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Examining Issues in Translating Qualitative Data in Cross-Cultural Health Science Research Conducted in Malaysia: A Systematic Review

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ABSTRACT

This systematic review examines the complexities involved in translating qualitative data in cross-cultural health science research, with a focus on the challenges faced in Malaysia's multilingual and multicultural context. As globalization continues to shape migration patterns, Malaysia's diverse linguistic landscape poses significant challenges for researchers conducting qualitative health-related studies. The accuracy of data interpretation in such contexts is crucial, as misinterpretations during translation can distort findings and affect outcomes. This study systematically reviews 78 qualitative health research studies conducted in Malaysia between 2022 and 2024. Drawing on a three-level analytical framework — macro, meso, and micro epistemological analysis — the review examines translation practices and their implications for data accuracy and meaning construction. The review finds that 81% of studies employed translation by research teams, with 9% using professional translators. Quality control measures, such as cross-checking or forward/back-translation, were reported in 13% and 9% of studies, respectively. The review also identified gaps in the transparent reporting of translation methods and the absence of participant validation in the translation process. This study emphasises the need for standardised translation practices and greater methodological transparency in qualitative health research. It also proposes practical recommendations, such as early planning for translation, inclusion of bilingual researchers with sociocultural competence, and adoption of rigorous quality control measures to enhance the reliability and trustworthiness of translated qualitative data.

Keywords: translation; qualitative research; health science; cross-cultural; Malaysia

INTRODUCTION

Globalization has reshaped migration patterns, influencing the demographic makeup of countries like Malaysia (Gill, 2013), known for its linguistic and cultural diversity. This diversity presents challenges for the healthcare system, which must address the varied health needs of its multiethnic population. Cross-linguistic and cross-cultural studies are essential in health science research, but language differences often create barriers between researchers and participants. Accurate interpretation is crucial in qualitative research for valid findings and policy development (Hennink et al., 2020), but language differences complicate data collection and interpretation,

potentially undermining findings' trustworthiness (Abfalter, 2021; Squires, 2009; van Nes et al., 2010).

Malaysia, with its multiethnic population speaking Malay, Mandarin, Tamil, and indigenous languages (Gill, 2013), provides an ideal context for studying the complexities of translation in qualitative health research. The multilingual environment presents challenges, especially in the health sciences, where accurate data interpretation is essential (Arunasalam, 2019). Research often involves ethnic minorities and migrant groups with distinct health needs and social contexts (Yunus et al., 2022a). Understanding how language affects data accuracy in Malaysia's health research offers insights applicable to other multilingual, multicultural settings globally (Mohamad Nasri et al., 2021).

Qualitative health research relies on participants' native languages, capturing detailed patient narratives and cultural perceptions of health (Al-Amer et al., 2015; Chen & Boore, 2010). However, translating this data into English for international publication presents challenges beyond simple linguistic conversion. Malaysia's diverse languages carry cultural meanings that may not have direct English equivalents (Lopez et al., 2008). Participants often prefer to communicate in their native languages, while researchers may use a different language or publish findings in English, creating disparities in expression (Temple & Young, 2004). These differences highlight the need for a rigorous translation process to ensure accurate interpretation of participants' experiences (van Nes et al., 2010). Despite its importance, translation remains largely overlooked in qualitative research (Squires, 2009).

While quantitative research has established translation standards, qualitative research, especially in multilingual settings like Malaysia, lacks standardised guidelines. Reporting frameworks like COREQ do not sufficiently address translation challenges, leading to inconsistent transparency and potential credibility issues (Tong et al., 2007; Yunus et al., 2022a). Qualitative data includes narrative and cultural nuances, requiring careful translation between languages (Schumann et al., 2025). The lack of standardised practices complicates cultural interpretation in qualitative health research. Additionally, the absence of clear guidelines has led to varying translation practices. Some studies provide minimal details, while others offer in-depth descriptions, including translator qualifications and validation processes like back-translation (Abfalter et al., 2021; Chen & Boore, 2010). This inconsistency makes it difficult for readers to assess the quality of translations, raising concerns about the trustworthiness of findings. Transparent translation practices are crucial in health sciences, where qualitative data directly impacts medical decisions and patient care outcomes.

While the literature on translation in qualitative research is growing, much of it focuses on quantitative settings or homogeneous linguistic contexts. This leaves a gap in qualitative health research, particularly in diverse and multilingual contexts like Malaysia. This review provides a comprehensive analysis of how translation practices affect qualitative health data interpretation in Malaysia's multicultural and multilingual environment. By reviewing 78 qualitative health studies from 2022 to 2024, the study identifies key translation challenges and evaluates the practices used to address them. The review contributes evidence-based insights into the role of language in shaping qualitative health research outcomes and offers practical recommendations to enhance translation practices, applicable to similar multicultural contexts worldwide.

