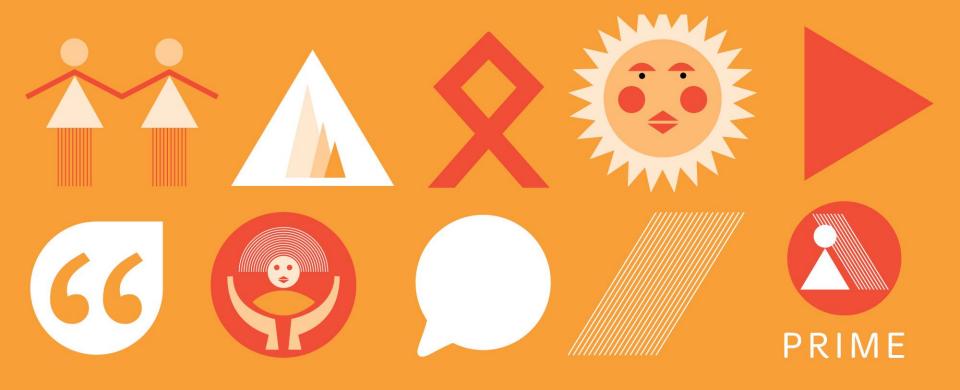
Menopause: Everything we know (or not) about women living with HIV

Shema Tariq, UCL Institute for Global Health, UK



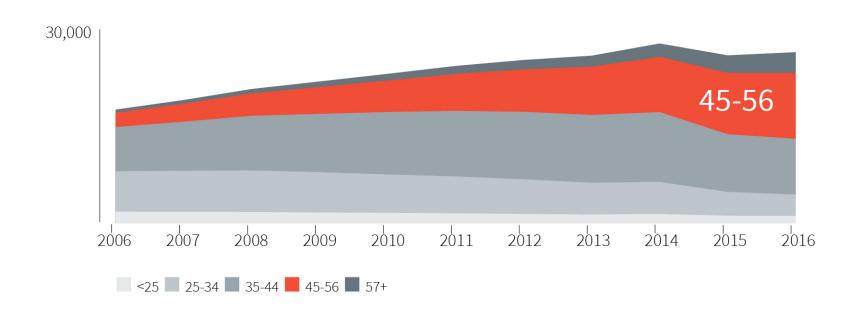
6th November 2019

@Prime_UCL

BACKGROUND



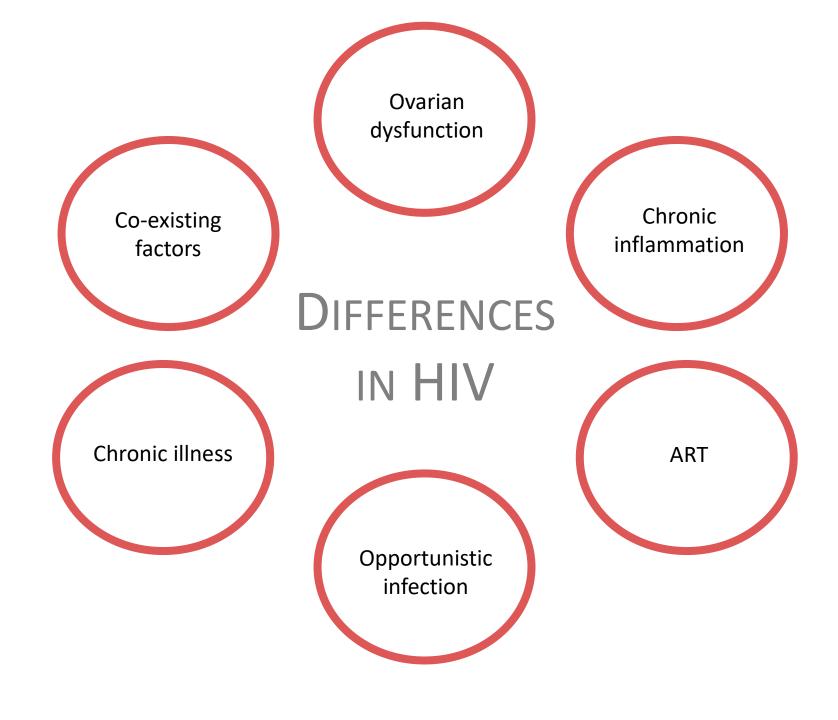
Number of women accessing HIV care by age group, 2006-2016



Source: Zheng Yin, Public Health England, personal communication, 05/10/17.

