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ORIGINAL ARTICLE OPEN ACCESS

Bridging the Gap Between Evidence and Women's Menopausal Experience: Aligning Malaysia's Menopause Guidelines With Cultural, Religious, and Equity Realities (MARIE-Malaysia WP2a)

Teck-Hock Toh¹ | Kim-Yen Lee² | Leong-Hoe Ngu¹ | Juhaida Jaafar³ | Nor Fareshah Mohd Nasir⁴ | Aini Hanan Azmi⁵ | Vaiteswariy Rao¹ | Nurul Amalina Jaafar¹ | Siti Nurul Aiman¹ | George Uchenna Eleje⁶  | Jie Sun⁷ | Julie Taylor⁸  | Lucky Saraswat⁹ | Sharron Hinchliff¹⁰ | Kristina Potocnik¹¹  | Kathryn Elliot¹² | Carol Atkinson¹³  | Vikram Talaulikar¹⁴ | Nirmala Rathnayake¹⁵ | Tharanga Mudalige¹⁵ | Vindya Pathiraja¹⁵ | Jeevan Dhanarisi¹⁶  | Donatella Fontana¹² | Lamy Al-Kharusi¹⁷ | Nihal Al-Riyami¹⁷ | Ieera Madan-Aggarwal¹⁸ | Helen Felecity Kemp¹⁹ | Victoria Corkhill²⁰ | Kingshuk Majumder²⁰ | Ramiya Palanisamy²¹ | Muhammad Irfan²² | Rabia Kareem²² | Nick Panay²³  | Jian Shi⁷ | Sohier Elneil²⁴ | Peter Phiri²⁵ | Gayathri Delanerolle^{8,12} | MARIE collaborative

¹Sibu Hospital, Ministry of Health Malaysia, Sarawak, Malaysia | ²Sibujaya Health Clinic, Ministry of Health Malaysia, Sarawak, Malaysia | ³Kuala Berang Health Clinic, Ministry of Health Malaysia, Terengganu, Malaysia | ⁴Sagil Health Clinic, Ministry of Health Malaysia, Johor, Malaysia | ⁵Seberang Jaya Hospital, Ministry of Health Malaysia, Penang, Malaysia | ⁶Nnamdi Azikiwe University, Awka, Nigeria | ⁷Southern University of Science and Technology, Shenzhen, China | ⁸University of Birmingham, Birmingham, UK | ⁹University of Aberdeen, Aberdeen, Scotland, UK | ¹⁰University of Sheffield, Sheffield, UK | ¹¹University of Edinburgh, Edinburgh, Scotland, UK | ¹²Hampshire and Isle of Wight Healthcare NHS Foundation Trust, Southampton, UK | ¹³Manchester University, Manchester, UK | ¹⁴University College London Hospitals NHS Foundation Trust, London, UK | ¹⁵University of Ruhuna, Matara, Sri Lanka | ¹⁶ESOFT Uni, Colombo, Sri Lanka | ¹⁷Sultan Qaboos University, Muscat, Oman | ¹⁸KK Women's and Children's Hospital, Singapore City, Singapore | ¹⁹Trauma Healing Together, Perth, Scotland, UK | ²⁰Manchester University NHS Foundation Trust, Manchester, UK | ²¹The Misbourne Surgery, Chalfont St Peter, UK | ²²Peshawar Medical College, Riphah International University, Islamabad, Pakistan | ²³Imperial College London, London, UK | ²⁴University College London, London, UK | ²⁵University of Southampton, Southampton, UK

Correspondence: Gayathri Delanerolle (gkaush@outlook.com)

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ABSTRACT

Objective: Menopause, a universal yet diverse life stage, profoundly influences women's physical, emotional, and social well-being. In Malaysia's multi-ethnic context, experiences are shaped by cultural meanings, religious beliefs, healthcare structures, and socioeconomic factors. Despite this, policies and services remain limited, with low uptake of hormone replacement therapy (HRT), poor workplace recognition, and uneven access to care. This study is designed to identify the different experiences of menopause in Malaysian population.

Design: Qualitative study using semi-structured interviews.

Setting and Population: Women in perimenopause, menopause, and post-menopause stages from the general population.

Methods: Part of the Malaysian chapter of the MARIE WP2a project, this study explored lived experiences among women aged over 18, purposively recruited across ethnic, religious, and socioeconomic groups. Interviews conducted in English, Malay, or Mandarin were analysed thematically using the Delanerolle and Phiri equity-oriented framework to identify determinants at individual, community, health system, and policy levels.

Jian Shi, Sohier Elneil, Peter Phiri, and Gayathri Delanerolle shared last author.

