

Making Pre-Exposure Prophylaxis (PrEP) Acceptable. Intention to Use PrEP among Men who have Sex with Men Living in Switzerland in accordance with Current Guidelines and Possible Future Regimes

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Background

Given the high proportion of newly diagnosed HIV infections among men who have sex with men (MSM) in high-income countries (1), in 2014 the WHO recommended offering daily oral PrEP with Truvada® to MSM (2). However, the uptake of PrEP seems to be slow (3). Although PrEP has not been approved in Switzerland, it is discussed as an additional prevention option for MSM. However, little is known about the acceptability of PrEP among MSM in Switzerland.

Furthermore, findings from recent and ongoing clinical trials could result in a change of PrEP regimes and guidelines in the near future. Against this background, the study aimed to determine:

1. the intention to use PrEP among HIV-negative MSM living in Switzerland in accordance with *current guidelines* (4)
2. the intention to use PrEP in accordance with various *possible future regimes*

Methods

Procedures

In a cross-sectional study, we surveyed HIV-negative MSM by using anonymous, standardized self-administered online and paper-and-pencil questionnaires. We gathered a convenience sample. Participants were recruited through flyers distributed in bars and gay health clinics, advertisement in gay magazines and posts on various gay-specific online dating sites and Facebook.

Measurement

The intention to use PrEP was measured by one item in accordance with current guidelines (*How likely would you use PrEP if it was available in Switzerland?*) and five items in accordance with possible future regimes (cf. Table 2). Answers ranged from 1='extremely unlikely' to 7='extremely likely'.

Data Analysis

We generated descriptive statistics to analyze the intention to use PrEP according to current guidelines and possible future regimes. Furthermore, we conducted Wilcoxon signed-ranks tests.

Participants

The sample consisted of 556 HIV-negative MSM living in Switzerland, aged 15 to 81 years (M=40.6, SD= 11.9). 48% had had a sexual encounter with a casual partner during the previous six months.

Table 1: Sample description

Variable		%	n
Sexual orientation (n=555)	gay	88	489
	bisexual	11	62
Relationship status (n=556, multiple answers possible)	single	44	243
	stable relationship with a man	51	283
	stable relationship with a woman	6	32
Educational level (n=555)	non-tertiary education	56	309
	tertiary education	44	246
Community size (n=555)	more than 100,000 inhabitants	48	268
	between 20,000 - 100,000 inhabitants	13	73
	less than 20,000 inhabitants	39	214

Results

39% of the participants would probably use PrEP, according to current guidelines, if available. However, almost 51% were unlikely to use PrEP and only about 10% were undecided.

With one exception, the intention to use PrEP in accordance with various possible future regimes is higher than in accordance with current guidelines. Analyses showed that the participants' intention to use PrEP significantly increased with the possibility of obtaining a drug with fewer side-effects or with 100% effectiveness compared to their intention in accordance with current guidelines. The option of an event-driven regime or full financial coverage by the health insurance also significantly increased the intention to use PrEP. The option of having the drug injected instead of taking pills did not increase the intention (cf. Table 2 / Figure 1).

Table 2: Intention to use PrEP in accordance with various possible future regimes

Scenarios	Mdn	IQR	Z	p	
Current guidelines	3	2-6			
Possible future regimes	Fewer side effects	6	4-7	-13.05	<0.001
	100% effectiveness	6	5-7	-14.52	<0.001
	Event-driven	5	2-7	-5.79	<0.001
	Full financial coverage by health insurance	6	3-7	-12.06	<0.001
	Injection instead of pills	4	1-6	-0.43	0.667

