

## How can we enhance sexual health outcomes in men who have sex with men in Lebanon?

In Lebanese men who have sex with men (MSM), the prevalence of HIV is 12% and the prevalence of having at least one symptom of a sexually transmitted infection (STI) is 34.9%.<sup>1</sup> Low HIV testing rates, unprotected unprotected sexual intercourse, alcohol and substance use contribute to this epidemic.<sup>2</sup> Here we present data on the prevalence of STIs in a sample of MSM attending a sexual health clinic in order to identify the correlates of risk-taking behaviour, and of testing behaviour in this population. Addressing these questions is crucial for reducing the incidence of HIV/STIs and, thus, for enhancing sexual health outcomes in this high-risk population in Lebanon.

We analysed data from the medical records of MSM who presented for STI screening and treatment between 2014 and 2018 at a sexual health centre (Dermatology-STI clinic) in Beirut, Lebanon. Ethical approval was obtained from the Faculty of Health & Life Sciences Research Ethics Committee, De Montfort University, Leicester, UK (Ref. 3082).

MSM attending the clinic completed a short survey and the data were added to their medical records. The sample consisted of 1364 participants for whom data were complete and thus were included in the analysis. The most frequent STIs were genital warts (41.13%), *Chlamydia trachomatis* (25.85%), anogenital herpes (24.49%), *Neisseria gonorrhoea* (22.87%), syphilis (13.41%), scabies/pediculosis (10.19%), HIV (9.51%), *Mycoplasma genitalium* (4.88%), hepatitis B (0.73%), lymphogranuloma venereum (0.45%) and hepatitis C (0.09%). Table 1 summarises the main findings across the participant sample.

To assess the predictors of STI screening, participants were divided into two groups: those who had never been screened (n=242, 17.9%) and those who had had at least one previous screening. Those who had been screened had a higher frequency of alcohol/substance use ( $\chi^2=27.2$ ,  $p=0.002$ ), higher use of mobile phone applications for casual sex ( $\chi^2=15.7$ ,

**Table 1** Demographic, behavioural and sexually transmitted infection findings in the participants

Variable	Responses	Had been tested for STIs/HIV (n=1103)		Never been tested for STIs/HIV (n=242)		P value
		n	%	n	%	
Age range (years)	<20	8	0.73	33	13.64	0.0001*
	21–25	274	24.84	78	32.23	
	26–30	540	48.96	53	21.90	
	31–35	238	21.58	52	21.49	
	>36	43	3.90	26	10.74	
Alcohol/substance use before sex	Always	427	38.71	39	16.12	0.0001*
	Never	385	34.90	177	73.14	
	Sometimes	291	26.38	26	10.74	
Use of mobile applications to find sexual partners	Always	501	45.42	61	25.21	0.0001*
	Never	268	24.30	141	58.26	
	Sometimes	334	30.28	40	16.53	
Perceived risk of HIV	Yes	404	36.63	41	16.94	0.0001*
	No	526	47.69	87	35.95	
	Don't know	173	15.68	114	47.11	
Hepatitis B vaccination	Vaccinated	489	44.33	169	69.83	0.02*
	Not vaccinated	614	55.67	73	30.17	
HPV vaccination	Vaccinated	43	3.90	0	0.00	0.29
	Not vaccinated	1060	96.10	242	100.00	
Protected sexual encounters on the last 10 occasions (n)	0	88	7.98	71	29.34	0.02*
	1–5	138	12.5	42	17.36	
	6–9	447	40.53	72	29.74	
	10	430	38.98	57	23.55	
	Mean 7.40, SD 3.11			Mean 5.20, SD 4.24		
Condyloma/genital warts	Yes	399	36.17	12	4.96	0.007*
	No	704	63.83	230	95.04	
Chlamydia	Yes	153	13.87	29	11.98	0.04*
	No	950	86.13	213	88.02	
Gonorrhoea	Yes	110	9.97	31	12.81	0.035*
	No	993	90.03	211	87.19	
Herpes	Yes	138	12.51	29	11.98	0.95
	No	965	87.49	213	88.02	
<i>Mycoplasma genitalium</i>	Yes	22	1.99	7	2.89	0.98
	No	1081	98.01	235	97.11	
Syphilis	Yes	116	10.52	7	2.89	0.17
	No	987	89.48	235	97.11	
HIV	Yes	73	6.62	7	2.89	0.43
	No	1030	93.38	235	97.11	
Scabies/pediculosis	Yes	44	3.99	15	6.20	0.7
	No	1059	96.01	227	93.80	
Lymphogranuloma venereum	Yes	5	0.45	0	0.00	0.8
	No	1098	99.55	242	100.00	
Hepatitis B	Yes	8	0.73	0	0.00	0.97
	No	1095	99.27	242	100.00	

Continued

Table 1 Continued

Variable	Responses	Had been tested for STIs/HIV (n=1103)		Never been tested for STIs/HIV (n=242)		P value
		n	%	n	%	
Hepatitis C	Yes	1	0.09	0	0.00	0.99
	No	1102	99.91	242	100.00	
Never had any STI	Yes	428	38.80	146	60.33	0.02*
	No	675	61.20	96	39.67	

\*Significant statistical result ( $p < 0.05$ ).