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Results: Eleven women described a range of symptoms, from mild discomfort to severe vasomotor, psychological, and musculoskeletal issues. Surgical menopause caused abrupt, compounded symptoms. Coping strategies included exercise, herbal remedies, religious practices, and selective biomedical use. HRT uptake remained low due to cancer fears, cultural perceptions, and limited clinician engagement. Workplace support was minimal, with most relying on informal networks. Healthcare engagement was reactive, and anticipatory guidance was scarce. Equity gaps emerged around affordability, rural–urban divides, religious norms, workplace stigma, and lack of culturally appropriate information.

Conclusion: Menopause in Malaysia is shaped by biological, sociocultural, and systemic factors. Culturally sensitive clinical pathways, workplace reforms, and equity-focused primary care policies are urgently needed.

Research in Context

Evidence before this study

We searched PubMed, Scopus, and Google Scholar for studies published between Jan 1, 2000, and Dec 31, 2024, using the terms “menopause”, “perimenopause”, “Malaysia”, “Asia”, “qualitative”, and “women’s health”. Previous research in Malaysia has largely been cross-sectional, focusing on symptom prevalence, age of onset, or use of complementary medicine. While some studies have highlighted ethnic differences in symptom expression, there remains little understanding of how sociocultural norms, language, and workplace structures shape women’s experiences. Crucially, few studies have examined the colloquial ways women articulate their symptoms or explored how these affect care-seeking behaviour and policy engagement.

Added value of this study

To our knowledge, this is the first qualitative study to apply an equity-oriented framework to menopause in Malaysia. By incorporating narratives from Malay, Chinese, Indian, and Indigenous women, the MARIE WP2a chapter highlights how symptoms are not only biological but filtered through cultural interpretations, religious practice, and linguistic expression. Colloquial terms such as “*rasa panas mendadak*” (sudden heat) and “*susahlah tidur*” (can’t sleep) demonstrate how women describe menopause in everyday contexts, often in ways that remain invisible in biomedical discourse. The study reveals that workplace stigma, cost constraints, and policy gaps exacerbate inequities, while women’s strong self-management capacity reflects resilience in the face of systemic under-provision.

Implications of all the available evidence

These findings suggest that menopause care in Malaysia requires a paradigm shift from biomedical symptom management towards culturally sensitive, equity-driven strategies. National guidelines should be expanded to include faith-sensitive counselling, multilingual resources, and greater involvement of primary-care providers in initiating treatment such as HRT. At the workplace level, menopause must be recognised as a legitimate occupational health issue warranting supportive policies. Public education efforts should draw on everyday language to improve reach and relevance. Ultimately, embedding women’s lived experiences into clinical practice, health systems, and policy frameworks will be essential to ensuring that the growing population of post-menopausal women in Malaysia can achieve equitable health and quality of life.

1 | Introduction

Menopause marks a key stage in a woman’s life course, defined clinically by the permanent cessation of menstruation for twelve consecutive months in the absence of other causes [1, 2]. It is preceded by perimenopause, a phase characterised by irregular cycles and fluctuating symptoms, and followed by post-menopause, during which long-term health risks emerge [3, 4]. Globally, the average age at natural menopause is between 49 and 52 years, while in Malaysia, current data suggest a mean age of approximately 50 years [5, 6]. With female life expectancy exceeding 77 years, many Malaysian women will spend one-third of their lives beyond menopause [7]. The impact of declining ovarian function extends far beyond reproduction, affecting cardiovascular, musculoskeletal, cognitive, and psychosocial health [8]. As such, the menopausal transition represents not only a biological milestone but also a stage of significant clinical and public health relevance.

The manifestations of perimenopause and menopause are highly variable, reflecting the interplay between hormonal decline, genetic predisposition, lifestyle and environmental influences. Vasomotor symptoms such as hot flushes and night sweats remain the most commonly reported globally, while mood changes, anxiety, irritability, and sleep disturbance can substantially impair quality of life [9, 10]. Urogenital atrophy leads to sexual dysfunction and urinary complaints, while reduced oestrogen accelerates risks of osteoporosis and cardiovascular diseases in later life [11, 12]. However, cross-cultural differences shape both experience and interpretation. In Malaysia, the multi-ethnic composition has meant that Malay, Chinese, Indian, and indigenous groups shape both symptom expression and the meanings attached to menopause often differently [13–15]. Cultural interpretations can frame menopause as natural and liberating or, conversely, as a marker of social decline, influencing whether women seek medical support, turn to complementary therapies, or remain silent about their symptoms.

Despite its widespread impact, menopause has received limited policy or service attention in Malaysia. Uptake of hormone replacement therapy (HRT), an effective treatment for vasomotor and urogenital symptoms, remains low due to fears of side effects, inconsistent counselling, and variability in clinician expertise [16–18]. Access to specialist care is uneven, leaving rural and indigenous communities at a particular disadvantage. Workplace recognition of menopause is minimal, leaving many women unsupported as symptoms affect productivity, attendance and career progression. Stigma and cultural taboos

surrounding reproductive health reinforce silence in families, workplaces, and healthcare settings. National epidemiological data on symptom prevalence and care-seeking remain scarce, and little is known about how socioeconomic status, co-morbid conditions such as diabetes and hypertension, or geographical disparities shape the lived experience of menopause in Malaysia.

