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A METHODOLOGICAL FRAMEWORK FOR THE CROSS-CULTURAL ADAPTATION AND VALIDATION OF CANCER QUALITY-OF-LIFE INSTRUMENTS IN NIGERIA: LESSONS FROM MALAYSIA

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ABSTRACT
Nigeria recorded about 152,000 new cancer cases and 91,000 cancer deaths in 2022, yet health-related quality of life is rarely measured in its three major languages where validated patient-reported outcome measures are few and mostly outside cancer care. This methodological review derives from a completed Malaysian programme a framework for adapting and validating the European Organisation for Research and Treatment of Cancer (EORTC) core questionnaire (QLQ-C30) and its disease-specific modules. All six publications of the author's programme (2012–2023) were included by design: a protocol with pilot data, four validation papers on the QLQ-C30 and colorectal module (QLQ-CR29) drawn from two samples, Bahasa Malaysia (n=93) and Chinese (n=96), and an applied study (n=324) whose participants may overlap with them. Extracted data were organised into seven pre-defined stages, mapped to EORTC translation guidance and COSMIN measurement standards and compared with African studies from a documented targeted search. The framework stages are instrument selection; EORTC-coordinated translation; piloting in 10–15 patients per language; at least 100 patients per language; interviewer-supported fieldwork; psychometric analysis, including factor and cross-language item analysis; and application. Three weak points recurred in both Malaysian languages: low reliability of the cognitive functioning scale (α=0.12–0.56), poor reliability of gastrointestinal scales in patients with a stoma (α=0.46–0.63), and misfit of the self-care item. The first also occurred in Uganda and Ethiopia. These may partly reflect instrument properties rather than translation failure and should be anticipated and examined. Nigeria can adapt an established method rather than develop one anew.

Keywords: Cancer; Hausa; Igbo; Yoruba; Cross-cultural validation; Nigeria; Quality of life

INTRODUCTION
Cancer outcomes research has historically centred on survival, which says little about how patients experience treatment, recovery, and survivorship. Health-related quality of life (HRQOL) is now a standard complementary outcome in oncology, largely through the European Organisation for Research and Treatment of Cancer (EORTC) core questionnaire (QLQ-C30) and its disease-specific modules (Aaronson *et al.,* 1993; Whistance *et al.,* 2009). The QLQ-C30 has been translated into more than 60 languages through a standardised EORTC procedure (Koller *et al.,* 2007).

Need is growing fast where measurement capacity is weakest. About 20 million new cancer cases and 9.7 million cancer deaths occurred worldwide in 2022 (Bray *et al.,* 2024), and cancer deaths in sub-Saharan Africa are projected to approach one million a year by 2030 (Ngwa *et al.,* 2022). Nigeria recorded 152,261 new cases and 90,795 deaths in 2022, with breast, prostate, cervical, and colorectal cancers the commonest sites (IARC, 2024). Its National Strategic Cancer Control Plan 2023–2027 and National Cancer Research Agenda 2024–2028 include support and care, and research among their pillars (Federal Ministry of Health, 2023).

Yet validated instruments in the languages most Nigerian patients speak are scarce. Nigeria has more than 500 languages (Heine *et al.,* 2021). A scoping review of patient-reported outcome measures (PROMs) in 32 sub-Saharan African languages found 126 instruments, with Yoruba among the better-served languages but none for ten of the languages studied (van Zyl *et al.,* 2023). Nigerian-language validations exist mainly outside oncology, including the Yoruba SF-36 (Mbada *et al.,* 2015), the Hausa and Igbo Stroke-Specific Quality of Life Scales (Odetunde *et al.,* 2018, 2020), and Hausa and Igbo back-pain questionnaires (Ibrahim *et al.,* 2021; Igwesi-Chidobe *et al.,* 2019). In cancer, a Yoruba translation of the EORTC QLQ-BR23 served as comparator in the Yoruba validation of the BREAST-Q mastectomy module, described as the first post-mastectomy PROM in any Nigerian language (Olasehinde *et al.,* 2024). Recent Nigerian cancer studies continue to use EORTC instruments without reporting a validated local-language version (Isah *et al.,* 2024), and an African review of post-mastectomy quality-of-life tools found translation work in only a few African languages, notably Arabic and Yoruba (Harerimana and Mchunu, 2025). Taking together, these studies show three things. First, standard translation and psychometric testing are feasible in all three languages, with acceptable reliability reported in each. Second, the evidence is fragmented: each study addresses a single instrument in a single language, mostly outside cancer, and the studies used different procedures, so their results cannot be compared across languages. Third, no study identified for this review reports a full psychometric validation of

