a result of these efforts, new Urdu words were assigned, and new phrases were coined. For example, no word was found for 'simulation' in Urdu. After much deliberation, the term 'Tamseel kari' was coined, combining various words, some from Urdu and some from its source languages, Persian and Arabic. That was how 'healthcare simulation experts' translated to '*Maahereen-e-tamseel kari baraey hifzaan-e-sehat*' and 'healthcare simulationists' to '*Tamseel karaan-e-hifzaan-e-sehat*'. See Table 1 for a list of these words.

## Final review

### *Experts review*

The translated version underwent critical appraisal by one bilingual healthcare practising provider in Pakistan and one bilingual social sciences researcher, who assessed the translation's fidelity. The experts carefully examined the translated code of ethics, compared it with the original English version, and provided valuable feedback regarding the translation's clarity, comprehensibility and cultural

**Table 1:** Linguistic delicacies: examples of words requiring special focus during translation

| English word | Urdu translation |
|---|---|
| Simulation | Tamseel kari |
| Healthcare simulation experts | 'Maahereen-e-tamseel kari baraey hifzaan-e-sehat' |
| Healthcare simulationists | 'Tamseel karaan-e-hifzaan-e-sehat' |
| Integrity | 'Diyanat daari' or 'Saalmiyat' (depending on the context of the conversation |
| Inspirational | Mutayyana, or baa-maqsid- context decided that it would be mutayyana |
| Privacy | 'Raazdaari' – The word for both privacy and confidentiality is the same, used interchangeably, and it is difficult to distinguish between these concepts. So, it was left as 'raazdaari'. |
| Transparency | 'Shaffaafiyat' is the translation for transparency, but this is the same translation for another English word, 'clarity'. Therefore, to capture the meaning of transparency, the word 'wazaahat' was added, which means 'explanation' in English. |
| Evaluation | Translated literally to 'Jannchna' which did not fit into the context and flow of the language. |
| Deception (in simulation) | Translated to the word: 'dhoka dahi' which has a bad connotation and does not capture what it means in simulation. So, with mutual agreement, the word 'Khufiya' was used, which explained it better and went well with the context. |
| Empathy and compassion | No exact translation was found, so used approximate words of 'humdardi' and 'Murawwat' were used. |
| Beneficence and non-maleficence | No exact translation was found, so used approximate words 'shafqat' and 'Nawazish' were used. |
| Professionalism | The exact translation, ' paysha warraiyat' was insufficient to capture the meaning. So, it was changed to 'paysha warrana slaahiyat', meaning 'professional capabilities' in English. |
| Submit themselves | No exact word in Urdu that would capture the meaning. So an approximate phrase, 'hama waqt tayyar aur dastiyaab' was used |
| The entire last sentence of 'Accountability' | The construct of the entire sentence was difficult to translate exactly without losing the meaning. So, an approximate translation was done to capture the content and emphasize the focal point. |
| Results Orientation | This term required in-depth discussion and an explanation of the context behind the word and how it applies to the simulation world before appropriate translation. |
| 'Outcomes are inclusive of all parts of the process of healthcare simulation. They are not exclusive to a final product'. | Due to a complex structure, the exact translation of this sentence was impossible without losing its focus leading to several attempts of translation before choosing the final one. |

relevance. The experts' review indicated the translated code's high accuracy and acceptability.

### *Critical review for semantic equivalence and harmonization*

The translator team incorporated the experts' feedback into the translated document before the final review from a senior bilingual social sciences researcher and linguistic specialist. This linguistic specialist assessed the document for accuracy and harmonization to achieve semantic equivalence per cultural nuances and linguistic variations, and his feedback was incorporated.

### *Obtaining certification*

The translated Code's final version maintained the integrity of the original document, ensuring its relevance and applicability among simulation practitioners who communicate using Urdu. The authenticity of the final translated version was certified by the National University of Modern Languages, the English Translation department, which performs professional translations for the Government of Pakistan and various foreign embassies.

## Results

The translation process resulted in a successful translation of the Code into Urdu, effectively capturing the principles and values of the original English language code while maintaining its integrity. It can be viewed at the Society of Simulation in Healthcare website [7]. (See Appendix 1 for the Urdu Translation of The Code).

## Discussion

The translation process considered linguistic and cultural nuances, ensuring the Code's relevance and appropriateness for people who speak Urdu. The methodical approach to translating the Code into Urdu while preserving its inspirational values resulted in a culturally sensitive and linguistically appropriate version.