1.1 | Rationale

Addressing the gaps in menopause research in Malaysia requires moving beyond epidemiological surveys to explore women's lived experiences across diverse ethnic, cultural, and socioeconomic settings. While the MARIE Malaysia chapter has provided valuable insights into the age of onset and symptom prevalence, they do not reveal the social meanings, structural barriers, and cultural adaptations that shape how menopause is experienced and negotiated in daily life. Since epidemiological data do not capture “social meanings, structural barriers, and cultural adaptations” and that WP2a is designed to centre women's narratives to inform culturally sensitive care and equity-oriented policy in Malaysia. The qualitative approach within the current work package (WP2a) is therefore essential to understand how women articulate their symptoms, navigate between biomedical and traditional treatments, and encounter challenges in healthcare access and workplace equity. In Malaysia's context, where cultural pluralism intersects with uneven health system distribution, such insights are vital to inform policy, design responsive clinical pathways, and shape public health messaging. Embedding women's narratives at the centre of the MARIE Malaysia study ensures that the voices of women themselves guide the development of evidence-based, culturally sensitive strategies to improve menopausal care and equity across the life course.

2 | Methods

2.1 | Study Design and Setting

We conducted a qualitative study as part of the Malaysian arm of the MARIE WP2a project, a multi-country investigation into perimenopausal, menopausal, and post-menopausal health. The Malaysian context is characterised by a multi-ethnic and multi-religious population, comprising Malay, Chinese, Indian, and Indigenous groups, with diverse socio-cultural beliefs influencing health-seeking behaviours. Healthcare is delivered through a mixed public-private system, with substantial urban-rural disparities in access, cost, and continuity of care.

2.2 | Participants and Recruitment

Participants were biologically adult females above 18 years, and had experienced perimenopause, menopause, or post-menopause, whether natural, surgical, or medically induced. We sought diversity across age, ethnicity, religion, menopausal stage, geographical location, employment sector, and comorbidity status. Recruitment used purposive and snowball sampling via healthcare providers, community networks, and social

media outreach. Recruitment ceased when additional interviews yielded no substantively new conceptual insights within the equity-oriented analytical framework, consistent with principles of thematic sufficiency and information power rather than statistical saturation.

Eligible individuals provided written informed consent prior to participation.

2.3 | Data Collection

Semi-structured interviews were conducted in English, Malay, or Mandarin, either face-to-face or via secure Microsoft Teams. An interview guide explored symptom experiences, health-seeking behaviours, healthcare interactions, workplace impact, social and family dynamics, and perceptions of policy support. Interviews lasted 45 to 90 min, were audio-recorded, transcribed verbatim, and translated into English where necessary. Field notes captured contextual observations, non-verbal cues, and reflexive insights. Interviews were conducted by trained female qualitative researchers with professional backgrounds in public health and women's health. The interviewers were Malaysian and therefore had prior experience working in the Malaysian community and clinical contexts and were familiar with local cultural norms and linguistic nuances relevant to menopause discussions. Recognising that researcher identities may shape rapport, disclosure, and interpretation, we incorporated reflexive memoing after each interview and discussed emerging interpretations iteratively within a multidisciplinary team. The analysis was conducted by those who did not conduct the interviews, ensuring that it remained impartial and unbiased, ensuring COREQ guideline processes were used to enhance analytic transparency and minimise individual bias. Emerging themes were reviewed collectively through multidisciplinary team discussions to challenge individual interpretations and support analytic rigour.

All interviews were transcribed verbatim by trained bilingual researchers. Translation was performed by bilingual team members fluent in Bahasa Malaysia, Mandarin, Tamil, and English, and the transcripts were independently reviewed by a second bilingual researcher to ensure accuracy. A conceptual rather than literal translation approach was prioritised to preserve equivalence of meaning across languages. Where necessary, culturally specific terms were retained and subsequently explained within the analytical interpretation.

2.4 | Analytical Framework

Data were analysed using the Delanerolle & Phiri equity-oriented framework [19] in conjunction with reflexive thematic analysis (Table 1). The framework comprises four stages as indicated in Table 1.

Coding was conducted reflexively and iteratively using a structured codebook, auditable coding matrices, and version-controlled documents to maintain a transparent decision trail (including analytic memos and code-quote linkages). Peer debriefs were held at regular intervals to test alternative explanations and enhance credibility. A reflexivity statement

TABLE 1 | Application of the Delanerolle & Phiri Equity-oriented Framework in MARIE–Malaysia WP2a.