the EORTC QLQ-C30 or a disease-specific EORTC module in Hausa, Igbo, or Yoruba. The gap is therefore not a lack of local capability but a lack of a common, cancer-specific protocol. A questionnaire that has not been validated in the respondent's language may produce numbers that look precise but are of uncertain meaning.

Malaysia faced a comparable gap in the early 2010s. A Malay QLQ-C30 had been tested in breast cancer (Yusoff *et al.*, 2010), but no colorectal cancer-specific HRQOL instrument had been validated in any Malaysian language. A University of Malaya programme led by the present author published a protocol (Magaji *et al.*, 2012), validated the QLQ-C30 and colorectal module QLQ-CR29 in Bahasa Malaysia (Magaji *et al.*, 2015a, 2020) and Malaysian Chinese (Magaji *et al.*, 2015b, 2023), and applied them to describe HRQOL among colorectal cancer patients (Magaji *et al.*, 2019). Shared multilingualism alone does not make this experience transferable. Four further features do. First, both countries pair an official language of clinical care with large ethnolinguistic groups who are often more comfortable in their own language, so each instrument must work in several languages within the same hospitals. Second, the Malaysian work was done in tertiary teaching hospitals without an existing local PROM infrastructure, the setting in which Nigerian oncology care is also concentrated (Ngwa *et al.*, 2022). Third, it used the same EORTC instruments and translation procedures that any Nigerian validation must follow. Fourth, it applied one analytic plan across languages and reported its shortfalls, so its lessons can be checked rather than assumed. Important differences remain, including lower literacy in indigenous-language scripts, greater dialectal variation, and fewer resources in Nigeria; these are addressed explicitly in each stage, and transferability is treated as a working hypothesis to be tested rather than a given.

The framework draws on two sets of standards that serve different functions. EORTC guidance governs how EORTC instruments are translated and linguistically adapted, and its procedure is required for any new language version (Kuliś *et al.*, 2017). COSMIN standards specify which measurement properties should be evaluated, with what designs and sample sizes, and how the quality of that evidence should be judged (Mokkink *et al.*, 2018; Prinsen *et al.*, 2018). The two are complementary, not interchangeable: an EORTC-approved translation is linguistically sound but not yet shown to be reliable or valid, whereas COSMIN criteria presuppose an instrument that has already been properly translated. The framework therefore places EORTC procedures at the translation and pilot stages, and COSMIN criteria at the sample-size and psychometric stages, so that each language version passes through both in sequence. The objective of this paper is to extract from the Malaysian programme a transferable framework for validating EORTC instruments in Hausa, Igbo, and Yoruba, updated against current EORTC guidance, COSMIN standards, and recent African EORTC validations (Ayana *et al.*, 2016; Gadisa *et al.*, 2019; Naamala *et al.*, 2021). Combining these standards is already recommended practice and is not itself claimed as novel; the contribution of this paper lies in operationalising them for Nigerian cancer research, using the documented successes and shortfalls of a completed programme to specify decisions, thresholds, and expected difficulties in advance.

MATERIALS AND METHODS

This is a methodological review: a structured narrative synthesis of one complete validation programme, used to derive a staged framework. It is not a systematic review, but the selection of sources, the extraction and synthesis procedure, and the supporting literature search are reported below so that readers can judge the evidence base and the potential for selection bias.

