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# Electronic Directly Observed Therapy (e-DOT) for PrEP adherence among Thai men who have sex with men: a feasibility randomized controlled trial

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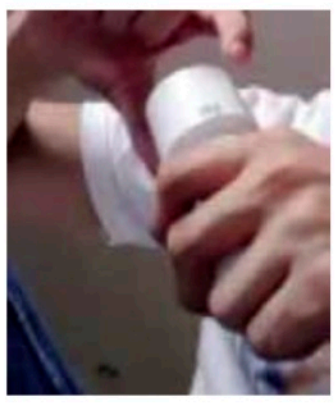
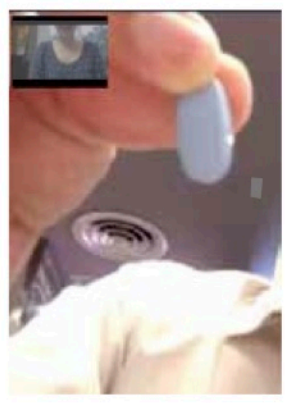
## Objectives

We examined the feasibility of electronic directly observed therapy (e-DOT) to monitor and support pre-exposure prophylaxis (PrEP) adherence among Thai men who have sex with men (MSM).

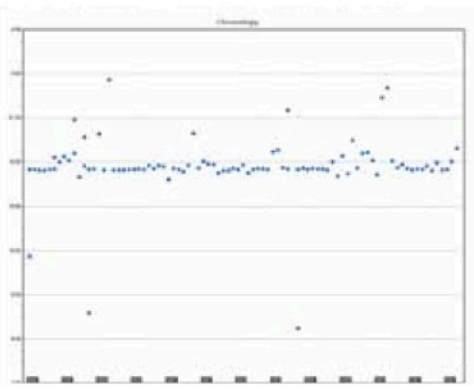
## Methods

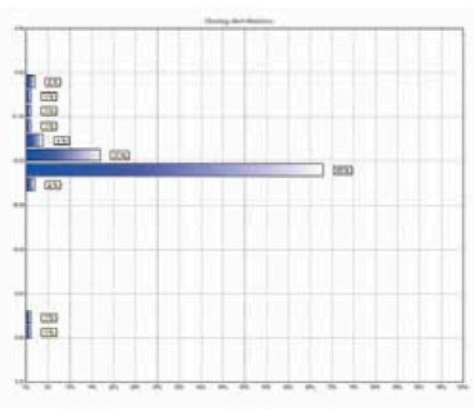
- Adam's Love (www.adamslove.org) piloted a feasibility randomized controlled trial of 30 MSM.
- The e-DOT arm participants engaged in live video calls (4 days/week) with online counselors, received personalized instant message (IM) reminders three days/week, and were asked to reply (two-way IM) confirming PrEP had been taken.
- The control arm participants engaged in daily two-way IM only.





## Results





MEMS measured timing adherence

- During November 2016 - May 2017, 30 MSM, median age 26.5 years (IQR 22-29) were enrolled and randomized 1:1 to e-DOT and control arms.
- Smartphone ownership and use was >90% and 46.7% had monthly data allowance of >6GB.
- Having multiple or casual (36.7%) partners, unknown (16.7%) and known HIV-positive status (13.3%) of partners were primary reasons for taking PrEP.
- Adherence to scheduled live video sessions was 99.6% (675/678) and to 2-way IMs was 99.2% (481/485) in the e-DOT arm, and 99.8% (1265/1268) to 2-way IMs in the control arm.
- Average video session duration was 90 seconds.
- During video calls participants were mostly at public spaces (57.8%) (office, fitness, university, shopping mall).
- The opening of MEMS Caps (Medication Event Monitoring System, Aardex MWV) and the taking of PrEP were successfully monitored online in 97.4% of total video events.
- Median adherence by MEMS was 98.8 (IQR: 97.6-100) and 100 (IQR: 96.4-100) in the control and intervention arms, respectively.
- On a five-point LIKERT, e-DOT participants felt the video calls were acceptable (mean 4.27, SD 0.59), felt comfortable seeking PrEP-related advice (mean 4.40, SD 0.63), and thought it helped them remember taking (mean 4.53, SD 0.52) and being adherent to PrEP (mean 4.33, SD 0.49).

## Conclusions

e-DOT using live videos is feasible, engaging and acceptable for PrEP adherence monitoring and support among Thai MSM.

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