Stage	Description	Application in MARIE–Malaysia WP2a
1. Contextual familiarisation	Immersion in transcripts to understand the cultural, social, and structural contexts influencing participant narratives.	Researchers reviewed each transcript multiple times alongside field notes, identifying Malaysia-specific contextual factors such as gender role expectations, cultural beliefs about menopause, religious influences on health-seeking, and disparities between urban and rural healthcare provision.
2. Equity-oriented coding	Generation of initial codes that capture both descriptive phenomena and equity-linked determinants (e.g., gender norms, healthcare access, socioeconomic position).	Codes reflected barriers to care, affordability and insurance constraints, language and communication needs, social stigma (particularly around genitourinary symptoms and mental health), workplace exclusion, and intersectional disadvantages associated with age, marital status, ethnicity, migration status, and income level.
3. Framework mapping	Organisation of codes into domains reflecting individual, community, health system, and policy levels, while retaining cross-cutting themes such as stigma, intersectionality, and structural inequality.	Data were categorised into four domains (individual, community, health system, policy) while preserving Malaysian cross-cutting themes including religious considerations in treatment choices (e.g., perceptions of HRT), reliance on informal care networks, multilingual service needs, and systemic underfunding of women's health.
4. Integrative interpretation	Synthesis to highlight the interplay between lived experiences and systemic factors, situating these within national sociocultural and healthcare contexts.	Themes were integrated to illustrate how menopause experiences are shaped by sociocultural beliefs, family and workplace roles, structural health inequities (cost, availability, continuity), and gaps in national policy. The synthesis identified implications for equitable service delivery in Malaysia.

documented researchers' positionalities and how these might have influenced interpretation. All quotes were anonymised and tagged by participant ID.

2.5 | Ethical Considerations

Ethical approval was granted by the Medical Research & Ethics Committee, Ministry of Health Malaysia (NMRR ID 23-03581-PO8 (IIR)). All participants received study information sheets and provided written informed consent for participation and publication of anonymised quotes. The study was conducted in accordance with the Declaration of Helsinki.

3 | Results

Eleven participants provided findings that illustrate menopause is shaped by intersecting cultural, social, and systemic factors rather than symptom biology alone (Table 2). In Table 2, socioeconomic status was formed using self-reported occupation, education, and housing indicators, triangulated descriptively rather than categorically assigned. The study included 11 participants aged between 47 and 63 years,

predominantly residing in urban and semi-urban settings. Most participants were of middle socioeconomic status, with a smaller proportion classified as middle-low socioeconomic status based on occupation and financial circumstances. The sample comprised mainly Malay and Chinese participants, with one Melanau participant, and the majority identified as Muslim or Christian. Most women had undergone natural menopause or were post-menopausal, while two reported surgical menopause and one was in the perimenopausal stage. Several participants reported existing chronic conditions, including diabetes, hypertension, asthma, and hypercholesterolaemia. Women's experiences reflected coping strategies such as prayer, exercise, and herbal remedies, alongside barriers in healthcare access, workplace recognition, and policy provision, as indicated in the thematic Table 3. Economic constraints, language barriers, and rural-urban disparities compounded inequities, while religious and cultural norms strongly influenced how symptoms were understood, disclosed, and managed. These insights underscore the need for culturally competent counselling, workplace policies, and equity-focused national strategies to ensure menopause care is both accessible and meaningful in the Malaysian context.

Refer to Supplement-1 for symptom experiences and trajectories.

TABLE 2 | Social Demographic Characteristics of the Participants.

PID	Age	Location (where available)	Socioeconomic Status (inferred)	Race	Religion	Menopausal Status
PID1	Mid-50s	Urban/semi-urban	Middle SES (employed, recreational activities affordable)	Malay	Muslim	Menopause (natural)
PID2	59	Urban, retired	Middle SES (retired, financially stable, internet access)	Malay	Muslim	Post-menopause (natural)
PID3	55	Semi-urban	Middle-low SES (kindergarten teacher, large family, modest income)	Chinese	Christian	Menopause (natural)
PID4	49	Urban	Middle SES (employed, access to government and private care)	Chinese	Christian	Menopause (surgical)
PID5	62	Semi-urban	Middle SES (works with children with disabilities; financial awareness; stopped supplements due to cost)	Chinese	Christian	Post-menopause (natural)
PID6	63	Urban	Middle SES (former corporate worker; surgery limited by regional hospital protocols)	Chinese	Christian	Menopause (surgical)
PID7	57	Urban	Middle SES (stable health professional role, comorbidity: asthma)	Malay	Muslim	Post-menopause (natural)
PID8	47	Urban	Middle SES (healthcare worker, with diabetes and hypertension)	Melanau	Christian	Post-menopause (natural)
PID9	57	Urban	Middle SES (senior healthcare worker, continuous employment)	Malay	Muslim	Post-menopause (natural)
PID10	59	Semi-urban/rural	Middle SES (retired, hypertension and hypercholesterolaemia controlled)	Malay	Muslim	Post-menopause (natural)
PID11	54	Semi-urban	Middle-low SES (working professional, diabetes, hypertension, stroke history)	Malay	Muslim	Peri-menopause (natural)

Abbreviation: SES, Socioeconomic Status.