Source publications were identified from the author's publication record and checked against a PubMed and Google Scholar search on the programme's protocol title and author names. All six peer-reviewed publications arising from the programme were included by design, without further eligibility screening; conference abstracts and the doctoral thesis were excluded to avoid duplicate reporting of the same data. The sources were a protocol reporting pilot findings from 10 patients per language (Magaji *et al.*, 2012); four validation papers on the QLQ-C30 and QLQ-CR29 (Magaji *et al.*, 2015a, 2015b, 2020, 2023), based on two language-specific samples, Bahasa Malaysia (n=93) and Malaysian Chinese (n=96), in which each patient completed both instruments; the four papers therefore represent 189 unique participants, not four independent samples; and an applied cross-sectional study (n=324) (Magaji *et al.*, 2019), recruited from the same clinical population, which may include participants from the validation samples. Sample sizes are therefore reported per publication and are not summed, and pilot data are used only descriptively. The programme was chosen because it is complete, multi-language, and multi-instrument, and because every validation paper applied the same pre-specified analytic plan.

The seven stages were defined before extraction, following the sequence of the EORTC translation procedure (Kuliś *et al.*, 2017) and the COSMIN approach to evaluating measurement properties (Mokkink *et al.*, 2018; Prinsen *et al.*, 2018): instrument selection, translation, pilot testing, sample size planning, fieldwork, psychometric analysis, and application. They were retained after extraction because every extracted item could be assigned to one of them. Using a structured form, instrument-selection rationale, translation procedure, pilot decisions, target and achieved sample sizes, fieldwork procedures, psychometric methods and results, and stated limitations were extracted from each publication and assigned to a stage. For each stage, the synthesis recorded what the Malaysian programme did, the lesson it offers, and the adaptation needed for Nigeria. Adaptations were derived by comparing the Malaysian practice with (i) current EORTC and COSMIN requirements, (ii) the African evidence described below, and (iii) Nigerian conditions documented in national cancer policy and the Lancet

Oncology Commission on cancer in sub-Saharan Africa (Ngwa *et al.*, 2022; Federal Ministry of Health, 2023).

The supporting evidence came from a targeted, non-systematic search of PubMed, African Journals Online, and Google Scholar, from inception to October 2026, with publisher databases reached through reference lists. Search terms combined instrument terms ("EORTC", "QLQ-C30", "quality of life", "patient-reported outcome") with validation terms ("validation", "psychometric", "translation", "cross-cultural adaptation") and language or setting terms ("Nigeria", "Hausa", "Igbo", "Yoruba", "Africa", and names of sub-Saharan African countries). Studies were eligible if they reported the translation or psychometric evaluation of any PROM in Hausa, Igbo, or Yoruba, or of an EORTC instrument in a sub-Saharan African language or population; only English-language reports were included. The author screened titles, abstracts, and full texts, and hand-searched the reference lists of included studies and of a scoping review of African-language PROMs (van Zyl *et al.*, 2023). African EORTC validations were used for comparison when they reported scale-level internal consistency for the QLQ-C30, allowing direct comparison with the Malaysian results.

The author led the source programme, which creates a risk of favourable interpretation. Three safeguards were used: shortfalls are reported alongside successes; all quantitative results were taken from the published papers rather than from unpublished data or recollection; and recurring weak points are compared with independent studies. These safeguards reduce but do not eliminate the risk. No second reviewer independently checked the extraction, stage assignments, or interpretation, and this is acknowledged as a limitation.

RESULTS AND DISCUSSION

Overview of the Malaysian Programme

The protocol planned three hospitals, three languages (Bahasa Malaysia, Chinese, Tamil), three instruments (QLQ-C30, QLQ-CR29, liver-metastasis module QLQ-LMC21), and eight clinical subgroups (Magaji *et al.*, 2012). Piloting in 10 patients per language showed that the Tamil arm and QLQ-LMC21 could not reach adequate samples; both were dropped. The four validation papers then applied an identical analytic template: internal consistency, test-retest reliability, multi-trait scaling, and known-groups comparison by stoma status and Karnofsky Performance Scale (KPS) (Magaji *et al.*, 2015a, 2015b, 2020, 2023). This consistency, with the analytic plan fixed once in the protocol, is what makes cross-language comparison possible. The programme sat within wider colorectal cancer research at the same centre, including descriptive epidemiology and survival analyses (Magaji *et al.*, 2014, 2017). The applied study identified markedly low sexual functioning and ethnicity as the only independent predictor of global health status (Magaji *et al.*, 2019).