Menopause and HIV

- Relatively under-researched
- US studies predominate
- Earlier age and possibly increased symptoms¹
- Symptoms under-recognised^{2,3}
- Use of HRT ~10%^{4,5}



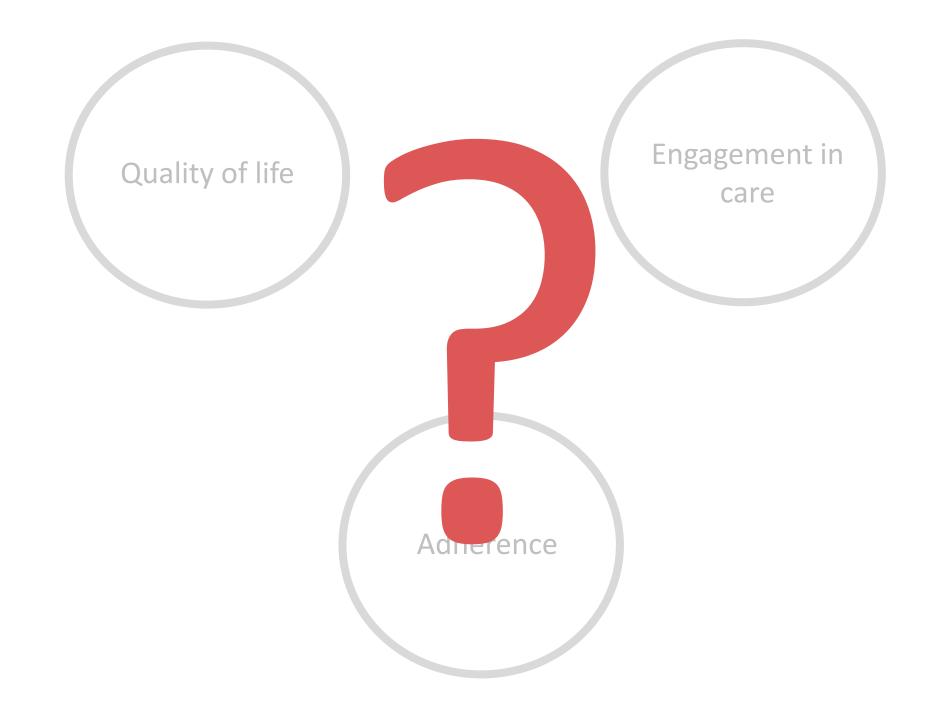
MENOPAUSE AND HIV

- Increased vasomotor symptoms^{1,2,3}
- Increased psychological symptoms^{3,4,5}
- No difference in cognition⁶
- No difference in sexual function^{7,8}
- Increased risk of osteoporosis and fractures^{9,10}
- Increased cardiovascular risk¹¹



