Physical, Psychosocial and Sexual Health in People Aged ≥50 Years With and Without HIV in Denmark

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BACKGROUND

With age, people with HIV may face higher rates of physical comorbidities, psychosocial challenges and sexual health problems, all of which can impact quality of life.

AIM

To examine self-reported physical, psychosocial and sexual health outcomes among people aged ≥50 years with and without HIV in Denmark.

METHODS

We used self-reported data, collected in 2021 to 2022, from a nationwide cross-sectional study among people aged ≥50 years with HIV in Denmark compared to people without HIV from a nationally representative cohort study. Data were collected via an electronic survey including several validated Patient Reported Outcome Measures. Sex-stratified logistic regression models examined associations between HIV and physical, psychosocial and sexual health outcomes, adjusted for confounding factors.

TABLE 1: SOCIODEMOGRAPHIC AND LIFESTYLE-RELATED CHARACTERISTICS

	MEN			WOMEN		
	With HIV (n=322)	Without HIV (n=15,548)	*p*-value	With HIV (n=67)	Without HIV (n=13,926)	*p*-value
AGE	n (%)	n (%)		n (%)	n (%)	
Median [IQR]	59 [55;65]	64 [57;72]	**<0.001**	56 [53;62]	62 [55;69]	**0.001**
RELATIONSHIP STATUS			**<0.001**			**<0.001**
Married/in steady relationship	191 (60.3)	13373 (86.3)		33 (49.3)	10645 (76.6)	
SEXUAL IDENTITY			**<0.001**			0.92
Heterosexual	80 (24.8)	14320 (92.1)		60 (89.6)	12646 (90.8)	
ETHNICITY			**<0.001**			**<0.001**
Non-Danish parentage	27 (8.4)	319 (2.1)		20 (29.9)	250 (1.8)	
FINANCIAL DIFFICULTIES WITHIN THE LAST YEARS			**0.03**			0.42
Yes	37 (11.5)	1266 (8.2)		4 (6.0)	1220 (8.8)	
SUBSTANCE USE						
Current smoker	67 (20.9)	2185 (14.1)	**<0.001**	14 (20.9)	1936 (13.9)	0.10
Weekly alcohol intake >7 units	104 (32.5)	6333 (40.9)	**0.002**	9 (14.3)	2927 (21.2)	0.18
Recreational drug use within the last year	40 (12.6)	320 (2.1)	**<0.001**	8 (11.9)	162 (1.2)	**<0.001**
HIV-SPECIFIC CHARACTERISTICS						
Years since HIV diagnosis, median [IQR]	24 [16;31]			27 [20;33]		
HIV RNA <50 copies/ml	316 (98.1)			64 (95.5)		
CD4 count >350 cells/µl	298 (95.6)			64 (95.5)		
HIV acquisition through sexual contact	312 (96.9)			62 (92.5)		



RESULTS

A total of 322 men and 67 women with HIV were included and compared to 15,548 men and 13,926 women without HIV. Key sociodemographic differences included fewer people with HIV in relationships and more with non-Danish parentage (Table 1). HIV was associated with increased odds of several health conditions, including liver diseases, cardiovascular disease in men, and hypertension and osteoporosis in women (Table 2). Among men, HIV was significantly associated with more depressive symptoms but also with a larger number of close friends (Table 3). For women with HIV, suicidal thoughts and behaviors, loneliness and domestic abuse experiences were more common. Sexual health analysis showed that men with HIV were more likely to report orgasmic dysfunction and erectile dysfunction, while lubrication dysfunction and genital pain dysfunction were more common among women with HIV (Table 4).

TABLE 2: ADJUSTED ODDS RATIOS OF ASSOCIATIONS BETWEEN HIV STATUS AND PHYSICAL HEALTH OUTCOMES

	MEN			WOMEN		
	With HIV (n=322)	Without HIV (n=15,548)	aOR[a]	With HIV (n=67)	Without HIV (n=13,926)	aOR[a]
SELF-RATED HEALTH	n (%)	n (%)		n (%)	n (%)	
Bad or very bad	24 (7.5)	1007 (6.5)	0.85 [0.51-1.40]	5 (7.5)	1021 (7.3)	0.87 [0.30-2.49]
HISTORY OF PHYSICAL HEALTH PROBLEMS						
Any physical health problem	131 (41.3)	5565 (36.2)	1.11 [0.85-1.46]	28 (43.8)	4786 (34.9)	1.42 [0.83-2.43]
Cardiovascular diseases	54 (17.0)	2014 (13.1)	**1.52 [1.06-2.17]**	5 (7.8)	798 (5.8)	1.40 [0.49-3.96]
Hypertension	43 (13.4)	1859 (12.1)	1.17 [0.79-1.73]	10 (15.4)	1282 (9.3)	**2.14 [1.02-4.49]**
Lung diseases	19 (6.0)	414 (2.7)	**2.43 [1.32-4.47]**	4 (6.2)	352 (2.6)	2.02 [0.61-6.77]
Liver diseases	12 (3.8)	105 (0.7)	**2.43 [1.08-5.46]**	≤3 (4.7)	133 (1.0)	**5.56 [1.63-19.04]**
Osteoporosis	10 (3.2)	135 (0.9)	2.21 [0.91-5.40]	5 (7.8)	419 (3.1)	**3.66 [1.25-10.67]**

[a] Adjusted for age, ethnicity, relationship status, sexual identity, financial situation, body mass index, history of mental health problems, current smoking, weekly alcohol intake and recreational drug use.

