

Supplementary Material 1, Interview Guides.

A) IN-DEPTH INTERVIEWS GUIDE FOR WLWH AGED 45–60 YEARS

Setting: HIV clinics, Mbarara and Masaka Regional Referral Hospitals, Southwestern Uganda

Duration: 40–60 minutes

Language: Runyankole or Luganda per participant preference

Introduction: Introduce yourself and the study purpose. Confirm informed consent and emphasize recording. Assure confidentiality and voluntary participation.

"We are interested in understanding your experience of menopause and how it relates to your HIV care. There are no right or wrong answers, do share openly."

Domain 1: Knowledge (Understanding of menopause and symptom overlap with HIV)

1. What do you understand by menopause? *Probe: How did you first learn about it? From whom?*
2. Any changes you have noticed in your body that you think may be related to menopause? *Probe: Physical? Emotional? Sexual? When did they start? [For premenopausal women: What changes do you anticipate?]*
3. How do you tell the difference between symptoms from menopause versus symptoms from HIV or your HIV medications? *Probe: Do you ever confuse them? What do you think is causing your symptoms? [Skip for premenopausal women]*

Domain 2: Skills (Managing symptoms and communicating with clinicians or peers)

4. What do you do on a day-to-day basis to manage your menopausal symptoms? *Probe: What has helped? What has not worked? [Skip for premenopausal women]*
5. How comfortable are you talking to your healthcare clinicians or peers about menopausal symptoms? *Probe: What makes it easy or difficult? Has a provider ever created a space for you to raise these concerns? [Skip for premenopausal women]*

Domain 3: Social/Professional Role & Identity (Expectations of HIV clinic for menopausal care)

6. When receiving HIV care, do you expect the clinicians there to help with menopause? *Probe: Why or why not? Who do you think should be responsible, HIV clinicians or someone else?*

Domain 4: Beliefs About Capabilities (Confidence in self and clinicians)

7. How confident do you feel managing your menopausal symptoms on your own? *Probe: What gives you that confidence, or what makes it hard? What about clinicians — do they have the knowledge and skills to help with menopause? [Skip for premenopausal women]*

Domain 5: Beliefs About Consequences (Impact on daily life and HIV care)

8. How have menopausal symptoms affected your life? *Probe: Relationships with partner or family? Work or household responsibilities? Sleep, mood, energy? How about affecting your HIV medication-taking or clinic attendance? [Skip for premenopausal women]*

Domain 6: Social Influences (Community norms, stigma, and support networks)

9. How do people in your community view women going through menopause? *Probe: Are there words or labels used? Has your status as a menopausal woman changed how others treat you?*
10. Are there cultural beliefs or norms that make it hard to discuss menopause openly at home or in the clinic? *Probe: Things considered private or shameful? Age or gender of provider affecting comfort? Who has been most helpful?*

Domain 7: Emotion (Feelings about menopause and aging with HIV)

11. How do you feel about going through menopause while also living with HIV? *Probe: Anxious? Ashamed? Accepting? What concerns you most? Faith, family, community support?*

Domain 8: Environmental Context & Resources (Accessing menopausal care)

12. What challenges have you faced trying to get treatment for menopausal symptoms? *Probe: Cost? Medications not available? Long waiting times? Privacy at the clinic? Distance? [Skip for premenopausal women]*

Domain 9: Goals (Health priorities)

13. What matters most to you about your health right now — managing HIV, managing menopausal symptoms, or both?

Domain 10: Memory, Attention & Decision Processes (Clinic encounter behaviour)

14. When you are at the HIV clinic, what helps you remember to mention menopausal symptoms to your provider? *Probe: Do you ever decide not to bring it up? What stops you — the long queue, fear of being sent to another department, not seeing it as a medical issue? [Skip for premenopausal women]*

Domain 11: Behavioural Regulation (Plans and self-management)

15. When you experience menopausal symptoms, do you seek help, and what makes it easier or harder to discuss these concerns during HIV clinic visits? *[Skip for premenopausal women]*

Domain 12: (Clinic encounter behaviour)

16. Do you remember to mention menopausal symptoms as important during your clinic visit? *Probe: What helps or prevents you from bringing it up? [Skip for premenopausal women]*

Domain 13: Optimism (Hope for better care)

17. Are you hopeful that HIV clinics will better address menopause in the future? *Probe: What gives you hope, or makes you sceptical, based on your past experiences?*

Domain 14: Reinforcement (What encourages or discourages care-seeking)

18. Has anything — a peer, a family member, a good clinic visit — encouraged you to seek help for your symptoms, or put you off seeking care? *Probe: Did a provider's response ever encourage or discourage you from raising menopausal concerns again?*

Closing

19. How do you cope with menopausal symptoms *[would you cope; for premenopausal participants]*, and what advice would you give to other WLWH going through menopause?
20. Is there anything important we have not discussed that you would like to share?

"Thank you very much for your time and for sharing openly. Your perspectives are very valuable to us."