Stage One: Instrument Selection

The Malaysian team selected instruments that were available from the developer, previously validated, and not clearly inferior to alternatives (Magaji *et al.*, 2012). For Nigeria, the QLQ-C30 should be the core instrument, with a module matched to the national burden: the QLQ-BR45 for breast cancer (Bjelic-Radisic *et al.*, 2020), the commonest Nigerian cancer (IARC, 2024), the QLQ-PR25 for prostate cancer (van Andel *et al.*, 2008), the QLQ-CX24 for cervical cancer (Greimel *et al.*, 2006), or the QLQ-CR29 for colorectal cancer, whose international evidence base remains limited (van der Hout *et al.*, 2019). The full item set should be retained until validation is complete, and a clinician-rated performance measure (KPS or ECOG) included from the outset for known-groups testing.

Stage Two: Translation

The Malaysian team used an existing EORTC Bahasa Malaysia QLQ-C30 and commissioned EORTC-guided translation of the QLQ-CR29 (Magaji *et al.*, 2015a). Current EORTC procedure requires two forward translations, reconciliation, two back translations, proofreading, and pilot testing, coordinated by the EORTC Translation Unit (Kuliś *et al.*, 2017), consistent with wider cross-cultural adaptation guidance (Beaton *et al.*, 2000; Wild *et al.*, 2005). Nigerian teams should contact the EORTC first, since a Yoruba QLQ-BR23 already exists (Olasehinde *et al.*, 2024); agree a reference variety for each language (for example, Standard Hausa, Standard Yoruba, and Standard Igbo); and prepare an approved oral script for patients who cannot read the indigenous-language script. Malaysian patients struggled to distinguish the global quality-of-life and health items and found sexual items uncomfortable (Magaji *et al.*, 2012); similar friction should be anticipated. Cultural adaptation can also be needed for items without local equivalents, as in the Igbo Fear Avoidance Beliefs Questionnaire (Igwesi-Chidobe *et al.*, 2019).

Stage Three: Pilot Testing

Pilot testing should involve 10–15 patients per language (Kuliś *et al.*, 2017), with debriefing on acceptability, clarity, completeness, linguistic clarity, spontaneity, and practicality, as in Malaysia (Magaji *et al.*, 2012). Debriefing should prove difficulty, confusion, distressing items, and how patients would phrase each question themselves. The pilot should be a decision point: in Malaysia it ended two planned arms before costly main-study failure (Magaji *et al.*, 2012), and a Nigerian programme attempting three languages at once should not assume all will prove equally feasible at every site; recruitment thresholds that trigger dropping or deferring a language arm should be set in advance and acted on. Timing and setting matter too; Malaysian patients disliked completing questionnaires after consultation, so administration moved to the waiting period (Magaji *et al.*, 2012).

Stage Four: Sample size Planning

The Malaysian protocol targeted ten subjects per item (300 for the QLQ-CR29) (Magaji *et al.*, 2012) but achieved 93–96 patients per language (Magaji *et al.*, 2015a, 2015b). Under COSMIN, evidence from fewer

than 100 participants are downgraded for imprecision (Prinsen *et al.*, 2018). Nigerian protocols should therefore plan for at least 100 patients per language and instrument, recruit across the North, South-West, and South-East, include a test-retest subsample of 50 or more, compared with 30 in Malaysia (Magaji *et al.*, 2015b), and oversample small known-groups subgroups such as patients with a stoma (Magaji *et al.*, 2015a). Target and achieved samples should both be reported, as the Malaysian papers did; the latter applied study reached 324 patients because it did not need pilot, test-retest, and stratified subsamples from the same patient pool (Magaji *et al.*, 2019).

