

Understanding Gendered Language in Health Promotion Materials Across Dialects

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ABSTRACT—Health promotion materials—posters, radio spots, SMS reminders, clinic leaflets, and social media tiles—are designed to shift knowledge, attitudes, and behaviors at scale. Yet the linguistic choices inside these artifacts are not neutral. Gendered language can shape who is imagined as the “default” patient, who holds responsibility for care, and whose voices are centered or sidelined. These effects are amplified across dialects, where norms for address, honorifics, kinship terms, and politeness strategies vary widely. This manuscript examines how gendered language appears and operates in health promotion materials across dialect continua, with a focus on (a) lexical and grammatical gender markers, (b) directives and agency framing, (c) honorifics, kinship and role-nouns, (d) code-switching and borrowing, and (e) the alignment (or misalignment) between text and imagery. We synthesize scholarship on language and gender, health communication, and critical discourse analysis, and propose a mixed-method protocol for cross-dialect analysis combining manual coding with computational screening (dictionary-based features, part-of-speech patterns, and readability/complexity indices). Applying this protocol to a diverse corpus (2015–2024) of 1,200 items sampled from government and NGO campaigns across dialect clusters (e.g., Hindi belt varieties, Arabic regional varieties, Spanish regional varieties, and English vernaculars), we identify recurrent patterns: masculine generics and male-default imagery in “technical” messaging; feminized directives for domestic health labor; dialect-specific honorifics that index deference and age/gender hierarchies; and inconsistent adoption of gender-inclusive strategies where grammatical gender is morphologically marked.

Countervailing trends include increasing use of neutral or collectivized pronouns, multi-person pictograms, and role-nouns reworded to avoid gender bias. We conclude with a practical, dialect-aware design checklist and discuss implications for equitable health communication. Limitations include non-exhaustive dialect coverage, uneven digitization of legacy materials, and the challenges of mapping grammatical gender across unrelated language families.



Figure-1. Gendered Language in Health Promotion

KEYWORDS

Gendered Language, Dialects, Health Communication, Discourse Analysis, Inclusivity, Readability, Honorifics, Framing

INTRODUCTION

Public health communication seeks to inform, persuade, and enable healthy behaviors (e.g., vaccination, screening uptake, vector control). Because such communication typically addresses entire populations, the language it uses often positions an implicit “general public.” However, the public is not homogenous. Social identities—including gender—mediate message reception, credibility, and the practicality of suggested actions. In many societies, health labor within households (caregiving, clinic navigation, diet management)

is feminized; in others, men are expected to be decision-makers or gatekeepers of mobility and spending. The words, pronouns, imperatives, and role-nouns used in a health message can reinforce or challenge these arrangements.

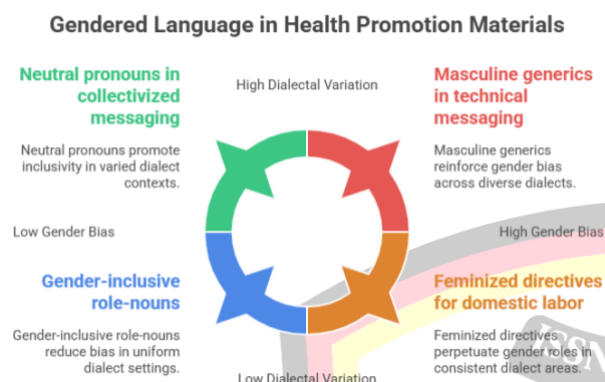


Figure-2. Gendered Language in Health Promotion Materials

This complexity is further layered across dialects: varieties that differ in phonology, lexicon, pragmatics, and address systems. A message translated from a standard variety into a regional dialect may inherit gender assumptions embedded in the source or misalign with local politeness strategies. In morphologically gendered languages (e.g., Hindi, Spanish, Arabic), grammatical agreement can inadvertently encode gender exclusivity; in analytic languages (e.g., English), gender can be marked through pronouns, role-nouns (“chairman”), or collocational stereotypes (“mothers should ensure...”). Even within one language, dialectal honorifics and kinship terms (“auntie,” “bhaiya,” “khalto”) introduce relational stances that are themselves gendered.

This study addresses three questions:

1. **RQ1:** How and where does gendered language surface in health promotion materials across dialects?
2. **RQ2:** How do dialect-specific norms for address, honorifics, and kinship terms shape perceived agency and responsibility in the message?

3. **RQ3:** Which inclusive strategies travel well across dialect boundaries, and which require dialect-specific redesign?