HIV, human immunodeficiency virus; HPV, human papillomavirus; SD, standard deviation; STI, sexually transmitted infection.

$p < 0.001$ ), higher perceived HIV risk ( $\chi^2 = 17.7$ ,  $p < 0.001$ ) and higher frequency of unprotected sex ( $\chi^2 = 20.2$ ,  $p = 0.02$ ).

These results suggest that those who engage in sexual risk behaviours (alcohol/substance use, use of mobile phone applications to find sexual partners, frequent unprotected intercourse) and who appraise their risk to be high are more likely to have been tested for HIV/STIs than those who do not. The findings suggest a multi-pronged strategy to prevent HIV and other STIs in Lebanon where the Joint United Nations Programme on HIV and AIDS (UNAIDS) treatment target to help end the AIDS epidemic ('90-90-90', ie, 90% diagnosed, 90% on treatment, 90% virally suppressed) is far from being achieved. First, there is a lack of data in Lebanon, therefore a representative national assessment of sexual health in Lebanese MSM should be conducted. Second, beside condom use, other preventive interventions targeting substance use in sexualised settings (known as 'chemsex'<sup>3</sup>) and varied sexual networks based on active dating applications usage<sup>4,5</sup> should be developed. HIV pre-exposure prophylaxis would be a valuable component of the national prevention strategy. Sexual

health risks specific to MSM need to be highlighted to individuals from this population who never test for STIs. Third, in Lebanon where homosexuality is socially stigmatised, MSM may have decreased access to sexual health promotion and HIV prevention information.<sup>2</sup> This can be translated into a gap in self-risk assessment amid a 60% prevalence of unprotected sexual intercourse. Fourth, in order for us to achieve '90-90-90' in Lebanon, our recommendation is to integrate sexual and reproductive healthcare services to improve access for key populations in line with the Regional World Health Organization (WHO) strategy. More generally, breaking the barriers of stigmatisation and criminalisation of Lebanese MSM can effectively improve our ability to target and serve this high-risk population with comprehensive preventive services.

Ismael Maatouk ,<sup>1,2</sup> Moubadda Assi,<sup>3</sup> Rusi Jaspal<sup>2</sup>

<sup>1</sup>Clemenceau Medical Center, Beirut, Lebanon

<sup>2</sup>De Montfort University, Leicester, UK

<sup>3</sup>Surveillance Officer, National AIDS Program, Beirut, Lebanon

Correspondence to Dr Ismael Maatouk, Clemenceau Medical Center, Beirut 11-2555, Lebanon; ismaelmaatouk@gmail.com

Twitter Ismael Maatouk @ismaelmaatouk

**Contributors** All three authors contributed to the conception, design of the work, acquisition, analysis and interpretation of data. IM drafted the letter and MA and RJ revised it critically.

**Competing interests** None declared.

**Patient consent for publication** Not required.

**Provenance and peer review** Not commissioned; externally peer reviewed.

© Author(s) (or their employer(s)) 2020. No commercial re-use. See rights and permissions. Published by BMJ.



BMJ Sex Reprod Health 2020;0:1–2.  
doi:10.1136/bmjsexrh-2019-200415

#### ORCID iD

Ismael Maatouk <http://orcid.org/0000-0003-1008-7413>

#### REFERENCES

- 1 National Aids Control Program. An integrated biological and behavioral surveillance (IBBS) study performed among 2 key populations (MSM and SW) 2019: In press.
- 2 Maatouk I, Jaspal R. HIV in men who have sex with men in Lebanon: clinical and psychosocial aspects. *BMJ Sex Reprod Health* 2019;45:175–6.
- 3 Kelly BC, Parsons JT. Prescription drug misuse and sexual risk taking among HIV-negative MSM. *AIDS Behav* 2013;17:926–30.
- 4 Jaspal R, Health ES. *Self-identity and wellbeing among men who have sex with men: a guide for practitioners*. London, UK: Jessica Kingsley Publishers, 2018.
- 5 Lehmler JJ, Ioerger M. Social networking smartphone applications and sexual health outcomes among men who have sex with men. *PLoS One* 2014;9:eB6603.