Despite the relatively high prevalence of English literacy among Pakistani healthcare professionals in urban areas, Urdu remains their preferred language for comprehension and communication in the community. This raises the question of whether healthcare professionals fully grasp

the Code's values and intent when reading it in English. How do they interpret and integrate the Code's values into their cultural, ethical and professional values? To address this concern, we carefully balanced literal translation with linguistic adaptation, ensuring the Code's core values resonated with the audience speaking Urdu. This was particularly crucial for healthcare professionals in non-urban settings, commonly called health workers, who typically have limited English proficiency and access to translation services.

The translation process demanded thoughtful reflection on Urdu's linguistic history within the context of colonial rule. To prevent misunderstandings associated with English-speaking colonial rule, the team approached the translated Code cautiously, a consideration highlighted in the critical review stage (10th step "Critical review for semantic equivalence and harmonization"). For instance, translating the term 'deception' into Urdu posed challenges due to historical connotations and public perception linked to English-speaking British rule. This intricacy is especially notable when dealing with another English-language document that discusses deception (Table 1). This attention to cultural sensitivity ensured that the Code's message resonated with the target audience without compromising its original intent.

Several items can be lost or misleading when translated into another language, a fact highlighted during the translation process. We found several ways a particular word in the Code can be translated or did not find an appropriate word. The exact word-for-word meaning would not capture the intent, tone or essence of that sentence and notion, as evidenced by the literature [17]. A deeper understanding of the concept helped us explain it to the linguistic experts to assign the most appropriate equivalent word, exemplified by the word 'deception' in the Code. Moreover, one of the most significant challenges encountered during the translation process was the lack of a precise Urdu equivalent for 'healthcare simulation'. To address this gap, the team delved into deeper discussion and, through back-and-forth translation, coined the term '*tamseel kari baraey hifzaan-e-sehat*' which accurately captures the simulation concept in Urdu.

Healthcare simulation is relatively new to the Pakistani healthcare education landscape; therefore, it must be established on the right foundation. The availability of the Code in Urdu sets up the precedence for forthcoming simulation-related initiatives. Moreover, presenting simulation-related concepts in Urdu might assist healthcare professionals in managing their cognitive load from planning to execution of simulation-based education. They can readily integrate this new knowledge into their existing one, a fact highlighted by Ahmed et al., 'To emphasize, we suggest modification of teaching methods in the language which he or she understands and repeat courses stressing on practical skills' [3].

## Challenges and limitations

Our work demonstrated that the cross-language translation process demands a substantial investment of time, financial resources, patience, and a profound understanding of the content, language and culture, which resonates with the literature [25,27]. Specific challenges included coordinating with global researchers in different time zones, continuous and timely access to libraries, digital or otherwise, for literature and dictionaries, availability of electricity and internet in Pakistan, and finding linguistic specialists with authentic translating experience – specifically, prior work with research articles and government/non-government documents as proof of linguistic specialists' proficiency. Limitations include a lack of a local practising simulationist in the team and a potential oversight of cultural nuances; however, due to the project's broad scope and lack of funding, this was beyond our purview.

## Strengths and future implications

A notable strength lies in the translation team members' expertise in simulation, healthcare, translation and bilingual research. Additionally, the method was rooted in evidence and literature, as described earlier. This initiative provides a pathway for more Urdu translations in simulation-related research, contributing to advancing healthcare simulation practices in these communities. To ensure the Code's successful implementation, we recommend establishing training programmes, workshops and educational resources in Urdu that guide the practical application of the Code in simulation-related activities. These activities will enable simulationists who communicate in Urdu to understand and abide by the ethical guidelines while conducting simulation-based activities and decision-making in the simulation field. We anticipate enhanced understanding and compliance with ethical guidelines, professionalism, simulation-based education and practice.

## Conclusion

This paper outlines the translation process, introducing the Code in Urdu and fostering ethical practices among healthcare simulationists in regions where Urdu is the communication language, notably Pakistan. This localized version enhances accessibility and outreach to remote areas and furthers ethically sound simulation-related education, especially to health workers. Through this project, we attempted to bridge the language barrier, paving the way for its wider adoption and implementation in the Pakistani healthcare simulation landscape. This achievement will undoubtedly contribute to the advancement of evidence-based practices and the overall improvement of patient care in Pakistan.

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## Declarations

## Authors' contribution

MB conceived the study and collaborated with MZK on the planning and design. MZK and MB guided the translation process. Both authors conducted analyses of disputed words, engaging in regular meetings with linguistic specialists. MB and MZK jointly authored the manuscript. All authors have followed the instructions for authors and have read and approved the manuscript.

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## Availability of data and materials

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## Ethics approval and consent to participate

None declared.

## Competing interests

There are no conflicts of interest to disclose.

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