CONCEPTUAL CLARIFICATION

In cross-linguistic qualitative studies, the term "translation" carries multiple layers of meaning, requiring conceptual clarification. **Translation** refers to language conversion for written text, including transcript, quotation, and code translation. **Interpreting** denotes real-time verbal conversion during data collection, typically mediating interviews; we use "interpreting" rather than "interpretation" to avoid confusion with its epistemological sense. **Interpretation** is an epistemological concept concerning meaning construction during translation and analysis. Translation itself is an interpretive act (Temple & Young, 2004) since language conversion cannot be separated from the translators' understanding and reconstruction of meaning. **Analysis** refers to systematic scholarly processing of data, including coding, theme identification, and theory construction. While analysis operates at the meaning level and translation at the linguistic level, they are fundamentally connected: researchers' decisions about what or when to translate already entail analytical processing. In this review, "translation" broadly encompasses all linguistic conversion acts (including interpreting), though written translation and oral interpreting are discussed separately given their distinct pragmatic and epistemological implications.

OBJECTIVES

This study aims to examine translation practices and their implications for data interpretation and meaning construction in qualitative health research conducted in Malaysia's multilingual context. Specifically, the review seeks to:

1. To identify and describe key translation practices and challenges highlighted in existing qualitative health research conducted in multilingual and multicultural contexts, particularly in Malaysia, and analyse their impact on data interpretation.
2. To identify the current gaps in standardised translation practices within qualitative health research and propose practical recommendations based on a synthesis of existing literature to improve translation accuracy and consistency.

CONCEPTUAL FRAMEWORK

This review adopts a three-level analytical spectrum, including macro, meso, and micro epistemological analysis, to establish a conceptual framework.

Level 1 (Macro): Epistemological positioning. Drawing on Zhao et al. (2025), this level distinguishes between "translation as texts" (treating translation as a standardised, technical process aiming for equivalence and accuracy through methods such as back-translation) and "translation as cultures" (treating translation as a cultural and political act involving language hierarchy, epistemological hegemony, and the reconstruction of cultural meaning). This binary lens examines whether included studies treat translation as a technical issue or a culturally situated practice, revealing an overlooked dimension in current methodology.

Level 2 (Meso): Decision-framework for translation. This level adopts Abfalter et al.'s (2021) seven-dimension framework for cross-cultural qualitative research: why (language requirement for research design), when (translation timing), what (verbatim transcript vs. selected translation), who (translator's role and credential), how (translation method and quality control), where (language direction and context), and by what means (human vs. technology-assisted

translation). Unlike Santos et al.'s (2015) five-stage framework focusing exclusively on translation timing, this framework encompasses all critical decision points in translation. The uneven depth of reporting across these dimensions informs the Level 3 analysis of reporting gaps.

Level 3 (Micro): Reporting transparency. Schumann et al. (2025) identified a significant "iceberg" phenomenon in reporting translation practice: most translation decisions remain unreported, with only a fraction visible in published findings. This level informs the analysis of reporting depth.

From a social constructivist perspective, this review treats translation not as a neutral technical process but as an interpretive act (Temple & Young, 2004). Translation decisions reflect the researcher's epistemological assumptions and power relations. In Malaysia's multilingual setting, the academic dominance of English makes translation not merely linguistic conversion but a constitutive element of knowledge production.

METHODS

SEARCH METHOD

A systematic literature review was conducted using PubMed and CINAHL databases. PubMed was selected as the largest biomedical literature database, indexing journals across medicine, public health, and allied health; CINAHL (Cumulative Index to Nursing and Allied Health Literature) was selected for its targeted coverage of nursing and allied health qualitative research. Together, these databases provide the most comprehensive coverage of health-related qualitative studies involving translation, the specific domain of this review. This review examines translation as reported in published studies rather than analysing source text–translation pairs directly. This methodological choice is justified on three grounds. First, the research questions concern translation practices and reporting patterns across studies — questions that require surveying methodological accounts, not evaluating individual translation quality. Second, source texts and their translations are rarely available in published qualitative research, making primary text comparison infeasible across a sample of this size. Third, this approach follows established precedent in the field (Al-Amer et al., 2015; Squires, 2009), which similarly reviewed reported practices to map the translation landscape. The search period (2022–2024) was delimited for three reasons. First, the COVID-19 pandemic reshaped the linguistic landscape of health research through expanded telehealth, multilingual health communication, and remote interpreting arrangements, and post-2022 studies capture these shifted practices (WHO, 2021). Second, the pandemic generated a surge of qualitative health studies conducted in multilingual settings, providing rich recent data for analysis. Third, whereas earlier reviews have traced the historical evolution of translation practices in cross-language qualitative research (Al-Amer et al., 2015; Squires, 2009), this review focuses on the current landscape and emerging challenges, complementing rather than duplicating prior work.

Relevant keywords, combined with Boolean operators, included terms like *translation*, *qualitative health research*, *multilingual research*, *language barriers*, and *healthcare research translation*, specifically targeting studies conducted in Malaysia or Southeast Asia. Inclusion criteria were studies published in English, focusing on qualitative research conducted in Malaysia that involved translation or was published in English. Quantitative studies and those not addressing translation issues were excluded. Two independent researchers screened titles, keywords, and

abstracts, with disagreements resolved through discussion; a second round of full-text verification was conducted by two additional researchers (Liberati et al., 2009).

The analysis followed a thematic framework approach, with themes derived inductively through repeated reading and coding, then grouped into broader categories reflecting the translation decision dimensions outlined in the Level 2 framework.