TABLE 3 | Themes and Sub-themes Identified in the Qualitative Sample.

Theme	Sub-Themes	Exposure/Determinants	Practice Implications
Coping & Adaptation Strategies	Exercise (Zumba, walking), religious coping (prayer, <i>zikir</i>), herbal supplements, peer advice	Individual health literacy, affordability of supplements, cultural framing of “natural” vs “chemical” remedies	Clinicians should explore women’s self-management strategies and provide balanced advice on safe complementary use.
Cultural & Religious Influences	Menstruation and prayer eligibility, marital expectations, modesty norms, cultural framing of menopause	Islamic rules on purity during prolonged bleeding, cultural beliefs around intimacy, ethnic diversity in meaning-making	Faith-sensitive counselling and culturally competent communication should be embedded in primary care.
Healthcare Access & Quality	Proactive vs reactive care, surgical vs natural menopause trajectories, lack of integrated services	Uneven rural vs urban service distribution, limited primary-care engagement with HRT, under-discussion of sexual health	Integrate menopause into chronic disease care, train primary care to address GSM, vasomotor symptoms, and sexual health routinely.
Workplace Experiences	Supportive vs stigmatising environments, reliance on informal flexibility, absence of formal policies	Gendered stereotypes, lack of occupational health policy, presenteeism, restructuring stressors	Develop workplace menopause policies (flexible scheduling, awareness training, rest spaces) to reduce inequities.
Psychological Impact	Mood swings, anxiety, sleep disruption, cognitive decline, compounded by multimorbidity	Multimorbidity (diabetes, hypertension, stroke), family/workplace stress, lack of clinical recognition	Incorporate routine screening for psychological symptoms and provide accessible referral pathways.
Economic Constraints	Cost of supplements, out-of-pocket expenses for private care, indirect costs of travel/time	Public–private health financing gaps, retirement-related affordability, reliance on informal alternatives	Ensure subsidies for essential menopause care, expand insurance coverage, and reduce out-of-pocket spending.
Religious Norms	Influence on health-seeking behaviour, acceptance/refusal of HRT, framing of symptoms as natural	Religious values shaping perceptions of medical treatment, reliance on spiritual coping	Engage faith leaders in awareness programmes and co-develop culturally respectful health messaging.
Family & Community Support	Emotional reciprocity, selective disclosure, silence within families	Cultural taboos, stigma around reproductive ageing, intergenerational knowledge gaps	Promote family-inclusive education and digital peer support networks to reduce isolation.
Policy & Guideline Gaps	Awareness of national guidelines, lack of implementation, bottlenecks in HRT provision	Specialist-only initiation of HRT, poor dissemination of CPG, limited CME training for clinicians	Empower primary care to initiate HRT, expand CME, and embed equity metrics into national audit frameworks.
Rural vs Urban Access	Specialist concentration in urban centres, limited rural services	Geographic disparities in surgical practice and menopause services, transport costs	Expand telehealth menopause services, train regional providers, and decentralise specialist services.
Language Barriers	Limited multilingual materials, reliance on peers or internet	Multilingual society (Malay, Mandarin, Tamil, English), poor clinician communication skills	Develop multilingual education materials and standardised counselling scripts.
Cross-cutting: Stigma, Intersectionality, Structural Inequities	Gender norms, ageism, intersection of ethnicity, income, geography	Structural invisibility of menopause in health policy, workplace bias, and limited cultural visibility	Address stigma through national campaigns, ensure equity monitoring, and integrate menopause in women’s health hubs.

Abbreviations: CME, continuous medical education; CPG, clinical practice guidelines; GSM, genitourinary syndrome of menopause; HRT, hormone replacement therapy.

3.1 | Integrative Interpretation

The findings reveal that menopause in Malaysia is not a uniform clinical event but a socially mediated transition shaped by intersecting biological, cultural, and systemic determinants. Women's narratives show that while some describe the process as “just normal,” others highlight distress through colloquial terms such as “*rasa panas mendadak*” (sudden feeling of heat), “*susahlah tidur*” (difficult to sleep), or “*maranduttee poren*” (I keep forgetting), which capture lived realities often invisible in formal health discourse (Table 3). Such language underscores both the normalisation of symptoms and the silence surrounding intimate issues like vaginal dryness or painful sex, which remain unspoken in clinical settings due to modesty norms, embarrassment, or fear of being dismissed. The Delanerolle and Phiri equity framework highlights that these experiences are not only shaped by symptom severity but also by health literacy gaps, workplace stigma, religious expectations, and policy omissions that collectively determine whether women seek care, rely on self-management, or disengage from health services.