Stage Five: Fieldwork

Malaysian patients self-completed questionnaires with a research assistant present, and surgeons scored KPS independently (Magaji *et al.*, 2012, 2015a). Self-administration protects privacy for sensitive items, while interviewer presence improves completion (Magaji *et al.*, 2012). Independent clinician scoring is what makes known-groups analysis meaningful. Research assistants were selected for defined language competence, with two per language in the applied study (Magaji *et al.*, 2012, 2019). In Nigeria, many patients will need interviewer administration; the mode should be recorded for every patient, items read verbatim, and gender-concordant interviewers offered for sexual-function items. Telephone administration, used successfully in the Malaysian applied study (Magaji *et al.*, 2019), is a lower-cost option once instruments are validated.

Stage Six: Psychometric Analysis

Three weak points recurred in both Malaysian languages (Table 1). The two-item cognitive functioning scale had low internal consistency (α=0.12–0.32 in Chinese (Magaji *et al.*, 2015b); 0.51–0.56 in Malay (Magaji *et al.*, 2020), a pattern since reported in Uganda (α=0.50–0.66) (Naamala *et al.*, 2021) and Ethiopia (α=0.29 and 0.52) (Ayana *et al.*, 2016; Gadisa *et al.*, 2019). Gastrointestinal QLQ-CR29 scales were unreliable in patients with a stoma (α=0.46–0.63) (Magaji *et al.*, 2015a, 2023). QLQ-C30 item 5 (need help with eating, dressing, or washing) correlated more with role and social functioning than with physical functioning (Magaji *et al.*, 2015b, 2020). Because the same patterns appeared in two languages and, for the cognitive scale, in independent African studies, they may partly reflect properties of the instruments, such as the low reliability expected of two-item scales, rather than translation problems alone. This remains an interpretation, not an established cause. Nigerian studies should pre-specify these weak points as possible findings and examine them, for example through cognitive debriefing and item-level analysis, rather than attribute them automatically either to translation failure or to the instruments.

Test-retest reliability in Malaysia used Pearson or intraclass correlation with r≥0.50 over 1–2 weeks; appetite loss, anxiety, urinary frequency, and stoma-care items were repeatedly the weakest, plausibly because these symptoms genuinely fluctuate (Magaji *et al.*, 2015a, 2020, 2023). Nigerian studies should keep the retest window but use the intraclass correlation coefficient (two-way, absolute agreement) (Koo and Li, 2016) against a 0.70 threshold (Terwee *et al.*, 2007). In multi-trait scaling (convergent r≥0.40), all four multi-item QLQ-CR29 scales met convergent and discriminant criteria in both languages (Magaji *et al.*, 2015a, 2023), while item 5 was the recurring QLQ-C30 exception (Magaji *et al.*, 2015b, 2020). Full correlation matrices should be published, as the Malaysian papers did (Magaji *et al.*, 2015a); summary pass/fail statements prevent later cross-language synthesis. Stoma status discriminated consistently in known-groups analyses, with worse blood-and-mucus, flatulence, incontinence, sore-skin, and embarrassment scores among patients with a stoma (Magaji *et al.*, 2015a, 2023), whereas KPS did not, probably because of ceiling effects in outpatient samples (Magaji *et al.*, 2015a, 2015b); this should be stated as an expectation in Nigerian protocols. Three analyses absent from the Malaysian programme should be added: confirmatory factor analysis, including the QLQ-C30 summary-score model (Giesinger *et al.*, 2016); differential item functioning across Hausa, Igbo, and Yoruba, since EORTC work found item-level differences in every European translation tested (Scott *et al.*, 2006) and larger cross-cultural differences in some world regions (Scott *et al.*, 2007); and floor and ceiling effects (Terwee *et al.*, 2007).

Stage Seven: Application

Validation pays off through the findings it enables. In Malaysia, the domain patients found hardest to answer at pilot stage, sexual functioning, proved markedly impaired in both sexes, and Chinese patients reported poorer HRQOL than Malay or Indian patients across nearly every domain, a difference unexplained by clinical or socio-demographic variables (Magaji *et al.*, 2019). Nigerian applied studies could compare HRQOL across ethnolinguistic groups once measurement invariance is established, test whether low sexual functioning recurs, and examine whether stoma status independently predicts global quality of life in an adequately powered sample, since the Malaysian stoma subgroup was only about 10% of patients (Magaji *et al.*, 2019). They should use published thresholds for clinically important problems (Giesinger *et al.*, 2020) and evidence-based guidance on meaningful differences (Cocks *et al.*, 2011), and trials should follow SPIRIT-PRO (Calvert *et al.*, 2018). Table 2 summarises the seven stages.