SEARCH OUTCOME

A comprehensive initial search of relevant databases identified 265 studies that met the basic inclusion criteria. Two researchers independently reviewed the full text of each study to ensure alignment with selection criteria. After thorough examination, a final set of 78 studies were deemed eligible for inclusion. The exclusion of studies was based on the following reasons: failure to report translation issues, inclusion of protocol articles, quantitative studies, studies using English to collect qualitative data, or studies conducted outside Malaysia. Any discrepancies between the two reviewers were resolved through discussion to ensure consistency and accuracy in the selection process.

RESULTS

OVERVIEW OF INCLUDED STUDIES

This review included 78 qualitative studies conducted in Malaysia between 2022 and 2024. In the 78 studies reviewed, translation practices can be grouped into three main categories: translation methods, translator types, and quality control measures (Figure 1). The analysis focused on these three dimensions as they yielded the most robust and systematic data across the included studies (Figure 1; Table 1). Translation methods refer to the techniques used for translating the collected data into a language that can be analysed. A key method in many studies (22) was multilingual data collection, where data was gathered in languages such as Malay, Mandarin, Tamil, and English and then translated into English for analysis and reporting. Another common method was forward/back translation (seven studies), where data was translated into the target language and then re-translated into the original language by a separate translator to verify accuracy. While this method ensures technical correctness, it may result in overly literal translations that lack contextual nuance. Some studies (nine) employed partial translation, translating only selected quotes for analysis or reporting, which may introduce bias as the selected quotes may not fully represent the entire dataset.

Translator type has been identified as a key factor shaping both the quality and the cultural sensitivity of translated data (Squires, 2009; Temple & Young, 2004). In the present review, the distribution of translator types was as follows. Most studies (63) relied on the research team for translations, including authors, research assistants, or nurses. This approach benefits from the team's familiarity with the research context and health terminology but may introduce bias, as researchers interpret data through their own lens. In contrast, seven studies used professional translators for technical accuracy and to minimise bias. Five studies employed native speakers, offering cultural insights, particularly in translating idiomatic expressions or culture-specific concepts. However, this method can still involve subjective interpretation. Additionally, ten studies used bilingual researchers or assistants to ensure translations were both accurate and culturally appropriate.

To maintain quality control, several studies implemented verification methods. Ten studies used cross-checking and verification, where translations were compared with the original data or checked by another researcher to ensure accuracy. Only one study employed member checking, where participants reviewed translated transcripts to ensure that the translations accurately represented their intended meanings.

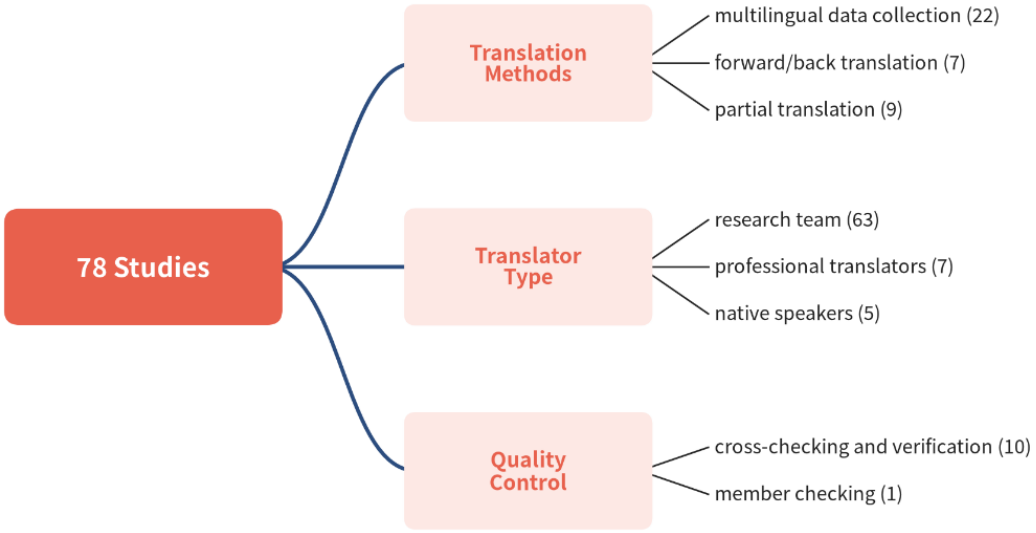

FIGURE 1. Major Categories of Translation Practices

Table 1 shows the distribution of translation-related themes across the 78 studies (some studies appear in multiple categories).