Engagement in care

Adherence

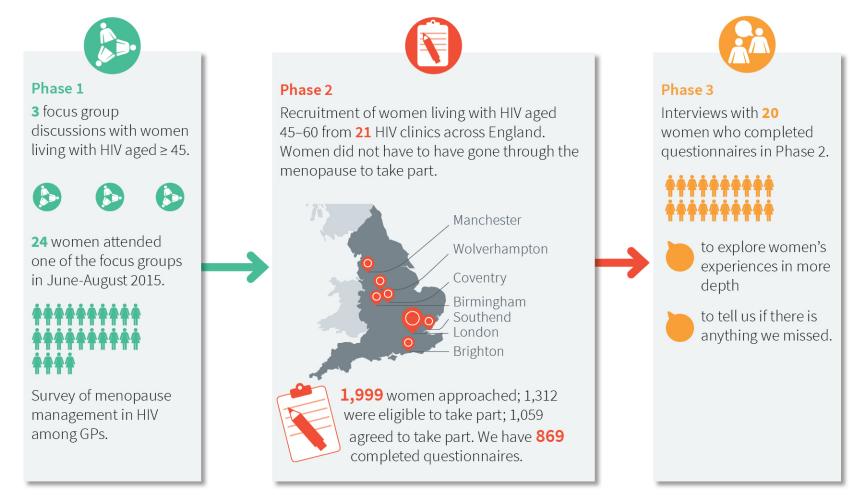




What is the impact of the menopause transition on the health and wellbeing of women living with HIV?



Design of the PRIME Study



Source: Tariq S et al. PRIME (Positive Transitions Through the Menopause) Study: a protocol for a mixed-methods study investigating the impact of the menopause on the health and well-being of women living with HIV in England. BMJ Open. 2019.

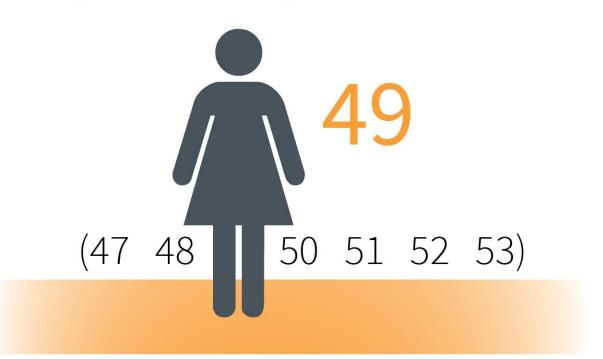
PRIME STUDY: RESULTS



Findings: Description of PRIME Study participants

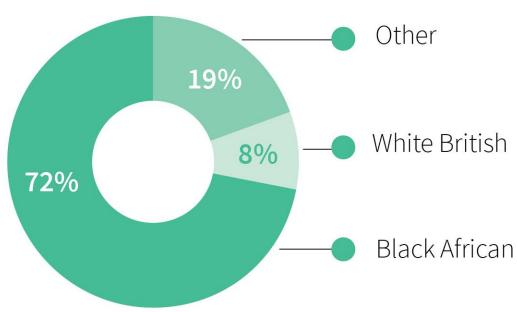
Characteristics of 869 PRIME Study participants

Median age (interquartile range)