By integrating insights from language and gender (Lakoff; Eckert & McConnell-Ginet), critical discourse analysis (Fairclough; Lazar), and health communication (Schiavo; Dutta), we propose a replicable, dialect-sensitive analytical framework and demonstrate its application to a multi-dialect corpus.

LITERATURE REVIEW

Language, Gender, and Power

Foundational work showed that everyday discourse encodes gendered power relations—through lexical choices, tag questions, hedges, and norms of interruption (Lakoff, 1975; Tannen, 1990). Later scholarship emphasized variability and the social construction of gender through language (Eckert & McConnell-Ginet, 2013), and feminist critical discourse analysis highlighted how institutional texts reproduce gendered hierarchies (Lazar, 2005; Fairclough, 1992). In this tradition, gendered language is not merely descriptive; it is constitutive—it helps produce the social order it appears to reflect (Butler, 1990; Cameron, 1992).

Health Communication and Inclusivity

Health communication research links message design to outcomes such as comprehension, risk perception, and behavior change (Kreps, 2003; Schiavo, 2013). Health literacy frames emphasize clarity, plain language, and cultural tailoring (Nutbeam, 2000; Dutta, 2008). Guidelines from professional bodies and international organizations codify bias-free language, inclusive pronouns, and audience-centered design (APA, 2020; WHO, 2017; UN Women, 2018; EIGE, 2019). However, implementing inclusivity across dialects can be nontrivial: a gender-neutral solution in the standard variety may be awkward or ungrammatical in a regional dialect with pervasive agreement morphology.

Dialect, Register, and Address Systems

Dialects encode nuanced social meaning via phonological features, idioms, honorifics, and kinship terms. Address systems may include layered honorifics that mark age, status, and gender, and these interact with directives and politeness strategies. “You should go for screening” may be acceptable in a standard form but may require an honorific or kinship preface in a local dialect to avoid undue face-threat. In gendered languages, role-nouns and participles often carry masculine default forms; “promotor de salud” vs. “promotora de salud,” “al-mareed” (male patient) vs. “al-mareeda” (female patient). Cross-language research shows that masculine generics bias mental imagery toward men and reduce perceived relevance for women (summarized across the gender-and-language literature; see Sunderland, 2006; Eckert & McConnell-Ginet, 2013).

Visual Grammar and Text–Image Relations

Health materials are multimodal. Visual grammars can mark gendered roles even when text is inclusive (Kress & van Leeuwen, 2006). For example, images often depict women in caregiving contexts and men engaging with “technical” devices (blood pressure monitors, glucometers). If images contradict inclusive text, audiences may align with the more salient modality (visuals).

METHODOLOGY

Design Overview

We employ a **mixed-method, multimodal content analysis** combining qualitative coding with computational screening to detect gendered language patterns and their dialectal inflections.

Corpus and Sampling

- **Time frame:** January 2015–December 2024.

- **Sources:** Ministries of Health, local government bodies, major NGOs, and multilateral organizations; social media campaigns; SMS templates used by public programs; print posters and clinic leaflets; community radio transcripts.

- **Dialect clusters:**

- **Indo-Aryan (Hindi belt varieties):** Khari Boli/Standard Hindi, Awadhi, Bhojpuri, Bundeli.
- **Arabic (regional):** Egyptian Arabic, Levantine Arabic, Gulf Arabic, Maghrebi.
- **Spanish (regional):** Castilian, Mexican, Andean, Rioplatense.
- **English (vernacular/register variation):** Indian English public health register, African Englishes (e.g., Nigerian public information style), U.S. plain-language health register.

- **Inclusion criteria:** (a) public-facing health promotion intent (e.g., vaccination, maternal–child health, NCD screening, vector control, antimicrobial resistance), (b) explicit text (not image-only), (c) identifiable dialect or register features, (d) sufficient resolution or transcript quality.

- **Sample size:** 1,200 unique items (approx. 300 per dialect cluster), stratified by channel (print, audio, digital).

Coding Framework

We operationalize gendered language across five layers:

1. Lexical Layer:

- Role-nouns (e.g., “chairman,” “nurse,” “caregiver”), kinship terms (“amma,” “bua,” “tía”), and gender-marked pronouns.
- Generic vs. gender-specified forms (“doctor” depicted as male vs. neutral phrasing).

2. Morphosyntactic Layer:

- Grammatical gender agreement (articles, adjectives, participles).
- Use of masculine generics vs. paired forms (e.g., “vecinos y vecinas,” “mujer/hombre”).