TABLE 1. Distribution of Translation-related Themes

Theme	Sub-Theme	Number of studies	Studies (authors and year)
Translation Methods	Multilingual data collection	22	Rajaratnam 2024; Khoo 2022; Tan 2023; Lee 2022; Goroh 2023; Tok 2023; Wong 2024; Sidek 2022; Yunus 2022b; Muhammed Elamin 2024; Noordin 2023; Djatmika 2024; Teh 2024; Mohamed Hussin 2023; Foley 2024; Danes-Daetz 2024; Yew 2023; Lim 2023; Samsudin 2024; Ang 2024; Lin 2023; Abu Hassan Shaari 2023
	Forward/back-translation	7	Khoo 2022; Salim 2022; Goh 2023; Noorulain 2022; Dahlan 2024; Abdullah 2022; Rani 2022
	Partial translation (only quotes)	9	Goh 2023; Manoharan 2023; Leong 2023; Samsudin 2024; Tok 2023; Ramli 2023; Rambli 2023; Kiew 2022; Naserrudin 2023
Translator Type	Translation by research team	63	Projects where authors, research assistants or nurses performed translation of transcripts or quotes, such as Khoo 2022; Rambli 2023; Goroh 2023; Sidek 2022; Tok 2023; Kiew 2022; Noordin 2023; Goh 2023; Chew 2022; Lim 2023; Samsudin 2024; Ang 2024 among others.
	Translation by professional translator/interpreter	7	Manoharan 2023; Mokhtar 2024; Mohamed Hussin 2023; Danes-Daetz 2024; Yunus 2022b; Foley 2024; Lim 2023
	Translation by native speaker	5	Rambli 2023; Lapchmanan 2024; Danes-Daetz 2024; Abu Hassan Shaari 2023; Noordin 2023

Theme	Sub-Theme	Number of studies	Studies (authors and year)
Quality Control	Cross-checking& Verification	10	Rambli 2023; Leong 2023; Tan 2023; Abd Hadi 2023; Chew 2022; Sulaiman 2024; Teh 2024; Kiew 2022; Lim 2023; Sidek 2022
	Member checking/participant validation	1	Lin 2023

TRANSLATION METHOD-MULTILINGUAL DATA COLLECTION NECESSITATING TRANSLATION

Of the 78 studies, 22 (28%) collected data in more than one language. Interviews were typically conducted in Malay and English; some projects also included Mandarin Chinese, Cantonese, Tamil, Thai, or Arabic (Table 2). Most multilingual projects used bilingual research nurses or investigators to translate between languages during interviews, with full transcripts then translated into English for analysis. For example, Goroh et al. (2023) conducted clinical interviews in Bahasa Melayu and English, with bilingual research nurses translating questions and answers and the first author transcribing and translating the recordings; Tok et al. (2023) collected interviews in English and Malay, translating Malay transcripts into English for reporting; Tan et al. (2023) explored adolescents' experiences in English, Malay, and Chinese, translating Chinese interviews into English for thematic analysis; Foley et al. (2024) addressed Tamil-speaking and Thai-speaking communities respectively.

Translation is necessary when interview languages differ from those used for analysis or publication. In multilingual projects, researchers sometimes analysed transcripts in the original language to preserve nuances but translated selected quotes into English for reporting. For example, Tok et al. (2023) analysed Malay transcripts in Malay and translated only relevant excerpts into English. In other studies, such as Goroh et al. (2023) and Sidek et al. (2022), full transcripts were translated to allow non-source language-speaking team members to participate in coding and collective theme discussions. The linguistic complexity in these cases highlighted the need for translation and an awareness of cultural nuances embedded in each language.

TABLE 2. Languages Used across the Multilingual Projects

Language	Frequency (among 22 multilingual projects)
English	22
Malay	20
Chinese (Mandarin/Cantonese)	4
Arabic	1
Tamil	1
Thai	1

TRANSLATION METHOD-USE OF FORWARD/BACK-TRANSLATION

Seven studies (9%) incorporated forward or back-translation procedures, primarily applied to selected quotes rather than full transcripts. Forward translation involves translating source-language data into the target language, whereas back-translation requires a second translator to translate the text back into the source language to check for equivalence (Maneesriwongul & Dixon, 2004). Examples of this approach include: Salim et al. (2022) used back-to-back translation methods to ensure accurate translation of recorded interviews;

Goh et al. (2023) described a forward and backward translation process, where Malay transcripts were analysed in the source language and quotes translated into English using forward and backward translation to maintain conceptual equivalence; Noorulain et al. (2022) performed forward and backward translations for focus-group discussions conducted in Malay.

Forward/back translation, while recommended in quantitative research, is less common in qualitative studies due to its labour-intensive nature and potential for producing literal translations that lack conceptual nuance. In our dataset, it was primarily applied to specific quotes, not full transcripts. Many researchers may find it too time-consuming for qualitative work. Literature suggests that back-translation can result in word-for-word translations that miss contextual meaning, making it less suitable for qualitative data (Yunus et al., 2022a). However, combining forward translation with consultation or cross-checking can improve both conceptual and technical accuracy.

TRANSLATION METHOD-PARTIAL TRANSLATION VS. FULL TRANSLATION

While most projects translated entire transcripts into English, nine studies (12%) adopted partial translation strategies. These projects either translated only non-English quotes that appeared in the manuscripts or selected quotations for analysis. For example, Samsudin et al. (2024) translated only relevant quotations into English for research purposes; Tok et al. (2023) analysed Malay transcripts in the source language but translated selected interview excerpts into English for reporting; Kiew et al. (2022) translated only the quotation excerpts; the coding was performed in the original language; Naserrudin et al. (2023) translated only the relevant quotes from the Sabah-Malay dialect into English, and a bilingual researcher verified the translations. Partial translation may be employed to reduce the translation workload or preserve the richness of the original data during analysis. However, this limits the ability of non–source language speakers on the research team (or peer reviewers) to engage with the data. Partial translation also makes it difficult to assess whether nuances are consistently interpreted across the datasets.