Table 1: Recurring psychometric weak points in the Malaysian programme and independent evidence[a]

Weak point	Malaysian findings	Independent evidence	Handling in Nigeria
Cognitive functioning scale, low α	α=0.12–0.32 (Chinese) (Magaji *et al.*, 2015b); 0.51–0.56 (Malay) (Magaji *et al.*, 2020)	Uganda α=0.50–0.66 (Naamala *et al.*, 2021); Ethiopia α=0.29 (Ayana *et al.*, 2016), 0.52 (Gadisa *et al.*, 2019)	Pre-specify as anticipated; do not modify items
GI scales in stoma patients, low α	α=0.46–0.49 (Malay) (Magaji *et al.*, 2015a); 0.46–0.63 (Chinese) (Magaji *et al.*, 2023)	QLQ-CR29 evidence limited (van der Hout *et al.*, 2019)	Report by stoma subgroup; oversample
QLQ-C30 item 5 misfit	Higher correlation with role/social than physical functioning (Magaji *et al.*, 2015b, 2020)	Item misfit in physical functioning, Ethiopia (Ayana *et al.*, 2016)	Publish full item–scale matrix; test with CFA
KPS known-groups, weak	Few or no differences; ceiling effect (Magaji *et al.*, 2015a, 2015b)	—	State a priori; recruit across performance range

[a]GI, gastrointestinal; KPS, Karnofsky Performance Scale; CFA, confirmatory factor analysis

Table 2: Seven-stage framework for validating EORTC instruments in Hausa, Igbo, and Yoruba[a]

Stage	Malaysian lesson	Nigerian application
1. Instrument selection	Availability, prior validation, no superior alternative (Magaji *et al.*, 2012)	QLQ-C30 plus burden-matched module; performance measure
2. Translation	Friction at global QOL and sexual items (Magaji *et al.*, 2012)	EORTC-coordinated; reference dialect; oral script (Kuliś *et al.*, 2017)
3. Pilot testing	Drop infeasible arms early (Magaji *et al.*, 2012)	10–15 per language; preset thresholds
4. Sample size	Targets not achieved (Magaji *et al.*, 2015a, 2015b)	≥100 per language; test-retest ≥50 (Prinsen *et al.*, 2018)
5. Fieldwork	Setting affects experience (Magaji *et al.*, 2012)	Record mode; language-matched interviewers
6. Psychometrics	Four recurrent weak points (Table 1)	Add CFA, DIF, floor/ceiling; COSMIN (Mokkink *et al.*, 2018)
7. Application	Sexual function, ethnicity findings (Magaji *et al.*, 2019)	Invariance before comparison; thresholds (Giesinger *et al.*, 2020)

[a]EORTC, European Organisation for Research and Treatment of Cancer; QOL, quality of life; CFA, confirmatory factor analysis; DIF, DIFferential item functioning; COSMIN, COnsensus-based Standards for the selection of health Measurement INstruments

Implications for Nigeria

This review shows that a complete, transparently reported template for multi-language cancer HRQOL validation already exists. Nigeria's problem, a linguistically diverse population with few validated cancer PROMs and a rising cancer burden, is not new. The Malaysian programme addressed a comparable problem and left a documented and partly imperfect record. That imperfection is useful: because shortfalls were reported across several papers, difficulties that may reflect the instruments can be distinguished, at least provisionally, from those specific to one translation. Independent African evidence is consistent with this reading for the cognitive functioning scale (Ayana *et al.*, 2016; Gadisa *et al.*, 2019; Naamala *et al.*, 2021), and a systematic review has found QLQ-CR29 evidence limited across settings (van der Hout *et al.*, 2019).