B) KEY INFORMANT INTERVIEWS (KIIs) GUIDE FOR CLINICIANS

Setting: HIV clinics, Mbarara and Masaka Regional Referral Hospitals, Southwestern Uganda

Duration: 40–60 minutes

Language: English

Introduction: Introduce yourself and the study purpose. Confirm informed consent. Assure confidentiality. Explain the recording.

"We are interested in your clinical experience managing menopausal symptoms in women living with HIV, and your perspectives on integrating menopausal care into HIV services. There are no right or wrong answers."

Section 1: Professional Background

1. Tell me about your role in HIV care and how long you have been providing it. *Probe: Cadre? Years of experience? Primary duties?*
2. What training have you received on menopausal health in general and specifically for WLWH? *Probe: Pre-service or in-service? How recently? How prepared do you feel based on that training?*

Domain 1: Knowledge (Awareness of menopause and its overlap with HIV)

3. How may menopause present differently among WLWH? *Probe: Timing? Symptom severity? Overlap with HIV or ART side effects?*

Domain 2: Skills (Clinical competencies for diagnosis and management)

4. How are menopausal symptoms managed among WLWH? *Probe 1: Menopausal hormone therapy: indications, access, concerns about ART interaction, barriers to prescribing? Non-hormonal options? Counselling? Referral? Probe 2: Differential diagnosis? Drug-drug interactions with ART? Lack of diagnostic tools or guidelines?*

Domain 3: Social/Professional Role & Identity (Scope of practice and care ownership)

5. Do you consider menopausal care part of your role as an HIV clinician? *Probe 1: Why or why not? Who do you think should own this: HIV clinicians, gynaecologists, or a shared responsibility? Probe 2: Do performance indicators or patient volume affect your ability to address menopause?*

Domain 4: Beliefs About Capabilities (Confidence to provide menopausal care)

6. How confident do you feel assessing and managing menopausal symptoms in your HIV patients? *Probe: What gaps in knowledge or resources undermine your confidence? What would increase it?*

Domain 5: Beliefs About Consequences (Clinical and programmatic impact)

7. Do menopausal symptoms affect women's engagement with HIV care? If yes, how? *Probe: ART adherence? Clinic attendance? Patient wellbeing? Viral suppression?*

Domain 6: Environmental Context & Resources (Health system constraints)

8. What resources are available at your facility for managing menopausal symptoms? *Probe: Medications, hormone therapy, lubricants, antidepressants? Private consultation space? Clinical guidelines?*
9. What systemic barriers most limit your ability to provide menopausal care in the HIV clinic? *Probe: Supply chain? Staffing shortages? High patient volumes? Lack of guidelines or referral pathways?*

Domain 7: Social Influences (Communication, culture, and provider-patient dynamics)

10. How do cultural beliefs, stigma, and age or gender norms influence discussions and care-seeking around menopause in your clinic? *Probe 1: What barriers prevent open discussion — cultural norms, stigma, age or gender dynamics? Probe 2: Do you routinely screen? Only when symptoms are presented? What prompts you?*

Domain 8: Emotion (Affective experience of providing menopausal care)

11. How do you feel when a patient presents with severe menopausal symptoms and you have limited options to help her? *Probe: Helplessness? Motivation to advocate for resources? [Skip if no experiences]*

Domain 9: Behavioural Regulation (Protocols and systematic practice)

12. Do you have any systematic way of screening for or tracking menopausal symptoms in your female HIV patients? *Probe: Documentation tools? Patient cards? Follow-up mechanisms? If not, what would help?*

Domain 10: Intentions & Goals (Motivation and competing priorities)

13. How does managing menopausal care fit into your intentions and goals during a typical clinical encounter? *Probe: Does it make it onto your priority list? What competes with it?*

Domain 11: Optimism (Confidence in integration)

14. How hopeful are you that menopausal care can be successfully integrated into routine HIV services at your facility? *Probe: What would need to change — guidelines, training, resources, leadership commitment?*
15. Have you ever seen a menopausal concern well-managed within an HIV clinic visit? What made it possible? *Probe: What can be built on from what already works?*

Domain 12: Memory, Attention & Decision Processes (Clinical encounter behaviour)

16. During a busy HIV consultation, what prompts you to ask about menopausal symptoms? *Probe: Symptom presentation only? Routine history? Are there cognitive cues or reminders that help?*

Domain 13: Optimism (Confidence that integration can succeed)

17. How hopeful are you that menopausal care can be realistically integrated into routine HIV services at your facility? *Probe: What conditions would need to be in place — updated guidelines, training, staffing, leadership endorsement?*

Domain 14: Reinforcement (What motivates or discourages provider engagement)

18. When you successfully address a menopausal symptom and see the impact on a patient, how does that affect you? *Probe: Does patient gratitude or clinical improvement motivate you to engage more with menopausal care?*
19. What discourages you from engaging with menopausal concerns during consultations? *Probe: Lack of treatment options? Time pressure? Fear of prescribing without guidelines? Feeling it is outside your role?*

Closing

20. What would most improve care for menopausal WLWH at your facility?
21. Is there anything important we have not covered that you would like to add?

"Thank you very much for your time and for sharing your clinical expertise. Your perspectives will directly inform efforts to improve integrated care for WLWH."