WHO PERFORMS THE TRANSLATION? TRANSLATION PERFORMED BY THE RESEARCHER

Across the 78 studies, 63 projects (81%) described translation performed by members of the research team rather than by external professionals. This broad category includes authors, research assistants, nurses or graduate students who translated transcripts or quotes into English. In many cases, the first author or another bilingual team member handled the translation because they possessed the linguistic and contextual knowledge required to preserve the meaning. For instance, Goroh et al. (2023) enlisted bilingual research nurses to translate interactions during interviews from English to Bahasa Melayu and back, and the first author translated the complete recordings into English to produce a unified dataset. Samsudin et al. (2024) conducted all interviews in Malay. After transcription, three team members who were fluent in English translated quotations into English for analysis and publication.

Many studies lacked resources to hire professional translators; instead, researchers leveraged their own bilingual abilities or those of team members. For example, Sidek et al. (2022) explained that two bilingual research investigators alternated between the original Malay and translated English transcripts to produce a final version that preserved the participants' intentions. While some bilingual team members translated during or after data collection (Goroh et al., 2023; Sidek et al., 2022), a notable subset provided real-time interpretation during interviews. This practice can

facilitate immediate clarification of meanings but may also introduce interpreter bias if responses are paraphrased rather than translated verbatim. None of the reviewed studies described training or guidelines for real-time interpreters, highlighting a gap in quality assurance. The reliance on in-house translation may reflect a preference for translators who are familiar with the research context and specific terminology used in health sciences. However, it also raises concerns about potential bias; if the same individuals collect, translate and analyse the data, they may inadvertently project their interpretations onto the participants' words.

In these examples, translation was deeply integrated into the research process. Researchers drew on their bilingual skills and contextual knowledge to interpret participants' words, preserving subtle cultural meanings that may have been lost in a literal translation. While translation by the research team ensures closeness to the data, it also raises questions about bias and consistency. Only a minority of the projects explicitly reported that multiple translators were used or that translated texts were cross-checked for accuracy, as discussed later.

WHO PERFORMS THE TRANSLATION? -USE OF PROFESSIONAL TRANSLATORS OR INTERPRETERS

Seven studies (9%) employed professional translators or interpreters at some stage of research. These projects either hired certified translators to translate entire transcripts or engaged professional interpreters during data collection. For example, Mokhtar et al. (2024) conducted focus groups in Malay and English; the Malay responses were translated by a professional translator. Professional translators provide formal language training and certification that can enhance the technical accuracy of translation, but they may lack contextual knowledge of the research setting. Furthermore, employing professional translators often incurs higher costs and logistical complexities. Consequently, most Malaysian health researchers relied on in-house translation.

WHO PERFORMS THE TRANSLATION? -TRANSLATION BY NATIVE SPEAKERS

Five studies (6%) explicitly reported that translation was undertaken by a native speaker of the source language. For example, Rambli et al. (2023) used a researcher who was a native Malay speaker with strong English proficiency to translate interview excerpts, capturing nuances in both languages; Mohd Noordin et al. (2023) noted that interviews in Bahasa Melayu were translated by a native speaker and then checked independently. Translation by native speakers may preserve linguistic subtleties and cultural expressions that non-native translators might misinterpret. However, the native speakers involved were often also members of the research team; therefore, this category overlaps with the translation by the research team. The main distinction is the explicit acknowledgement that the translator is fluent in the source language.

QUALITY CONTROL-CROSS-CHECKING AND VERIFICATION PROCEDURES

Only ten studies (13%) reported explicit cross-checking or verification procedures to ensure translation accuracy. These procedures involved having a second person review the translated transcripts, comparing them with the original language, or consulting an external expert. Examples include Tan et al. (2023) checked all transcripts for accuracy after translating a Chinese interview into English; Kiew et al. (2022) employed two independent translators to cross-check the translation of quotation excerpts. These examples illustrate good practices in translation quality

control; however, only a minority of studies described such procedures. Most projects simply noted that transcripts or quotes were translated without specifying whether cross-checking or verification had occurred. Lack of reporting does not necessarily mean that quality assurance is absent, but it limits the reader's ability to evaluate the trustworthiness of the translated data.

QUALITY CONTROL-MEMBER CHECKING AND PARTICIPANT VALIDATION

Only one study (1%) reported member checking, giving participants the opportunity to review translated transcripts or summaries. Lin et al. (2023) provided initial transcripts to participants so they could verify their answers before translation. This near absence reveals a critical research gap: participants whose data are translated are systematically excluded from verifying whether the translation accurately represents their intended meaning, leaving the trustworthiness of translated data unconfirmed by the very individuals whose experiences it purports to capture. The absence of member checking may reflect logistic constraints or unfamiliarity with this technique, but it also suggests that participant validation is not yet recognised as integral to the translation process in qualitative health research.

