

## **Dynamic Changes of Quality of Life in heroin users receiving opioid agonist therapy**

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### **Background**

Dynamic changes of quality of life (QoL) in heroin users were not commonly investigated.

### **Aims & Objectives**

We aimed to compare the dynamic changes in QoL of heroin users receiving opioid agonist therapy (OAT) after the implementation of harm reduction policy in Taiwan.

### **Methods**

We performed measurement of EQ-5D on 349 participants, including those with a valid state of OAT or non-OAT during 2015-2017 for utility values, while the QoL of referents were abstracted from the 2009 National Health Interview Survey. We applied kernel smoothing methods to capture the dynamic changes of the patients' QoL within 10 years after implementation of OAT. We also constructed multiple linear regression models to identify predictive factors for QoL.

### **Results**

QoL of the OAT group was significantly better than that of the non-OAT group in every domain of the EQ-5D, which was quantified to be 0.23 for utility after controlling for other variables. In addition to OAT, the QoL utility values of participants were also affected by current psychiatric medications, age, current amphetamine use and being infected with HIV. The interaction term of OAT and current psychiatric prescriptions was also significantly associated with poor QoL ( $p=.015$ ).

### **Discussion & Conclusion**

Receiving OAT is predictive of the QoL of heroin users. Dynamic changes of QoL would be useful for shared decision-making regarding treatment-seeking heroin users.