A new delivery model to increase adherence to methadone maintenance treatment

Dear Editor,

Letter to Editor

Today, a large number of Iranian addicts are treated in methadone maintenance treatment (MMT) centers (1). According to the current procedure, each patient has treatment record in only one clinic. So, each patient is able to get prescribed medications and other medical services of the center. Receiving drugs and center-based services has always faced serious challenges such as access (2). For example, some patients with mobility jobs, people with movement restrictions and physical conditions, and patients living in rural and remote areas are unable to refer to get the medication according to a regular timetable (3). The mentioned issues are a serious challenge for persistence and adherence to MMT. Under such circumstances, a significant proportion of patients abandoned treatment plan and they lost the ancillary services, including medical visits, psychological interventions, and physical and emotional support from a social worker. Ultimately, this situation led to an increased the risk of relapse and resume high risk behaviors related to substance abuse (4). Social damage and financial losses of the country's health system are only some of the negative consequences of this situation.

Based on these considerations, presentation of the strategies and constructive recommendations in support of the related organizations is a necessity. Despite the several offers raised, it seems that the abolition of the system receiving drugs from the origin center and the use of digital identification systems can be useful and practical (5). In the form of drug delivery system, patients can receive their daily dosages in any of the center across the country. This project is done in such a manner that each patient first enrolls in an MMT center and fills out a medical record form. Then, the doctor will determine the types of medication and drug dose based on the patients' medication history. In the first three months of treatment (i.e. until the stabilization of the dose), visits or appointments will be face to face. After the period and stabilized drug dose, the patient who receives medication is no longer confined to the origin center. This means that each patient is issued an entity identifier such as a smart card for medication. By issuing the smart card, the patient can receive quota set medication use in any part of the country. Definitely to prevent abuse of patients, it is recommended that the patient's identity be verified through the finger, eye, or facial recognition digital sensors (5). Meanwhile, bringing up an instruction can be useful based on a mandatory visit to the center of origin for medical examination and psychological services at least once a month.

So far, few studies have been conducted to review and confirm the delivery format of pharmaceutical services (6, 7). However, previous studies show that the facial assessment via computer evaluation and photo anthropometric variations in facial features are standard references for personal identification in the field of health and forensic (8, 9). Thus, our offer could possibly be effective in increasing adherence to treatment and reducing problems caused by the access to origin MMT center. As a result, we recommend using this pilot model for at least a one-year period. Then, if the benefit of this model is in practice, this proposal could be implemented permanently. Keywords: Methadone maintenance treatment, Substance

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References

- Eslami Shahrbabaki M, Ziaaddini H, Hagh Doost AA, et al. Methadone treatment in Iranian opiate addicts: a preliminary report. Addict Health 2011; 3: 53-60.
- 2. Khampang R, Assanangkornchai S, Teerawattananon Y. Perceived barriers to utilise methadone maintenance

therapy among male injection drug users in rural areas of southern Thailand. Drug Alcohol Rev 2015; 34: 645-53.

- 3. Mingliu Z, Wolff RS. Crossing the digital divide: costeffective broadband wireless access for rural and remote areas. IEEE Commun Magazine 2004; 42: 99-105.
- Zhang L, Chow EPF, Zhuang X, et al. Methadone maintenance treatment participant retention and behavioural effectiveness in China: a systematic review and meta-analysis. PLoS One 2013; 8: e68906.
- Baybutt M, Minnella C, Ginart AE, et al. Improving digital system diagnostics through prognostic and health management (PHM) technology. IEEE Trans Instrum Meas 2009; 58: 255-62.
- Tuchin VV. Tissue enhanced optical imaging and monitoring of drug delivery. 2012 Asia Communications and Photonics Conference (ACP) 2012 7-10 Nov.
- Wang Y. Engineering strategies for drug delivery [Introduction to the special issue]. IEEE Engineering Med Bio Magazine 2009; 28: 10-11.
- Choi CJ, Lefebvre DR, Yoon MK. Validation of the facial assessment by computer evaluation (FACE) program for software-aided eyelid measurements. Orbit 2016; 35: 117-20.
- Ogawa Y, Wada B, Taniguchi K, Miyasaka S, Imaizumi K. Photo anthropometric variations in Japanese facial features: Establishment of large-sample standard reference data for personal identification using a three-dimensional capture system. Forensic Sci Int 257: 511: e1-e9.