Underweight prevalence and nutrition status of female ketamine abusers in Hong Kong

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Introduction
Studies suggest that drug abuse can cause underweight and malnutrition because individuals may not ingest adequate nutrition in both qualitative and quantitative aspects. Underweight and malnutrition people are more prone to have infection, anemia, higher chance of acute hospital admission, longer hospital length of stay and high mortality rate. The current study on the effect of ketamine abuse on body weight and nutritional status is rare.

Objectives
This study aims to investigate the prevalence of underweight in female ketamine abusers in Hong Kong and to explore other possible complications on nutritional status caused by ketamine abuse.

Methodology
Records of 100 female ketamine abuse patients admitted to North District Hospital Crisis Accommodation Centre (CAC) program during the period of May 2012 to May 2016 were retrieved and reviewed retrospectively for service evaluation purpose. The underweight prevalence was investigated in this group of subject. Liver function measured by ALP level and nutrition markers represented by RDW level were further compared between underweight and normal weight groups.

Result
The underweight prevalence of female ketamine abuser in our review was alarming high. Sixty-one out of 100 (61%) female ketamine abusers were underweight, of which 18 (18%) subjects were classified as severely underweight. According to the Hong Kong Department of Health 2010 BMI distribution report, only 14.4% female was classified as underweight. In addition, our review showed that the female ketamine abusers have a higher chance of developing liver disease and malnutrition.
Forty-eight subjects (48%) have an elevated ALP level and their mean body mass index (BMI) was classified as underweight (≤ 18.5 kg/m²), which was significantly lower than the group with normal ALP level. Forty-six out of these 100 female subjects (46%) have a higher than normal level of RDW, a biochemical marker that may reflect nutrition deficiency in iron, folate, and vitamin B12 when it is evaluated.