



HIV PREVENTION AMONG MSM IN JAPAN: CURRENT OPINIONS ON ACHIEVING THE FIRST 90 AMONG JAPANESE MSM



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BACKGROUND

Japan is a developed nation with an HIV epidemic concentrated among men who have sex with men (MSM)^[1]. Despite success in exceeding the second and third UNAIDS 90-90-90 targets, Japan has lagged behind on first 90. Approximately 30% of newly reported cases have been annually identified by AIDS onset^[2], implying reaching subpopulations for early HIV testing remains primary challenge.

METHODS

In 2019, interviews were conducted with medical professionals at AIDS Core Hospitals (serving >6,000 HIV-positive people), HIV researchers, governmental agencies, and community staffs in Tokyo, Nagoya, Kanagawa, and Osaka. We sought to understand current HIV testing alternatives, reasons behind late diagnosis, and identified immediate strategies for scaling-up early HIV testing.

A Cumulative numbers of HIV/AIDS diagnosed cases from 2006 to 2015

	Japan	Tokyo	Osaka	Fukuoka	Japan except for Tokyo
HIV	10,517	3,824	1,620	357	6,693
AIDS	4,442	941	527	181	3,501
HIV/AIDS	14,959	4,765	2,147	538	10,194
%AIDS	30%	20%	25%	34%	34%

Fig. 1. Trends in HIV/AIDS cases diagnosed in Japan from 2006 to 2015. Matsuoka S, Nagashima M, Sadamasu K, et al. Estimating HIV-1 incidence in Japan from the proportion of recent infections. *Prev Med Rep.* 2019 Oct;16:100994. AIDS Surveillance Committee, Ministry of Health, Labor and Welfare, Japan. 2016. Annual AIDS Occurrence Report 2016 (in Japanese). <http://api-net.jfap.or.jp/status/>.



[Left] Meeting with dista Community Center in Osaka exploring current HIV testing initiatives [Right] Discussions with HIV care providers and medical doctors at Clinical Research Center, National Hospital Organization Nagoya Medical Center, Nagoya

RESULTS

Municipal healthcare centers remain key sites delivering free/anonymous HIV/STI testing, although their women/child health focus limits uptake among MSM. Primary reasons for late HIV diagnosis included challenges in reaching and engaging MSM in HIV cascades, structural barriers i.e. testing capacity, schedule/accessibility, lack of MSM-friendly services and regulatory issues with HIV self-testing.

In Japan, community organizations are spearheading HIV testing initiatives by implementing prefecture-based models. For example, HIVCheck.jp Tokyo, an HIV self-testing research piloted in collaboration with clinical laboratory led to increased HIV testing uptake among MSM (1,127 DBS samples collected), with provisional positive rate of 2.4%^[3]. In Nagoya, HIV testing during 2018 LGBT event has seen two-fold year-on-year increase in HIV testing (approx. 700 MSM).



[Above] HIVCheck.jp advertisements posted on MSM dating applications [Below] Akta President Kohta Iwahashi (right) displaying HIV self-testing kits and sharing success stories of the study



[Left] Business Responds to AIDS (BRTA) piloted by doctors at Nagoya Medical Center in collaboration with private sector companies for increasing self-testing among office employees [Right] Sailor Moon Japan Sexual Health Campaign promotions materials

In Osaka, bimonthly, weekend-based HIV/STI testing program (engaging 30-40 MSM) offers low-cost HIV testing during late hours at collaborated private clinics. Japanese MSM actively use Internet for seeking sex partners, e.g. gay dating app 9 monsters has reportedly >300,000 active members^[4]. While traditional outreach approaches at gay hotspots are widely prevalent, sexual health campaigns (e.g. Sailor Moon) to stem rapid rise of STI cases by government has had limited impact among MSM.

CONCLUSIONS

To reach the first 90, Japan needs diffusion of innovative technology to streamline its HIV service delivery and develop a culturally- sensitive communications strategy. To ensure seamless virtual to critical offline HIV services transition, Japan should implement an integrated online-to-offline (O2O) model offering real-time eCounseling and online bookings (QR codes) to ensure privacy and real-time monitoring features to help track/validate participants^[5,6].

1. Iwamoto A, Taira R, Yokomaku Y, et al. The HIV care cascade: Japanese perspectives. *PLoS ONE.* 2017 Mar;12(3):e0174360. 2. Matsuoka S, Nagashima M, Sadamasu K, et al. Estimating HIV-1 incidence in Japan from the proportion of recent infections. *Prev Med Rep.* 2019 Oct;16:100994. 3. Iwahashi K, et al. Dried blood spot based HIV testing 'HIVcheck.jp' is a new testing opportunity for men who have sex with men in Tokyo, Japan. Oral abstract: Fast-Track Cities 2019; 2019 Sep 8-11; London, United Kingdom; 2019. 4. Hill AO, Bavinton BR, Armstrong G. Prevalence and correlates of lifetime and recent HIV testing among men who have sex with men (MSM) who use mobile geo-social networking applications in Greater Tokyo. *PLoS ONE.* 2019;14(1):e0209933. 9Monsters. 9Monsters Advertise. 2018. Available from: <https://ninemonsters.com/advertise> 5. Anand T, Nitpolprasert C, Trachunthong D, et al. A novel Online-to-Offline (O2O) model for pre-exposure prophylaxis and HIV testing scale up. *J Int AIDS Soc.* 2017 Mar;20(1):21326. 6. Anand T, Nitpolprasert C, Phanuphak N. Online-to-Offline (O2O) models in HIV service delivery. *Curr Opin HIV AIDS.* 2017 Sep;12(5):447-457.

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