OBSERVATIONS ON TRANSLATION CHALLENGES AND REPORTING TRANSPARENCY

Although the dataset does not systematically record translation challenges, several studies mentioned difficulties encountered during translation. Some researchers noted that metaphors, idioms, and culturally specific concepts lack direct English equivalents. For example, Salim et al. (2022) highlighted challenges in translating metaphors and cultural expressions, while Naserrudin et al. (2023) faced difficulties translating Sabah-Malay dialect quotes into English, which were then checked by a bilingual researcher to preserve nuances. Many researchers emphasised the labour-intensive nature of translation and the lack of resources to hire professionals, leading teams to perform translations themselves, despite potential bias. Linguistic borrowing also complicated translation, especially when English medical terms lacked direct Malay equivalents, necessitating paraphrasing. Translation thus involved not only linguistic conversion but also interpretive decisions that shaped the data.

The reporting of translation processes varied greatly across studies. Some studies provided detailed descriptions of translation methods, while others simply stated that the data were translated into English with no elaboration. For instance, Goh et al. (2023) described a forward and backward translation process. However, many studies gave no further details, and only one study (Lin et al., 2023) offered participants the opportunity to validate translated transcripts. This inconsistency in reporting aligns with concerns in the literature that translation processes are often overlooked or inadequately described (Squires, 2009, p. 227). Without specifying who translated the data or how, readers cannot assess the trustworthiness of the findings, a concern that the Level 3 analysis of reporting transparency further addresses.

DISCUSSION

TRANSLATION IS AN INTERPRETIVE ACT

The results of this review underline that translation is ubiquitous in Malaysian health science research. More than one-quarter of the identified studies collected data in multiple languages, and the vast majority translated interview data into English for analysis and dissemination. However, translation is frequently treated as a minor methodological detail rather than an interpretive act that shapes data. Schumann et al. (2025, p. 589) argue that qualitative research recognises language as a "dynamic and influential force that shapes social realities and knowledge creation"; when translation is conducted without reflexivity, non-English-speaking participants' voices risk being marginalised.

Translation is filtered through translators' identities and subjective positioning (Temple & Young, 2004; Yunus et al., 2022a), meaning that the interpretation of participants' experiences is filtered through the translator's contextual experience before being interpreted by the researcher. This multi-layered interpretive process means that translation has the potential to reveal and obscure meaning. Without transparency about the translation decisions made, it is impossible to evaluate the extent to which the translation is faithful to participants' perspectives (Abfalter et al., 2021; Squires, 2009; Temple & Young, 2004).

IMPLICATIONS OF TRANSLATION PATTERNS

The predominance of researcher-translated data reflects both a practical reality — researchers' familiarity with study context and terminology (Abfalter et al., 2021; Squires, 2009) — and a concern: researchers may impose their own interpretations, and many studies did not clarify whether translators had formal training, raising questions about confirmation bias (Temple & Young, 2004). Bilingual team members bridge linguistic and cultural gaps, but their dual roles as researchers and translators can introduce bias (Squires, 2009), underscoring the need for high sociocultural competence (Schumann et al., 2025). Many Malaysian studies did not clarify whether translators had formal training, raising concerns about confirmation bias (Temple & Young, 2004).

The limited use of professional translators and native speakers likely reflects resource constraints rather than methodological preference; while professionals enhance credibility, their translations may miss cultural nuances. Native speakers bring cultural insight but may lack formal training, as shown by Naserrudin et al. (2023), where a native speaker familiar with the Sabah-Malay dialect ensured accurate translations. However, this approach may not always be feasible due to resource constraints. Yunus et al. (2022a) warn that non-professional interpreters, such as relatives, may bring emotional bias and lack proper language skills. Although no studies in our review used family members as interpreters, this highlights the importance of carefully selecting translators.

QUALITY CONTROL, FORWARD/BACK TRANSLATION AND TIMING OF TRANSLATION

Only about 13% of the reviewed studies mentioned any form of quality control, such as cross-checking translations with audio recordings or having a second researcher verify translations. However, rechecking is essential for ensuring accurate meaning (Yunus et al., 2022a). Bilingual researchers or native speakers should compare translations with original data or discuss them with other team members to ensure cultural and conceptual equivalence. Some Malaysian studies used

peer reviews, where a second bilingual researcher cross-checked translations, and others compared translations with audio recordings. However, these practices were not universal, and the lack of systematic quality control weakens the credibility of the data and calls for a more rigorous approach.

Forward and backward translation techniques were used in only seven studies. While back-translation is common in quantitative research (Maneesriwongul & Dixon, 2004, p. 175), it may result in literal translations that miss conceptual nuances (Yunus et al., 2022a). Some Malaysian studies preferred forward translation with bilingual cross-checking, which focuses on meaning and tone. The timing of translation also varied; translating early can engage non-local team members, but delays can limit their participation (Santos et al., 2015; Schumann et al., 2025). Many studies translated interviews after analysis began or translated only selected quotes, which can reduce workload but introduce bias, as partial translation may not represent the full dataset.