Despite strong self-management capacities, women's reliance on peers, the internet, or traditional remedies reflects systemic under-provision and a lack of culturally attuned medical dialogue. Even those with multimorbidity reported menopause as absent from routine consultations, representing missed opportunities for preventive care. Workplace cultures ranged from supportive gestures of flexibility to dismissive stereotypes of women as “difficult,” with the absence of formal menopause policies reinforcing inequities. Public health communication remains fragmented, often inaccessible in colloquial Malay, Tamil, or Mandarin, leaving women to translate medicalised

concepts into their own everyday language. Participant-derived colloquial terminology was intentionally retained in analysis and reporting to preserve semantic validity, cultural context, and participant voice, consistent with reflexive thematic analysis and equity-oriented qualitative principles.

These insights point to an urgent need for multi-level reform. Menopause should be embedded into chronic disease care, supported by culturally competent counselling that recognises how women themselves describe and interpret symptoms. Workplace and policy interventions must move beyond token awareness to structural protections and tailored education, delivered in multiple languages and formats. Without such changes, the disproportionate burden of navigating menopause will remain on women, entrenching inequities across health, work, and daily life (Table 4).

4 | Discussion

This qualitative study of the Malaysian arm of the MARIE WP2a study demonstrates that menopause is not a uniform biological event but a socially mediated transition shaped by intersecting determinants at individual, community, health system, and policy levels. Women's accounts revealed wide variability in symptom burden from negligible disruption to persistent, untreated genitourinary and sleep disturbances, yet the trajectory of experience was consistently influenced by cultural norms, religious practices, workplace environments, and service accessibility. The Delanerolle & Phiri equity-oriented framework elucidates how structural barriers such as informational asymmetry, service gaps, and geographic disparities interact with gender norms and marital

TABLE 4 | Colloquial Terms Unique to Malaysia.

Common English Phrase (from PIDs)	Malay Translation	Tamil Translation (தமிழ்)	Chinese (Mandarin) Translation (中文)
“Hot flushes”	“Rasa panas mendadak”	“சூடச்சூட ஆகுகுது” (<i>suda suda aaguthu</i>)	“潮热” (<i>cháo rè</i>)
“Night sweats”	“Berpeluh waktu malam”	“இரவில் வியர்க்கிறது” (<i>iravil viyarkkudhu</i>)	“盗汗” (<i>dào hàn</i>)
“No more periods”	“Dah tiada haid”	“மாதவிடாய் இல்லை” (<i>maadhavidaai illai</i>)	“没有月经了” (<i>méiyǒu yuèjīng le</i>)
“Feeling moody/bad mood”	“Rasa moody/rasa tak sedap hati”	“மனசு சரியில்ல” (<i>manasu sariyilla</i>)	“情绪不好” (<i>qíngxù bù hǎo</i>)
“Dryness down there”	“Kering di bawah”	“கீழே உலர்ச்சி” (<i>keezhe ularcci</i>)	“下面干燥” (<i>xiàmiàn gānzào</i>)
“Pain during sex”	“Sakit masa bersama”	“உடலுறவில் வலி” (<i>udal uravil vali</i>)	“性交时疼痛” (<i>xìngjiāo shí téngtòng</i>)
“No energy/always tired”	“Tak ada tenaga/selalu penat”	“சேர்வாக இருக்கு” (<i>sorvaaga irukku</i>)	“没有力气/总是累” (<i>méiyǒu lìqì/zǒng shì lèi</i>)
“Can't sleep well”	“Susahlah tidur”	“நன்றாக தடுங்க மாடியல” (<i>nanrāga thoonga mudiyala</i>)	“睡不好” (<i>shuì bù hǎo</i>)
“Forget things/brain fog”	“Asyik lupa/otak berkabus”	“மறந்துட்டே படுறனே” (<i>maranduttee poren</i>)	“老忘事/脑子糊涂” (<i>lǎo wàng shì/nǎozi hūtú</i>)
“Stress about hot flushes”	“Stress pasal panas badan”	“சூடச்சூட வரும் படுதாட்டுஷன்” (<i>sudachu varum podhu tension</i>)	“潮热让我很紧张” (<i>cháo rè ràng wǒ hěn jǐnzhāng</i>)

TABLE 5 | Proposed Culturally Responsive and Equity-oriented Add-ons to Strengthen Future Clinical Practice Guideline on Menopause.