TABLE 3: ADJUSTED ODDS RATIOS OF ASSOCIATIONS BETWEEN HIV STATUS AND PSYCHOSOCIAL HEALTH OUTCOMES

	MEN			WOMEN		
	With HIV (n=322)	Without HIV (n=15,548)	aOR[a]	With HIV (n=67)	Without HIV (n=13,926)	aOR[a]
CURRENT SYMPTOMS OF ANXIETY	n (%)	n (%)		n (%)	n (%)	
GAD-7 score ≥5	84 (26.1)	1011 (13.1)	1.27 [0.88-1.83]	21 (31.3)	1460 (21.6)	1.32 [0.72-2.44]
CURRENT SYMPTOMS OF DEPRESSION						
PHQ-2 score ≥3	49 (15.2)	792 (10.2)	**1.63 [1.07-2.49]**	13 (19.4)	1019 (15.1)	1.22 [0.62-2.38]
SUICIDAL THOUGHTS OR ATTEMPTS						
Ever	93 (29.7)	2024 (13.2)	0.91 [0.65-1.26]	23 (35.9)	2520 (18.4)	**1.92 [1.03-3.59]**
LONELINESS						
Sometimes, often or always feel lonely	100 (31.2)	1275 (16.5)	1.01 [0.71-1.44]	32 (47.8)	1663 (24.6)	**2.02 [1.15-3.55]**
SOCIAL NETWORK SIZE						
≥3 close friends	245 (76.8)	5382 (71.2)	**1.44 [1.03-2.00]**	46 (70.8)	5330 (79.7)	0.58 [0.32-1.04]
VICTIM OF DOMESTIC ABUSE						
Ever	23 (7.1)	151 (2.0)	0.92 [0.49-1.72]	20 (30.8)	762 (11.3)	**2.38 [1.28-4.42]**

Note: The 7-item Generalized Anxiety Disorder Screener (GAD-7); The 2-item Patient Health Questionnaire (PHQ-2)
[a] Adjusted for age, ethnicity, relationship status, sexual identity, financial situation, body mass index, history of physical or mental health problems, current smoking, weekly alcohol intake and recreational drug use.

TABLE 4: ADJUSTED ODDS RATIOS OF ASSOCIATIONS BETWEEN HIV STATUS AND SEXUAL HEALTH OUTCOMES

	MEN			WOMEN		
	With HIV (n=322)	Without HIV (n=15,548)	aOR[a]	With HIV (n=67)	Without HIV (n=13,926)	aOR[a]
SEXUAL QUALITY OF LIFE	n (%)	n (%)		n (%)	n (%)	
The importance of having a good sex life						
Not very important or not at all important	69 (21.8)	2485 (16.2)	**2.32 [1.64-3.27]**	21 (34.4)	4869 (35.7)	1.08 [0.59-1.98]
Quality of sex life in the last year						
No sex life in the last year	51 (15.9)	2151 (13.9)	**2.32 [1.51-3.56]**	26 (41.3)	3529 (25.6)	1.88 [0.86-4.11]
Fulfilment of sexual needs						
No sexual needs in the last year	14 (4.4)	833 (5.4)	**2.31 [1.19-4.48]**	15 (23.4)	1948 (14.3)	**2.73 [1.31-5.72]**
SEXUAL DESIRE						
Less than once a month or not at all	32 (10.5)	2213 (14.6)	**1.75 [1.09-2.82]**	32 (55.2)	4832 (36.5)	**2.43 [1.23-4.80]**
SEXUAL DYSFUNCTION IN THE LAST YEAR[b]						
Erectile dysfunction	51 (24.2)	1484 (13.8)	**2.09 [1.28-3.40]**			
Orgasmic dysfunction	28 (12.4)	535 (5.0)	**2.71 [1.51-4.87]**	≤3 (7.1)	606 (7.2)	1.03 [0.21-5.06]
Lubrication dysfunction				10 (33.3)	1148 (13.6)	**3.56 [1.25-10.17]**
Genital pain dysfunction				5 (16.7)	513 (6.1)	**3.98 [1.39-11.37]**
ERECTILE DYSFUNCTION MEDICATION						
Used in the last year	100 (37.2)	1224 (18.4)	**1.79 [1.25-2.55]**			

[a] Adjusted for age, ethnicity, relationship status, sexual identity, financial situation, body mass index, history of physical or mental health problems, current smoking, weekly alcohol intake and recreational drug use.
[b] For a sexual dysfunction to be present, the specific sexual difficulty must have been experienced 'often' or 'every time' during sexual activity with another person within the last year and perceived as a problem.

CONCLUSIONS

People with HIV aged ≥50 years in Denmark face significantly more physical, psychosocial and sexual health challenges compared to people without HIV. Clinical attention to these disparities is crucial for improving the overall health of ageing people with HIV.

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