

Factors associated with sexual quality of life among HIV positive men

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Background

- Sexual quality of life (SQoL) is an important component of a person's wellbeing and sexual identity.
- A high prevalence of sexual dysfunction symptoms in the People Living with HIV/AIDS (PLWHA) has been well established and is even higher compared to patients with chronic diseases (1).
- SQoL may not only influence the PLWHA's quality of life but could potentially affect treatment adherence (2).
- Evaluating the quality of sexual life among PLWHA is an important objective in terms of public policy and clinical perspective and should be highlighted at prevention level.
- In addition to demographic and physiological factors, the specific HIV-related elements such as HIV treatment or HIV-related biological parameters are important to explore (3).
- Clinical factors, including psychological factors (Depression, psychological distress) were found to be relevant to general sexual dysfunction among HIV positive men(4,5).

Objective:

To identify multi-dimensional factors associated with SQoL as reported by men affected by HIV and AIDS, using a large international dataset from the PROQOL-SexLife validation study.

Methods

Participants:

107 heterosexual men and 474 men who have sex with men (MSM) were recruited from HIV centers in five countries:

- Australia: n=109
- Brazil: n=139
- Canada: n=77
- France: n=192
- USA: n=64

Measures:

- Participants' physical and mental health status and HIV parameters were self-reported.
- Using PROQOL-Sexlife questionnaire for assessing SQoL with below characteristics:
 - The first instrument developed for measuring specifically SQoL among HIV patients.
 - Following a qualitative analysis, comprehensive dimensions were created considering the HIV-positive patient's sexuality.
 - Assessing the sexual functioning and wellbeing from a bio-psycho-social perspective.
 - Comprising six dimensions for MSM and five dimensions for heterosexual men.
 - The score of each dimension ranges from 0 (no impairment) to 100 (best).

PROQOL-Sexlife dimensions:

- Positive sexual perception (POP)
- Sexual dysfunction (DYS)
- Stigma/fear (STI)
- Sexual practices with partner (PAR)
- Soft sexual practices (SOF)
- Drug consumption (DRG)

	Dimension	Abbreviation	Mean ± SD	List of variables constructing PROQOL-SexLife dimensions
MSM	Positive sexual perception	POP	41.5 ± 24	General satisfaction, importance, pleasure, partner satisfaction, Having sexual activity with a partner in last 4 weeks
	Stigma and fear	STI	42.5 ± 23	Fear of being rejected, serological effect, fear of reinfection, feeling less desirable, experience of stigma due to sexual orientation
	Sexual dysfunction	DYS	37.2 ± 25.7	Having less sexual desire, erection problem
	Sexual practices with partner	PAR	28.6 ± 22	Foreplay, oral-anal, anal sexual practices
	Soft practices	SOF	42.4 ± 23	Sexual dreams, masturbation
	Drug consumption	DRG	78.5 ± 23	Using drug for sex, other type of sexual practices
Heterosexual Men	Positive sexual perception	POP	40.0 ± 26	General sexual health, importance, general satisfaction, Enjoy, partner satisfaction
	Stigma and fear	STI	42.5 ± 27.3	Fear of rejection, serological effect, fear of catching infection, feeling less desirable
	Sexual dysfunction	DYS	36.8 ± 24.3	Low sexual desire, arousal difficulty, Erectile problem, avoiding sex
	With partner sexual practices	PAR	51.7 ± 15	Having sexual activity with a partner in last 4 month, preliminary, oral-vaginal, anal, vaginal sex
	Soft practices/drug consumption	SOF/DRG	42 ± 27	Drug/alcohol use for sex, having sexual dream, masturbation

Fig1. PROQOL Sexlife dimensions

Data analysis:

A linear mixed model was used to explore the relationship between PROQOL sexlife scores and the explanatory variables:

- Socio-demographic variables
- General health status
- HIV biological related factors
- HIV treatments
- Treating countries as random effects