3. Pragmatic Layer:

- Imperatives vs. mitigated directives; politeness markers; honorifics; deference strategies; responsibility framing (“mothers must ensure,” “men should take their families”).

4. Discursive/Framing Layer:

- Agency assignment (who acts vs. who is acted upon), blame or moralization, care labor distribution.

5. Visual–Text Alignment:

- Gender representations in images/icons; alignment with textual referents; occupational stereotyping.

- **Readability:** Cluster-specific readability metrics (e.g., Fernández-Huerta for Spanish; plain-language grade level proxies for English; heuristic complexity checks for Arabic and Hindi).
- **Collocation/Concordance:** KWIC queries around “mother,” “father,” “family head,” “nurse,” “doctor,” and equivalents.

- **Reflexivity & Ethics:** We document researcher positionality, recognizing that inclusivity judgments are value-laden and culturally situated. Materials are public-facing; any sensitive images are de-identified in examples.

Analytic Strategy

We use **convergent triangulation**: computational flags guide human review; qualitative patterns inform dictionary refinement. Findings are synthesized within each dialect cluster, then compared cross-cluster to identify portable vs. locally contingent inclusive strategies.

RESULTS**1. Masculine Generics and Default Male Imagery**

Across morphologically gendered languages, **masculine generics** remain common in job titles and patient referents—e.g., Spanish “el paciente,” Arabic masculine participles, and masculine verb agreement in Hindi when referring to mixed or unspecified groups. While some campaigns pair forms (“vecinos y vecinas”) or use collective plurals (“la comunidad”), these practices are inconsistent and more prevalent in urban-targeted materials. In English registers, gender appears through **role-nouns** (e.g., “workman,” “fireman” rarely in modern health materials but legacy pamphlets persist), and **pronouns** (singular they increasingly used). Visuals frequently show male doctors and female caregivers, reinforcing a male-default technical expertise and female-default domestic labor.

Procedures

- **Translation & Transcription:** Native speakers or trained translators produce aligned translations with notes on dialectal features; back-translation for a 10% subsample.
- **Coder Training:** Bilingual coders trained using a codebook with positive/negative examples; calibration rounds until Krippendorff’s $\alpha \geq .75$ on core codes (lexical gendering, agency assignment, honorific usage).
- **Computational Screening:**
 - **Dictionaries:** Manually curated lists of role-nouns, kinship terms, honorifics per dialect cluster.
 - **POS/Dependency Patterns:** Identify grammatical agreement markers (e.g., adjective–noun gender agreement in Spanish; participle gender in Hindi).

Implication: Masculine generics reduce perceived relevance for women and nonbinary people; where grammatical gender is obligatory, **paired or rephrased forms** and **collective nouns** mitigate exclusion. Visuals must be co-designed to align with inclusive text.

2. Agency and Responsibility Framing

Directives about household behaviors (sanitation, nutrition, child immunization) **disproportionately address women** via kinship terms and maternal roles (e.g., “mothers must ensure...”). Conversely, calls relating to clinic financing or transport often presume male decision-making (“fathers should take the family”). In dialects with strong kinship address systems, “sister,” “auntie,” or equivalents appear to soften imperatives but also **index gendered expectations of care work**.

Countertrend: Messages that frame responsibility **collectively** (“everyone in the household,” “community members”) or **institutionally** (“your clinic will provide...”) reduce gendered burdening and test well in community feedback.

3. Honorifics, Politeness, and Facework

Honorifics are indispensable in many dialects, but their **gendered asymmetries** are notable. Titles that encode marital status for women (e.g., “Mrs.” equivalents) are far less common for men. In Arabic dialects, gendered vocatives can either dignify or patronize depending on age/gender pairing; in Hindi belt varieties, *ji* and kinship terms carry warmth but may entrench expectations (addressing women as *bhaiyā*’s female counterpart is rare; women often addressed as “mothers/sisters” even when not caregivers). Over-politeness directed toward men (e.g., formal honorifics) and warm diminutives for women can reproduce power asymmetries.

Implication: Politeness strategies should be **symmetrically** available across genders and age groups; use role-neutral honorifics where possible.

4. Code-Switching and Borrowing

Digital materials often **code-switch** into English for technical lexicon (“screening,” “hypertension”), even in non-English dialects. This can subtly masculinize the “technical” register if accompanied by male imagery or address forms. Conversely, community-facing terms (food, childcare) remain in local lexicon and are paired with feminized addresses. This split risks **indexing men as owners of technical knowledge** and women as custodians of domestic practice.