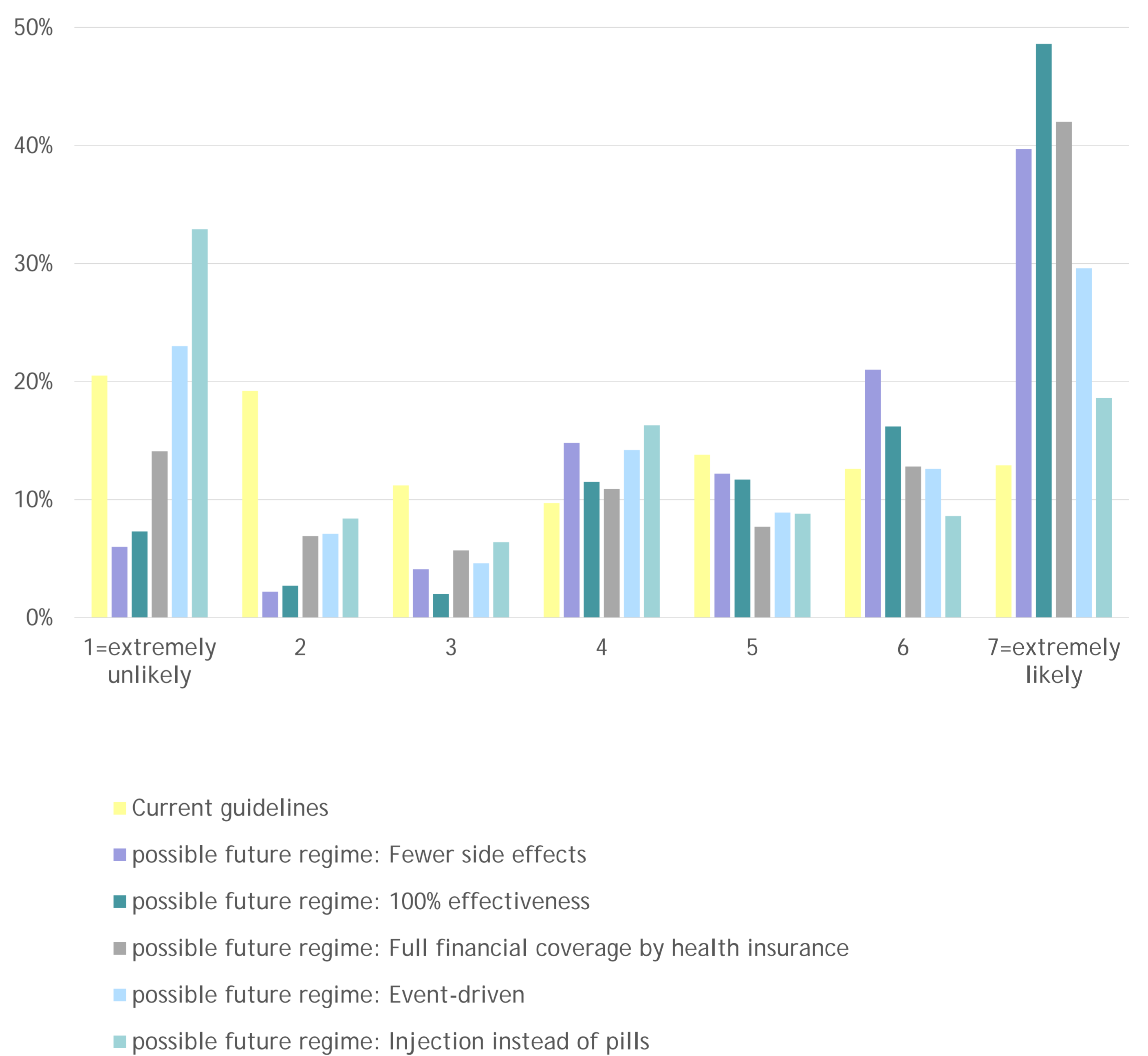


Figure 1: Intention to use PrEP in accordance with current guidelines and possible future regimes

Conclusion

Results indicated that the moderate intention to use PrEP among MSM living in Switzerland increased in accordance with future adjustments of PrEP. Especially having a drug with fewer side-effects or a higher level of effectiveness is of importance. Moreover, financial coverage by health insurance and an event-driven PrEP regime will increase the acceptability of PrEP.

Before implementing PrEP in Switzerland, these issues should be considered, while being aware that the decision-making process in MSM (living in Switzerland) is far more complex and influenced by several other factors (5).

References

- (1) Beyrer, C./Baral, S. D./van Griensven, F./Goodreau, S. M./Chariyalertsak, S./Wirtz, A. L./Brookmeyer, R. (2012). Global epidemiology of HIV infection in men who have sex with men. *The Lancet*, 380(9839), 367-377.
- (2) World Health Organization (2014). Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Retrieved from http://apps.who.int/iris/bitstream/10665/128048/1/9789241507431_eng.pdf?ua=1&ua=1
- (3) Kirby, T./Thorner-Dunwell, M. (2014). Uptake of PrEP for HIV slow among MSM. *The Lancet*, 383(9915), 399-400.
- (4) Centers for Disease Control and Prevention (2014). Pre-exposure Prophylaxis (PrEP) for HIV Prevention, 1-2. Retrieved from http://www.cdc.gov/hiv/pdf/PrEP_fact_sheet_final.pdf
- (5) Gredig, D./Uggowitz, F./Hassler, B./Weber, P./Nideröst, S. (2016). Acceptability and willingness to use HIV pre-exposure prophylaxis among HIV-negative men who have sex with men in Switzerland. *AIDS Care*, 28(sup1), 44-47.