Results

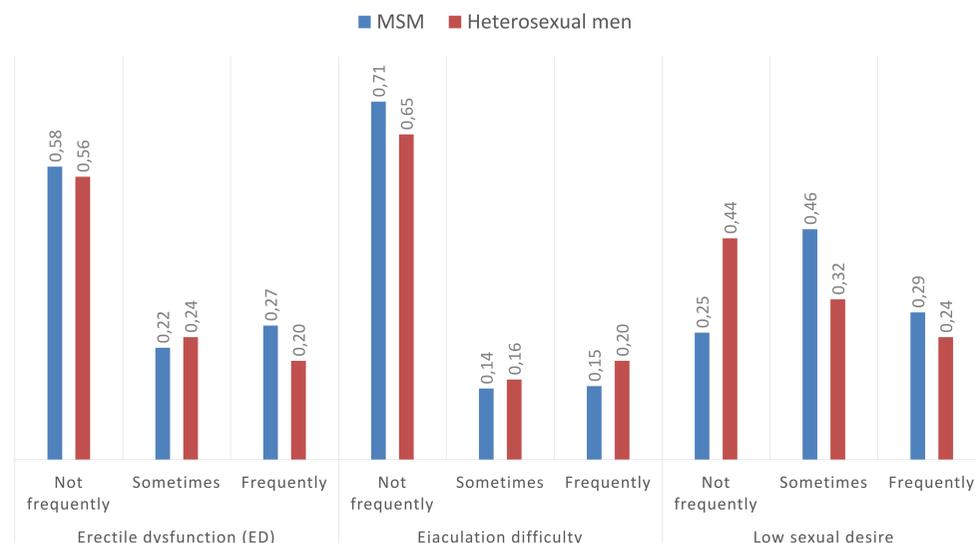


Fig2. Prevalence and frequency of the three common sexual dysfunctions among MSM and Heterosexual men

Prevalence of sexual dysfunction:

Almost half of participants (41%) reported medium to high frequency of erectile dysfunction (ED) with no significant difference between MSM and heterosexual men.

Sexual quality of MSM population:

- POP dimension:** Living with partner, comparing to living alone ($\beta=-4.4$, $SE=2.13$, $p<0.05$) and satisfaction from received health services ($\beta=-15.1$, $SE=2.2$, $p<0.001$) were positively associated with better SQoL.
- STI dimension:** Single participants ($\beta=10.1$, $SE=2.2$, $p<0.00$) or participants with cardiovascular complication ($\beta=7.1$, $SE=3.0$, $p<0.05$) were more likely to experience stigma and/or higher social distress.
- DYS dimension:** Positively associated with using Viagra ($\beta=7.9$, $SE=2.8$, $p<0.05$) and anti-cholesterol treatment ($\beta=9.0$, $SE=3.3$, $p<0.01$).
- PAR dimension:** Being infected par HCV ($\beta=11.7$, $SE=3.7$, $p<0.05$) and anti-cholesterol treatment were factors associated with lower variation of sexual practices with partner ($\beta=8.7$, $SE=4.1$, $p<0.05$), while being satisfied with health care services appeared to be positively associated with higher more variety in practices ($\beta=-8.5$, $SE=3.0$, $p<0.05$).
- SOF dimension:** Soft practices were common between high-educated category and participants living with children and they were less frequent among older men.
- DRG dimension:** Viagra consumption and being coinfectd with HCV were found associated with higher values in this dimension which indicate association with lower SQoL.

Sexual quality of heterosexual men population:

POP dimension: Being unemployed and African origin were two significant sociodemographic factors ($\beta=12$, $SE=6.2$, $p<0.05$) ($\beta=-17$, $SE=6.3$, $p<0.01$).

SOF/DRG dimension: Comparing to MSM for whom Separate dimensions address the concepts of soft practices(SOF) and drug consumption (DRG), among heterosexual men these concepts were addressed through one dimension(SFO/DRG). age, alcohol consumption and length of time being diagnosed with HIV were significant factors in this dimension.

PAR dimension: Consumption of Viagra was found to be associated with higher variety of sexual practices with partner.

Factors common in both the MSM and heterosexual population:

- Mental health related variables (Ex: depression and hopelessness) were negatively associated with outcome of SQoL in three dimensions (POP, DYS, STI).
- Considering their effect size, they were associated with at least a 6 to 8 points decrease in SQoL.
- The variable *being preoccupied with serum status during sex* appeared associated with impaired SQoL with in POP and DYS dimensions.
- No significant association between type of HIV treatment and PROQOL-SexLife dimension

Conclusion

- This study emphasizes on the significant impact of psychological factors on SQoL and absence of association with HIV-related biological parameters (CD4, viral load, HIV stage)
- Emphasizes on the importance of including both clinical and non-clinical factors in order to comprehensively and accurately assess all elements of SQoL.
- Perceived quality of health care and confidence in knowledge about risk of transmission* among patients are factors to be considered when developing future intervention in this area.

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