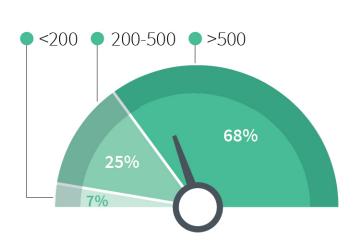


Characteristics of 869 PRIME Study participants

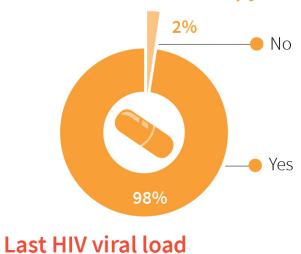
Ethnicity

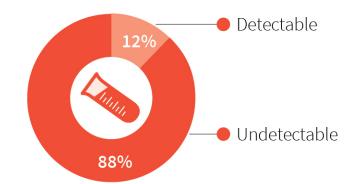


Characteristics of 869 PRIME Study participants



Last CD4 count (cells/mm3) On antiretroviral therapy

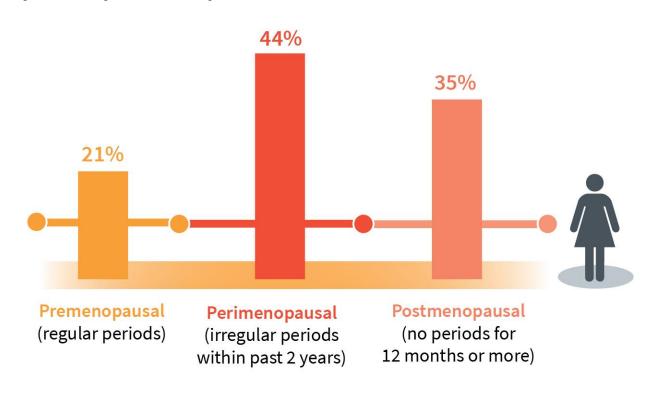






Findings: Description of PRIME Study participants

The majority of PRIME Study participants were either peri- or postmenopausal





Findings: Menopausal symptoms in women living with HIV

Prevalence of menopausal symptoms



Somatic

hot flushes, palpitations, joint and muscle discomfort, sleep disturbance





Urogenital

vaginal dryness, urinary tract symptoms, sexual problems





Psychological

depression, anxiety, irritability, exhaustion



It leaves you feeling 'what is going on here'? Is it HIV? Is it the menopause?

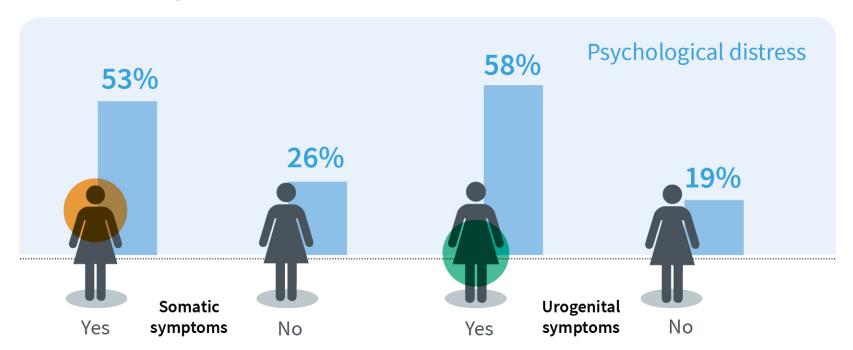


If I wasn't coping with HIV and I was dealing with menopause alone, maybe it would be easier. I've got to cope with the two at the same time. If you haven't slept for the whole night and you need to take medication...it just gets so annoying.



Findings: Menopausal symptoms in women living with HIV

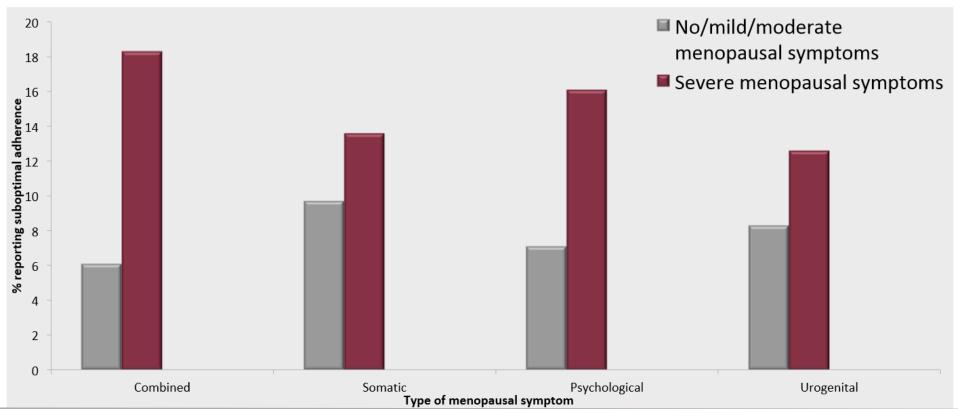
Psychological distress and menopausal symptoms



My menopause is now interrupting my life quite seriously. I think I have gone into a depression. My sleeping pattern is so horrendous and so chaotic that I feel very emotional.

Source: Tariq S *et al*. Menopausal symptoms are associated with psychological distress in HIV+ women. Conference on Retroviruses and Opportunistic Infections; 4-7 March; Boston, USA 2018.