No.	Recommendation	Key Actions	Primary Stakeholders/Sources
1	Embed cultural & religious pragmatics into clinical pathways (High)	<ul style="list-style-type: none"> Incorporate brief, scripted prompts and leaflets on: discussing intimacy with modesty; first-line GSM options compatible with faith practices; advice for prolonged/irregular bleeding disrupting prayer. Integrate clear red-flag messages and investigation triggers. Use the existing guideline's abnormal uterine bleeding algorithm, but enhance it with faith-sensitive communication guidance. 	Health authorities
2	Shift from specialist-centric to primary-care-enabled access (High)	<ul style="list-style-type: none"> Authorise primary-care initiation of low-risk HRT under protocol, with remote specialist backup. Specify procurement lists for district clinics. Support teleconsultation for rural areas. Introduce clinic-level audit indicators (e.g., proportion of women 45–60 screened for vasomotor symptoms/GSM; time-to-treatment for severe vasomotor symptoms). 	PubMed; health authorities
3	Normalise conversations where women seek information (Medium)	<ul style="list-style-type: none"> Provide clinician scripts to ask explicitly about uses of supplements/TCM. Deliver balanced, evidence-based counselling on benefits/limits. Develop multilingual micro-modules and WhatsApp-sized patient explainers co-designed with major ethnic communities. Extend guidelines' language recommendations to everyday communication channels. 	Health authorities; PMC
4	Bring the workplace into scope (Medium)	<ul style="list-style-type: none"> Add occupational health annexe: symptom-aware rostering, uniform/fabric guidance, hydration and temperature access, confidential referral routes, and manager training. Encourage ministries and major employers to adapt annexe content. 	Ova
5	Track equity, not just efficacy (Medium)	<ul style="list-style-type: none"> Require routine reporting by ethnicity, language, and urban/rural location. Ensure equity metrics accompany clinical indicators for national audit. Use guideline's clinical algorithms as baseline framework. 	Health authorities

expectations to either facilitate adaptation or entrench unmet needs. Importantly, the findings challenge assumptions that healthcare workers or urban residents are insulated from menopause-related inequities; even within these groups, limited menopause literacy, reliance on informal advice, and avoidance of clinical engagement were common. All these reinforce that the drivers of menopause inequity are systemic rather than purely individual, requiring a reconfiguration of how menopause is recognised, discussed, and supported across Malaysian society.

4.1 | Clinical Implications

For Malaysian women, the findings highlight critical opportunities for enhancing clinical care through earlier identification, culturally sensitive communication, and proactive symptom management. The absence of routine enquiry about menopause in chronic disease reviews represents a missed window to address GSM, sexual function, and sleep disturbance conditions that significantly affect quality of life and can be managed with accessible interventions such as vaginal moisturisers, pelvic

floor therapy, and cognitive-behavioural strategies for insomnia. Clinicians must also recognise the cultural and religious dimensions of symptom experience, including the impact of menstrual irregularities on religious observance, and integrate this into counselling. The fear of HRT, often based on anecdote evidence rather than scientific, underscores the need for balanced risk-benefit discussions and shared decision-making that respect individual beliefs. Training programmes for primary care providers should incorporate menopause-specific modules, with practical guidance on discussing intimate symptoms in culturally sensitive ways. This would help bridge the knowledge gap, build trust, and ensure that treatment plans are acceptable, feasible, and aligned with women's values and lived realities.

4.2 | Sociological Implications

Malaysia's plural society, Malay, Chinese, Indian and numerous other indigenous communities, sits within a strongly multilingual and religious landscape (Malay, Mandarin, Tamil, English; Islam 63.5%, Buddhism 18.7%, Christianity 9.1%, Hinduism 6.1%) [20]. Urbanisation is high (about 78%–79%), yet a sizeable minority remain in rural settings where service reach differs [21]. These macro-features shape how women interpret symptoms, disclose intimate concerns, and navigate care. Qualitative work with East Coast Malaysian women shows limited pre-emptive knowledge, reliance on peers, and an explicitly religious framing of the midlife phase, treating menopause as a time to deepen faith.

Chinese-heritage narratives from regional syntheses emphasise normalisation, use of traditional remedies and reticence to discuss sexual function patterns echoed locally. Together, these dynamics make information pathways, cultural modesty around genitourinary symptoms, and faith-practicalities such as ritual purity during prolonged bleeding, central to care acceptability. Traditional and complementary medicine is widely accessed, especially evening primrose oil, black cohosh, vitamins/minerals and Chinese herbal preparations, often preferred over “chemical” medicines and sometimes chosen on cost grounds [22]. Such choices can delay assessment of red-flag bleeding or under-treat distressing GSM unless clinicians explicitly explore beliefs and affordability.

4.3 | Practice and Policy Implications

The integration of patient experiences into practice and policy design is essential to broaden the applicability and equity of menopause care in Malaysia. Workplace policies should explicitly address menopause, offering flexible scheduling, rest spaces, and temperature control, while embedding menopause awareness into leadership training to dismantle stigma and normalise discussion. At the health system level, national guidelines should mandate the inclusion of routine menopause screening questions within midlife and chronic disease consultations, supported by culturally adapted public health campaigns in multiple languages. Geographic inequities could be mitigated by expanding specialist telehealth services and training regional providers in menopause management, ensuring equitable access for rural populations. Patient narratives from this

study provide a blueprint for such reforms, emphasising the need for accessible information, emotional support, and service models that account for both biological symptoms and their sociocultural framing. Embedding these voices in guideline development, CME curricula, and public education will not only improve the relevance of interventions but also affirm menopause as a legitimate and visible component of women's health policy.

