

Mental and Sexual Health in Women Living with HIV aged 40-60 in Denmark: a cross-sectional study

Ditte Scofield¹, Morten Frisch², Nina Weis¹, Merete Storgaard³, Gitte Pedersen⁴, Terese L. Katzenstein⁵, Isik S. Johansen⁶, Christian Graugaard⁷, Ellen Moseholm¹

¹Department of Infectious Diseases, Copenhagen University Hospital, Hvidovre, Denmark; ²Department of Epidemiology Research, Statens Serum Institut, Denmark; ³Department of Infectious Diseases, Aarhus University Hospital, Denmark; ⁴Department of Infectious Diseases, Aalborg University Hospital, Denmark; ⁵Department of Infectious Diseases, Copenhagen University Hospital, Denmark; ⁶Department of Infectious Diseases, Odense University Hospital, Denmark; ⁷Department of Clinical Medicine, Center for Sexology Research, Aalborg University, Denmark.

BACKGROUND

Ageing in the context of HIV necessitates new clinical consideration. Data suggests that women living with HIV (WWH) are at increased risk of mental health problems, sexual dysfunction, and severe menopausal symptoms during midlife when compared to women living without HIV (WWOH).

OBJECTIVES

To investigate the mental and sexual health of WWH aged 40-60 in comparison to WWOH in Denmark. Secondly, to examine the severity of menopausal symptoms in WWH.

METHODS

- The WWH were identified from the ongoing SHARE study.
- The WWH were recruited from five centers in Denmark.
- Data was collected from March to September 2021.
- The survey assessed symptoms of depression (PHQ-2), anxiety (GAD-7), sexual dysfunction (FSFI-6), and additional items covering multiple areas of physical, sexual and psychosocial health.
- A control group of WWOH, matched 1:10 on age, was included from the Danish population-based cohort study Project SEXUS.
- Mental and sexual health data in WWH and WWOH were compared using logistic regression models.
- A sub-analysis explored severity of menopausal symptoms in WWH.

RESULTS

In total, 73 WWH and 730 WWOH with a median age of 49 years [IQR 45-54] in both groups were included.

- Sociodemographic characteristics** (Table 1): WWH were more likely to be single, born to parents with non-Danish backgrounds and have spent less time in formal education.
- Health characteristics** (Table 1): No differences were identified.
- HIV characteristics**: Median time since HIV diagnosis: 20 years [IQR 1-26], 95.9% had acquired HIV by sexual transmission. The WWH were generally well-treated: 97.3% had HIV RNA loads < 50 copies/ml, 98.6% had CD4 counts > 350 cells/ μ l. All WWH were currently receiving ART.
- Mental health outcomes**: No significant association with HIV status was seen in mean score or cut-off scores for GAD-7 or PHQ-2.
- Sexual health outcomes** (Table 2): No significant association with HIV status was seen in sexual quality of life (view on the importance of one's sex life, quality of one's sex life, whether one's sexual needs met) or frequency of sexual activity. However, WWH had significantly increased odds of lower sexual desire levels (aOR 3.19 [95% CI: 1.51-6.73]), lubrication dysfunction (aOR 8.26 [95% CI: 2.59-26.41]) and genital pain dysfunction (aOR 4.98 [95% CI: 1.31-8.90]) when compared to WWOH.
- Menopausal symptoms**: No significant differences in severity was found.

TABLE 1: SOCIODEMOGRAPHIC AND HEALTH CHARACTERISTICS

	WWH (n=71)	WWOH (n=730)	P-value
	n (%)	n (%)	
Age (median, IQR)	49 [45-54]	49 [45-54]	1.00
Married/steady relationship	46 (63.0%)	593 (81.2%)	<0.01
Non-Danish ethnicity^a	38 (52.1%)	14 (1.9%)	<0.001
In employment/full-time education	56 (76.7%)	619 (84.7%)	0.10
Education (<10 years)	19 (26.0%)	49 (6.7%)	<0.001
BMI (median, IQR)	25.6 [21.9-27.7]	25.4 [22.6-29.4]	0.72
Current smoker	13 (18.3%)	125 (17.1%)	0.93
Self-rated health: good	53 (72.6%)	559 (76.6%)	0.70
Long-term/serious somatic disease^b	35 (47.9%)	716 (98.1%)	0.95
History of mental health problems	24 (33.8%)	307 (42.1%)	0.25
Post-menopausal	31 (45.6%)	317 (43.5%)	0.71
Premature menopause (<age 40)	5 (16.1%)	20 (6.3%)	0.55
Age at menopause^c (median, IQR)	48 [45-50]	49 [46-52]	0.29

^aParents born and raised outside Denmark; ^bOther than HIV; ^cIf age at menopause between 40-60.

TABLE 2: LOGISTIC REGRESSION ANALYSES ON SEXUAL HEALTH OUTCOMES

	WWH (n=71)	WWOH (n=730)	Crude OR [95%CI]	Adjusted OR ^a [95%CI]
	n (%)	n (%)		
Sexual desire frequency				
At least once a month	32 (47.0%)	579 (79.3%)	1 [reference]	1 [reference]
Less than once a month	14 (20.6%)	86 (11.8%)	4.05 [2.36-6.97]	3.19 [1.51-6.73]
Sexual dysfunction	n=33	n=513		
FSFI-6 ^b score (mean, SD)	22.3 (5.20)	23.62 (4.69)		
Score > 19	23 (69.7%)	433 (84.4%)	1 [reference]	1 [reference]
Score \leq 19	10 (30.3%)	80 (15.6%)	2.35 [1.08-5.13]	5.33 [1.60-17.72]
Lubrication dysfunction^c (n=41)	8 (19.5%)	36 (6.0%)	4.07 [1.74-9.51]	8.26 [2.59-26.41]
Genital pain dysfunction^c (n=44)	6 (13.6%)	21 (3.5%)	3.93 [1.14-13.49]	4.98 [1.31-18.90]

^aAdjusted for ethnicity, relationship status, financial situation, substance use, BMI, physical health status, mental health status, smoking status and menopausal status; ^bThe Female Sexual Function Index – 6 item: presented to women in steady relationships, who report sexual intercourse with a man in the last four weeks; ^cSex with a man in the last year, experienced the difficulty frequently and found it to be a problem

CONCLUSION

Preliminary results from the SHARE study demonstrated that WWH, aged 40-60, suffered more sexual problems and dysfunctions when compared to WWOH of the same age in Denmark.

No difference was seen in mental health outcomes or in the severity of menopausal symptoms.