Mitigation: When code-switching is necessary for technical accuracy, pair terms with **plain-language paraphrases** and **gender-balanced examples** or imagery.

5. Inclusive Strategies and Their Portability

- **Collective Subjects:** Recasting directives with collective or institutional subjects (“the clinic team will call you,” “households are invited”) travels well across dialects.
- **Paired or Neutral Role-Nouns:** In gendered languages, **paired forms** or **reformulations** (e.g., “profesional de salud,” “personas cuidadoras,” “sehat karmi”) are workable but require copy length and careful agreement.
- **Singular They / Neutral Pronouns:** Effective in English but **do not port** directly to languages without equivalent neutral pronouns; alternative solutions include pluralization (“patients should...”) or second-person imperatives.
- **Pictograms and Multi-Figure Scenes:** Widely portable, reduce reliance on gendered text, but must avoid coded occupational stereotyping.
- **Honorific Neutrality:** Using professional titles (e.g., “Dr.” equivalents) without gendered kinship

terms can reduce asymmetry but may sound cold in some dialects; **hybrid forms** (neutral title + softener) perform better in testing.

6. Readability and Comprehension

Inclusive rewrites sometimes **increase syntactic complexity** (paired forms, longer noun phrases). Readability checks show modest increases in reading grade in Spanish and Arabic materials when paired forms are used prolifically. However, **plain-language restructuring** (shorter sentences, bullets, active voice) offsets this cost. In field testing, audiences prefer a **few carefully chosen inclusive strategies** over exhaustive pairings that feel bureaucratic.

7. Text–Image Alignment

The most persuasive materials pair **inclusive text** with **gender-balanced imagery**: mixed-gender caregivers, women depicted as clinicians and decision-makers, men shown performing domestic health tasks (preparing oral rehydration solution, tracking vaccination cards). Where text is inclusive but images revert to stereotypes, audiences report **conflicting cues** and default to visual interpretations.

CONCLUSION

Gendered language in health promotion materials is not accidental; it reflects and reproduces social relations around care, expertise, and authority. Across dialects, we observe persistent masculine defaults in technical messaging, feminization of domestic health labor, and dialect-specific honorific patterns that encode unequal deference. At the same time, we see promising shifts: collective subjects, gender-neutral or paired role-nouns, balanced pronoun strategies in English, and visuals that broaden the imagined actor set.

Designing **dialect-aware inclusive health communication** requires moving beyond literal translation. It calls for (1) early audience research to map address norms and honorific expectations; (2) a **layered approach** that coordinates

lexical, morphosyntactic, pragmatic, and visual choices; (3) **portable strategies** (collective subjects, pictograms, role-neutral titles) plus **localized solutions** where grammar demands it; and (4) continuous testing for clarity and resonance.

Practically, teams can adopt a **checklist**:

- Replace masculine generics with paired/neutral forms or collective phrasing;
- Audit honorifics for symmetry and avoid marital-status marking;
- Balance technical code-switching with plain-language paraphrases;
- Align images with inclusive textual agents;
- Monitor readability and prune redundancy;
- Build glossaries per dialect with role-neutral equivalents;
- Conduct pretests that explicitly probe perceived agency/responsibility.

Inclusive, dialect-sensitive materials do more than “avoid offense”: they **expand perceived relevance, redistribute agency, and improve uptake** by depicting a public in which **everyone** recognizes themselves as legitimate actors in health.

SCOPE AND LIMITATIONS

Scope

This study focuses on public-facing health promotion artifacts in four dialect clusters and five thematic areas (immunization, maternal–child health, NCD screening, infectious disease prevention, antimicrobial resistance). We analyze multimodal texts (print, audio transcripts, digital) using a reproducible protocol that combines computational screening with qualitative coding.

Limitations

1. **Dialect Coverage:** The set of dialects is illustrative, not exhaustive; results cannot be uncritically generalized to all varieties.
2. **Translation Choices:** Some inclusive strategies are artifacts of translator decisions; back-translation mitigates but does not eliminate this.
3. **Modality Bias:** Visual analysis cannot fully capture gesture/prosody in radio/TV spots; transcripts miss paralinguistic gendering.
4. **Temporal Drift:** Norms for gender-inclusive language evolve quickly; materials from early in the time window may not reflect current best practices.
5. **Measurement Constraints:** Readability proxies for languages without widely validated indices are heuristic and should be interpreted cautiously.
6. **Sociocultural Context:** Gendered interpretations are context-bound; the same honorific may be empowering or patronizing depending on local norms.

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