Member checking, where participants verify the accuracy of translations, was nearly absent. Only one study reported sharing transcripts with participants before translation. While this practice can ensure translations reflect participants' intended meanings, cultural norms, logistical difficulties, and literacy levels may hinder its adoption. Nevertheless, involving participants in the translation process helps preserve authenticity and enhances trustworthiness (Yunus et al., 2022a).

PRACTICAL BARRIERS AND CONTEXTUAL CHALLENGES

The translation challenges described in Malaysian studies resonate with international discussions. Several projects have reported difficulties translating metaphors, idioms and culturally specific expressions (Salim et al., 2022). Translators sometimes retained original terms or phrases and provided explanatory notes to preserve their nuances. Dialectal variations added complexity: the Sabah-Malay dialect and the mixing of Malay and English required translators familiar with local speech patterns (Naserrudin et al., 2023). Code-switching of participants switching between languages within the same sentence posed another challenge (Sidek et al., 2022). Translators had to decide whether to retain code-switching in the English transcripts or provide single-language equivalents. These challenges illustrate the interpretive nature of translation and the need for cultural and linguistic sensitivity. The literature emphasises that qualitative data collected in participants' native languages preserves the original meaning and contextual nuances (Yunus et al., 2022a). However, when languages do not have direct equivalents, translation often demands creative paraphrasing and negotiation of meaning. These challenges in English–Malay translation are further evidenced by benchmarking studies demonstrating that even advanced AI systems struggle with idiomatic precision and cultural adaptation in this language pair (Sulaiman et al., 2025).

REPORTING PRACTICES AND THE INVISIBILITY OF TRANSLATION

One of the most striking findings of this review was the variability in the reporting of translation practices. Some articles offered detailed accounts of who translated the data, what translation techniques were applied and how translation accuracy was ensured. Others provided only a cursory statement such as "interviews were translated into English," with no further elaboration. This pattern mirrors the "iceberg phenomenon" identified by Schumann et al. (2025, p. 591), where only a small portion of the literature explicitly discusses translation challenges and strategies, whereas a larger body of work mentions translation briefly or not at all. Transparent reporting of

translation processes is essential for readers to appraise the credibility of their findings and to replicate or adapt translation methods in future research (Yunus et al., 2022a).

This lack of detailed reporting is not unique to Malaysia. In a scoping review of international cross-language health research, Squires (2009) found that only six out of forty studies met the recommended translation criteria and that translator roles were often invisible. The COREQ checklist, widely used by journals to ensure comprehensive reporting, does not include specific items on translation (Schumann et al., 2025, p. 592). Consequently, the authors may assume that translation is unimportant or self-explanatory. Our findings underscore the need to revise reporting guidelines to include translation-related considerations (Temple & Young, 2004; Squires, 2009). At a minimum, authors should report the source and target languages, who performed the translation, their qualifications, the translation methods used (e.g., forward/back translation, consultation), quality control measures and any challenges encountered.

RECOMMENDATIONS FOR IMPROVING TRANSLATION PRACTICE

Our synthesis points to several recommendations for researchers conducting multilingual qualitative health research in Malaysia and other similar contexts.

Plan translation early: Decide when translation will occur, who will translate, and how it integrates into data analysis. Early planning allows for proper budgeting and ensures non-local team members can engage with the data (Schumann et al., 2025).

Engage socioculturally competent translators: Translators, whether researchers, bilingual team members, or professionals, should possess cultural knowledge and sociolinguistic competence (Zhao et al., 2025). Collaborating with community-based translators familiar with participants' cultural context can enhance accuracy.

Implement quality control: Translations should be reviewed by a second bilingual researcher and compared with audio recordings or back translated to ensure accuracy (Yunus et al., 2022a).

Balance forward/back translation: A combined forward translation and collaborative discussion is more suitable for qualitative data than full back translation, which may lack nuance. Prioritise conceptual equivalence over verbatim accuracy.

Use member checking: When possible, return translated transcripts to participants for clarification, ensuring that translations reflect their intended meanings.

Transparent reporting: Journals and guidelines should require detailed descriptions of translation processes, including methods, challenges, and rationale behind decisions (Yunus et al., 2022a).

Allocate resources: Recognise translation as a legitimate research cost and allocate funding for professional translators or bilingual researchers to work collaboratively.

STRUCTURAL FACTORS SHAPING TRANSLATION PRACTICES

Current translation practice is not purely a methodological choice but is shaped by institutional constraints, academic norms, and publishing pressures.

The scholarly evaluation system in Malaysia encourages researchers to publish their findings in English. In the academic promotion and assessment systems of public universities in Malaysia, publishing in international journals, especially in journals indexed by Scopus and Web of Science, matters significantly (Gill, 2013). This institutional incentive has driven a fundamental

transformation: researchers must translate non-English qualitative data into English for publication. The 78 included studies were published in English-language journals, which demonstrates a driving force for translation that derives not from methodological requirements but from institutional factors. Budget constraints are another potential factor. Fees for professional translation are more likely to exceed the research budget, especially when multiple languages are involved. This review found that 81% of studies still relied on translation by research team members, which may suggest that this choice is driven more by financial pressure than by methodological preference.