FIGURE: MENOPAUSAL SYMPTOMS AND SELF-REPORTED SUB-OPTIMAL ADHERENCE TO ART

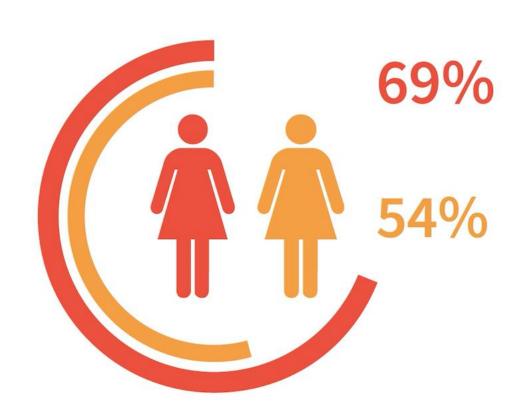


Severe menopausal symptoms were associated with sub-optimal adherence (AOR 2.47, p=0.008)

Source: Solomon D *et al.* The association between severe menopausal symptoms and adherence to antiretroviral therapy in women living with HIV. AIDS 2018; 23-27 July; Amsterdam, 2018.

HIV STATUS AND SEXUAL PROBLEMS





Women living with HIV reported ≥1 sexual problems lasting ≥3 months in the past year.

Women without HIV reported ≥1 sexual problems lasting ≥3 months in the past year.

Source: Toorabally N *et al.* Association of HIV status with sexual function in women aged 45-60. Conference on Retroviruses and Opportunistic Infections (CROI); March 4-7; Boston, USA 2018.

HIV STATUS AND SEXUAL FUNCTION



	Natsal-3 (HIV-) N=1677	PRIME (HIV+) N=312	Adjusted odds ratio ^a (95% CI)
Lacked interest in sex	38%	52%	2.30 (1.30-4.07)
Lacked enjoyment in sex	13%	32%	3.50 (1.94-6.30)
Felt anxious during sex	4%	16%	4.01 (2.24-7.16)
Physical pain due to sex	8%	15%	2.71 (1.83-4.01)
No arousal during sex	9%	29%	3.17 (1.84-5.44)
No orgasm/long time to reach orgasm	15%	31%	2.82 (1.86-4.28)
Reached orgasm too quickly	2%	7%	2.20 (0.67-7.26)
Vaginal dryness	17%	28%	2.44 (1.47-4.06)
Overall sexual function			
Low sexual function	54%	69%	2.44 (1.49-4.00)

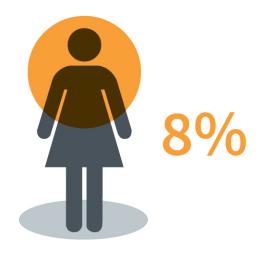
^aAdjusted for ethnicity, age, number of chronic conditions and depression

Source: Toorabally N *et al.* Association of HIV status with sexual function in women aged 45-60. Conference on Retroviruses and Opportunistic Infections (CROI); March 4-7; Boston, USA 2018.

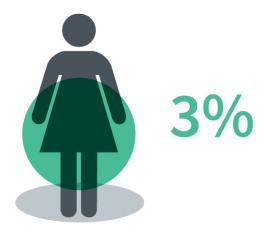


Findings: Managing menopausal symptoms

Low use of MHT and vaginal estrogens



Women with somatic symptoms who reported currently using MHT



Women with **urogenital** symptoms who reported currently using vaginal oestrogen

PRIMARY CARE MANAGEMENT

	HIV-ne womer	•	HIV-po womer	
How confident do you feel managing menopause symptoms?				
Confident		85 (97)		40 (47)
Not confident		3 (3)		46 (53)
Where should menopause be routinely managed?				
Mainly within primary care		84 (96)		40 (53)
By a specialist service	•	3 (3)	_	17 (22)
HIV specialist teams		n/a		18 (24)
Other		1 (1)		1 (1)

Source: Chirwa M *et al*. Managing menopause in women living with HIV: A survey of primary care practitioners. Post Reprod Health. 2017; 23(3):111-5.