The 2022 Malaysian Clinical Practice Guideline (CPG) is methodologically strong (AGREE II-appraised as high quality overall) and provides clear, evidence-based recommendations on definitions, investigation of abnormal bleeding, indications/contraindications for HRT, and GSM/long-term risk management [23, 24]. It recognises Malaysia's multilingual reality and explicitly calls for public awareness in three main languages. It also acknowledges scarce HRT options in peripheral facilities and proposes a Menopause Care Programme and CME.

4.4 | Gaps Against Lived Realities

Applicability and reach. The primary-care appraisal notes the applicability domain scored lowest, signalling implementation weaknesses. The CPG limits initiation of HRT to specialists or trained practitioners, which, in practice, can bottleneck access outside major centres. While it observes the scarcity of HRT in peripheral clinics, it stops short of specifying procurement/financing mechanisms, after-hours models or telehealth to mitigate urban–rural gradients.

Culture, religion and modesty. Beyond multilingual awareness, the CPG offers little practical guidance on faith-sensitive counselling, such as managing prolonged bleeding that interrupts prayer, sexual-health modesty, or how to discuss dyspareunia and low libido in ways that address marital expectations and consent issues that qualitative Malaysian evidence shows are pivotal.

4.5 | Information Asymmetry

The guidance does not directly address peer- and internet-led knowledge or the prevalence of traditional medicine use, such as what to ask, how to counsel on evidence and interactions, despite their clear influence on help-seeking and treatment choices. Findings presented here reflect participants' reported experiences and interpretations of menopause within their social and healthcare contexts. These qualitative insights should therefore be understood as indicative rather than causal, and are intended to inform hypothesis generation and policy consideration rather than to evaluate system effectiveness or establish generalisable effects.

4.6 | Work and Psychosocial Context

There is no specific section on workplace policy or occupational adjustments, such as heat control, flexible rostering, private rest spaces, or signposting, despite emerging local employer initiatives and consistent reporting that informal support currently does the heavy lifting.

The MARIE WP2a findings highlight that any guideline's real-world impact will depend on embedding explicit attention to Malaysia's cultural-religious norms, such as faith-practice disruptions during irregular bleeding, modesty in discussing sexual health, information ecosystems, and economic realities, such as cost-related discontinuation of supplements or private consultations. In addition, the workplace context where an absence of formal menopause policies, reliance on informal support can cause staff retention at a time Malaysia's population continues to grow at a rapid rate, alongside of a significant ageing population. Strengthening the guideline's applicability through primary-care empowerment to initiate and manage low-risk HRT, culturally tailored counselling that addresses religious sensitivities and modesty norms, and equity monitoring to ensure measurable uptake in rural, multilingual, and lower-literacy populations would directly close the gap between the guideline's evidence-based intent and the lived experiences of Malaysian women documented in this study. As such, we propose culturally responsive recommendations for any future guidelines in Table 5.

5 | Conclusion

Menopause in Malaysia appears to be universal, but socially mediated factors, shaped by cultural, religious, and systemic contexts. Women's accounts highlight gaps in awareness, service provision, and workplace recognition that perpetuate inequities in symptom management and support. Strengthening culturally competent clinical care, empowering primary care to deliver menopause services, and embedding workplace and public health policies are urgently required. Addressing these gaps will ensure that the national guideline translates into meaningful improvements in quality of life and equity for Malaysian women across the menopausal transition.

Author Contributions

G.D. developed the ELEMI program and the MARIE project. This was furthered by G.D. and P.P. T.H.T. submitted and secured the ethics approval for the study in Malaysia. K.Y.L., L.H.N., J.J., N.F.M.N., A.H.A., V.R., N.A.J. and S.N.A. collected data. G.D. and J.Q.S. conducted the data analysis. G.D. wrote the first draft and was furthered by T.H.T. and all other authors. V.P. formatted the paper, and G.D. and V.P. worked on all the rebuttals. All authors critically appraised, reviewed and commented on all versions of the manuscript. All authors read and approved the final manuscript.

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Consent to Participate

Obtained.

Consent for Publication

All authors consented to publish this manuscript.

Conflicts of Interest

All authors report no conflict of interest. The views expressed are those of the authors and not necessarily those of the NHS, the National Institute for Health Research, the Department of Health and Social Care or the Academic institutions.

Data Availability Statement

The Principal Investigator and the study sponsor may consider sharing anonymous data upon a reasonable request.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.

Figure 1: A thematic map visualises the major themes (in green) and contextual factors (in blue) identified from the analysis of 11 Malaysian qualitative interview transcripts (MARIE WP2a).