Health science has long been influenced by the positivist paradigm, considering translation as a technical step rather than an interpretive act. This subject-related culture may result in two consequences. One is that researchers tend to describe translation procedures in the methods section (e.g., "translation is conducted by bilingual researchers and checked by back-translation"), instead of offering a reflexive discussion of the potential implications of translation choices for data. Also, the reporting of translation practice lacks institutional incentives since common guidelines, such as COREQ, seldom clarify translation-related criteria (Schumann et al., 2025; Tong et al., 2007), making reporting on this issue optional.

Ethics review processes provide another potential factor: ethics committees pay more attention to the translation quality of informed consent forms to ensure participants' understanding, but insufficient attention to the translation of qualitative data. This asymmetrical oversight also reinforces the conceptualisation of translation as a merely technical step.

English as academic lingua franca orients translation toward the purpose of academic publishing rather than methodological rigour. The purpose of translation becomes producing academically qualified text rather than preserving the subtle cultural nuances of the source language. The loss of cultural nuances in translation is a systematic issue, which is also reflected in academic translation. Publishing pressure may also affect the choice of translation timing: researchers may tend to choose early translation (translating verbatim transcripts during the data preparation phase) to expedite analysis and manuscript preparation. These three factors are interconnected and mutually reinforcing.

IMPLICATIONS FOR FUTURE RESEARCH

Our review suggests several avenues for future research. First, empirical studies are needed to examine how different translation strategies affect qualitative data analysis and interpretation, and to assess the trade-offs between cost, accuracy, and depth. Second, research should explore the impact of translator training and sociolinguistic competence on translation quality. Third, the role of participant involvement in translation, such as member checking and participatory translation, should be investigated to enable co-construction of meaning and correction of misinterpretations. Fourth, context-specific guidelines for cross-language qualitative research are needed, as existing frameworks like COREQ do not sufficiently address translation. Fifth, cross-national comparisons could offer insights into how translation practices vary in different linguistic and cultural settings. Finally, institutional reform warrants investigation: reconfiguring academic evaluation systems to value multilingual scholarship, extending ethics review to cover qualitative data translation, and revising reporting guidelines to mandate translation transparency would address the structural barriers identified in this review. The challenges documented here extend beyond Malaysia; as cross-cultural research grows, robust translation methodologies are essential to accurately

represent participants' perspectives and ensure the trustworthiness of findings, particularly in health research where they impact policy and patient care.

LIMITATIONS

This review has several limitations. Firstly, it focused on qualitative health science studies published between 2022 and 2024 in Malaysia, which may not capture translation practices in other regions or earlier periods; the three-year timeframe precludes comparison of practices across different periods, limiting the ability to identify historical trends. Secondly, our analysis relied on published descriptions. When authors did not report translation procedures, we could not infer the actual practices. Consequently, this review may not fully capture the extent of translation issues in unpublished or grey literature. These factors may limit the generalizability of the findings and suggest the need for further research that includes a broader range of studies, including unpublished works, to gain a more comprehensive understanding of translation practices in qualitative health research. Additionally, some misclassification may have occurred because we categorised translation strategies based on limited information. We did not contact authors for clarification, and we did not evaluate the quality of the translated data or outcomes. Nonetheless, our review provides a comprehensive overview of current translation practices and challenges in Malaysian health research.

CONCLUSION

This review examined translation practices in 78 qualitative health-science studies conducted in Malaysia from 2022 to 2024. Multilingual data collection was common, with nearly one-quarter of studies gathering data in two or more languages. Most studies translated interview transcripts into English, usually done by research team members, with limited involvement of professional translators or native speakers. Quality control measures, such as cross-checking translations, were used in only a few studies, and forward/back translation techniques were rarely employed. Bilingual researchers provided real-time interpretation in only a handful of studies, and member checking was virtually absent.

The literature emphasises that translation is not merely a technical task but an interpretive act that shapes qualitative data (Schumann et al., 2025). Without careful attention to cultural and linguistic nuances, participants' meanings may be distorted. Our findings show that Malaysian health researchers face challenges similar to those discussed in international research. The reliance on research team translations reflects practical constraints and the multilingual competence of local researchers but raises concerns about bias and lack of independent verification. The limited use of professional translators is likely due to cost and the belief that domain expertise is more important than linguistic expertise. However, as Yunus et al. (2022a) note, translation must consider both language and cultural context. While bilingual researchers and native speakers can serve as cultural brokers, they still need quality control and reflexivity to ensure trustworthy translations.

This review reveals that translation in Malaysian qualitative health research is ubiquitous yet largely unexamined: most studies relied on team members without independent verification, quality control was rarely reported, and member checking was virtually absent. These patterns reflect not merely methodological oversight but structural forces — institutional publishing incentives, positivist disciplinary norms, and asymmetrical ethics oversight — that position

translation as a technical step rather than an interpretive act. By integrating a three-level analytical framework with the Abfalter et al. (2021) decision dimensions, this review provides a structured lens for identifying reporting gaps and evaluating translation decisions. The findings call for a shift from ad hoc translation practice toward deliberate, transparent, and reflexively grounded approaches that honour the epistemological significance of translation in multilingual qualitative research.

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