Table 3. Thematic table which includes sub-themes, exposures, determinants and practice implications.

Domain	Sub-themes	Exposures	Determinants	Practice implications
Biological	Vasomotor disturbance and sleep disruption	Night sweats, hot flushes, fragmented sleep	Hormonal decline, late-onset vasomotor symptoms, comorbid insomnia	Embed menopause screening into primary care; develop tailored sleep and vasomotor management pathways.
	Musculoskeletal and bone health	Joint pain, osteopenia/ osteoporosis, mobility limitations	Oestrogen deficiency, multimorbidity (osteoporosis, arthritis), low awareness of bone health link	Integrate menopause into chronic disease management; routine bone health monitoring.
	Genitourinary and sexual health (GSM)	Vaginal dryness, dyspareunia, urinary urgency	Oestrogen decline, surgical menopause, treatment contraindications (cancer)	Expand access to local oestrogen therapies; train clinicians to proactively address GSM; normalise sexual health in consultations.
	Metabolic and endocrine changes	Hypercholesterolaemia, pre-diabetes	Midlife metabolic transition, multimorbidity	Link menopause care with metabolic disease prevention; lifestyle counselling alongside symptom management.
Psychological	Mood disturbance and anxiety	Irritability, intrusive thoughts, withdrawal	Hormonal fluctuations, work stress, family strain, ADHD/ neurodiversity	Integrate mental health support within menopause care; normalise mood symptoms in consultations.
	Cognitive change (brain fog)	Forgetfulness, reduced concentration	Hormonal shifts, occupational stress, ageing stigma	Provide workplace adjustments (flexible deadlines, memory aids); clinician training to distinguish cognitive ageing versus menopause.
	Coping and resilience	Exercise, mindfulness, reframing menopause	Health literacy, supportive networks, socio-economic resources	Build resilience programmes into workplace and community interventions; leverage digital peer support tools.
Socio-cultural	Family and interpersonal dynamics	Reduced intimacy, spousal withdrawal, supportive partners	GSM, stigma around ageing/ sexuality, cultural silence	Couple-based counselling; culturally sensitive education for families.
	Peer influence and misinformation	HRT cancer myths, reliance on friends' advice	Lack of public health messaging, cultural conservatism	Launch multilingual, evidence-based campaigns; regulate health misinformation in media.
	Stigma and silence	Reluctance to disclose, avoidance of clinical help	Cultural taboos on ageing/ sexuality, gendered expectations	Normalise menopause conversations in schools, workplaces and community groups.
Health system	Access and care pathways	Public/private divide, prohibitive costs	Unequal insurance coverage, socio-economic status	Subsidise menopause care; ensure equitable public access to HRT and counselling.
	Clinical knowledge and attitudes	GP reluctance to prescribe HRT, dismissal of symptoms	Limited training, persistent "hormone phobia"	Introduce menopause modules in medical education; upskill GPs and non-specialists.
	Continuity and integration	Fragmented provision, lack of integrated multimorbidity care	Biomedical silos, absence of structured pathways	Develop 1-stop menopause clinics; embed care in chronic disease management.
	Trigger points for care-seeking	Participation in MARIE survey prompted recognition	Systemic invisibility of menopause in screening	Introduce structured menopause screening tools in primary care and occupational health.

ADHD: attention deficit/hyperactivity disorder; GP: general practitioner; GSM: genitourinary syndrome of menopause; HRT: hormone replacement therapy; MARIE: Menopause and Ageing Research in International Environments