Four Nigerian features go beyond the Malaysian experience. First, dialectal variation within each of Hausa, Igbo, and Yoruba means one translation must be acceptable to speakers of several varieties, so the reference variety should be chosen deliberately and tested. Second, literacy in indigenous-language scripts is often lower than spoken fluency, so interviewer administration will be commoner than in Malaysia and its effect must be documented. Third, sensitivity around sexual, bowel, and emotional items may be greater, and religious and family roles may shape how patients interpret role and social functioning items. Fourth, late presentation, concentration of oncology care in tertiary centres, and out-of-pocket costs (Ngwa *et al.*, 2022) will affect who can be recruited and may skew samples towards patients able to reach and pay for care. Existing Nigerian-language PROMs nonetheless show that acceptable reliability is achievable: α=0.71–0.90 and

intraclass correlation 0.86–0.99 for the Hausa stroke scale (Odetunde *et al.*, 2018), α=0.79 for the Hausa back-beliefs questionnaire (Ibrahim *et al.*, 2021), α=0.80–0.86 for the Igbo fear-avoidance questionnaire (Igwesi-Chidobe *et al.*, 2019), and test-retest intraclass correlation of 0.64–0.84 for Yoruba SF-36 scales in more than 1,000 participants (Mbada *et al.*, 2015). The Yoruba BREAST-Q work shows that formal cancer PROM validation in a Nigerian language is achievable (Olasehinde *et al.*, 2024); a common protocol would let such efforts produce comparable rather than isolated evidence. Dialect choice, oral administration, and interviewer gender should therefore be treated as protocol decisions, not field improvisations.

A Nigerian programme validating the QLQ-C30 and one module in three languages could yield a protocol, up to six validation papers, a cross-language invariance paper, and applied studies, and would give the national cancer research agenda (Federal Ministry of Health, 2023), cancer registries, and future trials a common patient-centred outcome. The Malaysian programme produced six citable papers from two instruments in two languages; the same structure applied to three Nigerian languages would build durable research capacity as well as instruments. Its main requirements are organisational: a multi-site consortium across the three language regions, early EORTC engagement, trained language-matched staff, and funding for translation, piloting, and test-retest work.

Strengths and Limitations

This synthesis draws on a single programme led by the author, which may bias interpretation. Extraction, stage assignment, and literature screening were done by the author alone, without independent checking by a second reviewer; the Malaysian samples fell short of their own targets, partly overlapped across publications, and lacked structural validity and invariance analyses; and the supporting search was targeted rather than exhaustive and limited to English-language reports. Nigerian-language cancer PROM work in non-indexed outlets may have been missed. The transferability of lessons from Malaysia to Nigeria is argued rather than demonstrated, and some Malaysian findings may not recur in Nigerian settings. Its strength is that one analytic plan was applied to two instruments in two languages, allowing recurring weak points to be distinguished from translation-specific ones. The framework has yet to be tested in Nigeria; independent replication of this synthesis and a multi-site pilot application would strengthen it.

CONCLUSION

Nigeria does not need to invent a methodology for validating cancer quality-of-life instruments in its indigenous languages. The seven-stage framework presented here, aligned with current EORTC and COSMIN standards, offers Nigerian researchers a documented route for Hausa, Igbo, and Yoruba validation of the EORTC QLQ-C30 and disease-specific modules, with likely difficulties flagged in advance. Closing the gap is a matter of executing a known method with adequate resources. The following are recommended:

1. Researchers planning Hausa, Igbo, or Yoruba validation should contact the EORTC Quality of Life Group before any translation work and adopt its coordinated translation procedure.
2. A multi-site Nigerian consortium spanning the North, South-West, and South-East should run one common protocol, with at least 100 patients per language and instrument.
3. Protocols should pre-specify the recurrent weak points identified here, add structural validity and cross-language differential item functioning analyses, and publish full correlation matrices.
4. Breast cancer, the commonest cancer in Nigeria, should be prioritised for the first disease-specific module, followed by prostate, cervical, and colorectal cancers.
5. Funders, including those supporting the National Cancer Research Agenda, should budget for translation, piloting, and test-retest work, not only the main survey.

Conflict of interest: The authors declare no conflict of interest.

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