[The HIV doctors] are telling us to take everything to the GP...the GP then tells you to take it back to your HIV consultant. It's very frustrating if you're suffering all these things, and you keep going backwards and forwards



Findings: Managing menopausal symptoms



47%

of women said they did not have sufficient information about the menopause

It would be good to hear about [menopause] earlier, then we would start noticing it in our bodies. It would be a thing that we know. Not a kind of shock. You don't know what is happening to you. Come and teach us. Tell us more.

FORTHCOMING WORK



- Predictors of age at menopause and symptoms
- Menopausal symptoms and retention in HIV care
- Menopausal status and symptoms and quality of life
- Attitudes towards menopause among women living with HIV
- Experiences of menopause in women living with HIV
- Ovarian biomarker sub-study

KEY FINDINGS



- High levels of menopausal symptoms
- Impact on mental health and sexual well-being
- Limited use of HRT and vaginal oestrogens
- Nearly half did not have enough information
- GPs lack confidence in managing HIV and menopause

MANAGEMENT

BHIVA/BASHH/FSRH Guidelines 2018

- Provide information including healthy behaviour change
- Annual review of menstrual cycle
- Menopausal symptom assessment aged >45
- HRT as per NICE guidelines (drug interactions)
- Bone screening (3 yearly FRAX age>50 or postmenopausal)
- CVD screening (yearly Qrisk 3 age >40)
- Aim for management within primary care

www.hiv-druginteractions.org



HRT Treatment Selector

Charts revised November 2017. Full information available at www.hiv-druginteractions.org

For personal use only. Not for distribution. For personal use only. Not for distribution. For personal use only. Not for distribution.

		ATV/r	DRV/r	LPV/r	EFV	ETV	NVP	RPV	MVC	DTG	RAL	ABC	FTC	3TC	TDF	ZDV	E/C/F/TAF	E/C/F/TDF
	Estradiol	Įª.	↓ª	↓ª	Įª.	↓ª	↓ª	↔	‡	‡	‡	‡	‡	‡	+	+	1	1
	Drospirenone	↑b	↑b	↑b	Įª.	↓ª	ļª.	+	+	+	+	+	+	+	+	↔	↑b	↑6
ET)	Dydrogesterone	↑b	↑b	↑b	Į*	↓ª	↓ª	\leftrightarrow	+	‡		\leftrightarrow	\leftrightarrow	+	\leftrightarrow	\leftrightarrow	↑b	↑ b
ns (H	Levonorgestrel	↑b	↑b	↑b	1ª	↓ª	↓ª	\leftrightarrow	+	‡	+	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	\leftrightarrow	↑b	↑b
jestir	Medroxy- progesterone (oral)	↑b	↑b	↑b	i a	↓ª	↓ª	\leftrightarrow	+	‡		\leftrightarrow	+	‡	\leftrightarrow	+	↑b	↑b
Prog	Norethisterone (Norethindrone)	↑b	↑b	↑b	ª →	↓ª	ª →		‡	‡	‡		‡	‡	‡	‡	↑b	↑6
	Norgestrel	↑b	↑b	↑b	a i	↓ª	↓ª	+	‡	‡	‡		+	‡		‡	↑b	↑ b

Colour Legend

	No clinically	significant	interaction	expected.
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These drugs should not be coadministered.

Potential interaction which may require a dosage adjustment or close monitoring.

Potential interaction predicted to be of weak intensity. No a priori dosage adjustment is recommended.

Text Legend

- Potential increased exposure of the hormone
- Potential decreased exposure of the hormone
- → No significant effect
- Monitor for signs of estrogen deficiency.
- The clinical significance of increased progestin exposure in terms of overall risk of deep vein thrombosis, pulmonary embolism, stroke and myocardial infarction in postmenopausal women receiving substitution hormones is unknown.

TAKE HOME MESSAGES

- Ageing cohort
- Health consequences of menopause
- Opportunity for preventative healthcare
- British HIV association guidelines and standards
- Expanding area for research

ACKNOWLEDGEMENTS

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 Alexandra Rolland, Caroline Sabin, Tuhina Bhattacharyya
 & Saliha Abbassi
- All our study participants and participating clinics



