

EXECUTIVE SUMMARY

INRODUCTION

Previous studies showed that drug abuse adversely affects nutritional status. The position statement made by the American Dietetic Association draws attention to improving food and nutrition intake in drug rehabilitation programs. The anonymous study aims at: (1) To investigate and to compare the prevalence of participants' dietary intakes meeting (beneficial nutrients) or not exceeding (potentially harmful nutrients) the recommended references and participants being underweight among three groups of adolescents. (2) To investigate factors associated with nutrients intakes. The three groups of Chinese adolescent participants (≤ 18 years old) are: current psychotropic substance users ($n=202$), institutionalized abstainers ($n=50$) and a control group of adolescents who self-reported never having used psychotropic substances ($n=100$).

RESULTS

1) Only respectively 26.4 % of the males and 21.9% of the females met the recommended energy requirement. Percentages of participants meeting the recommended level of beneficial nutrient intakes only ranged from 7.1% (dietary fibre) to 61.9% (protein) for males, and from 10.3% (iron) to 42.6% (protein) for females. The percentage of participants keeping their intakes of potentially harmful nutrients below the recommended limit ranged from 37.6% (sodium) to 71.1% (saturated fat) for males and from 57.4% (sodium) to 81.3% (cholesterol) for females.

2) Male substance users were less likely than the male controls to meet the energy intake (20.8% versus 42.6%) and protein intake (46.7% versus 85.2%) standards. Female substance users as compared to the female controls were more likely to be underweight (56.1% versus 34.8%), though the differences was only of marginal

significance. Among those substance users who were underweight, only respectively 50% and 32.6% of the males and the females perceived themselves to be underweight, whilst 5.6% of the males and 52.2% of the females was even trying to lose weight.

3) Institutionalized abstainers, as compared to substance users, tended to have higher likelihoods to meet the required standard for beneficial nutrients. Lower percentages of abstainers kept their level of harmful nutrients within the recommended limit as compared to the group of substance users. Female substance users as compared to female abstainers were more likely to be underweight (56.1% versus 14.8%).

4) Female substance users were more likely than male substance users to keep their cholesterol (85.4% versus 65.8%) and sodium (64.6% versus 41.7%) levels within the recommended limit. Male substance users were more likely than female ones to have adequate intakes of protein (46.7% versus 29.3%) and iron (27.5% versus 6.1%).

5) Ketamine users were less likely than other drug users to have an adequate intake of protein (37.3% versus 46.9%) and iron (16.3% versus 26.5%), but were more likely to have their cholesterol level kept within the recommended limit (75.8% versus 67.3%).

CONCLUSION

Adolescent substance users are having inadequate intakes of beneficial nutrients. Energy and protein intakes among male substance users were significantly less than those of the control group. Many female substance users were under-weighted. It is possible that they use substance use as a means of weight control. Inadequate intakes of nutrients such as iron and calcium are prevalent among substance users. The poor nutrition status may enhance the harmful effects of substance use.

Institutionalized abstainers were more likely than substance users to meet the requirements for intakes of beneficial nutrients, implying that nutritional intakes among substance users are modifiable. However, the quality of dietary intakes among

abstainers could be improved as many of them exceeded the limits of intakes of potentially harmful nutrients (cholesterols and sodium). Special attentions should be given to ketamine users, who tended to have lower intakes of nutrients coming from animal sources.

RECOMMENDATIONS

With regard to non-institutional substance users, it is recommended that: 1) Workers should be made aware of malnutrition and underweight problems among adolescent substance users. They should be backed up by qualified nutritionists and should be given basic training on nutritional sciences. 2) Health education campaigns targeting adolescent substance users should be launched to promote healthy nutrition. 3) Special attention should be given to the underweight problem among adolescent substance users, especially among the female ones. 4) Poorly consumed nutrients among adolescent substance users include respectively iron and calcium for female and dietary fibre and calcium for male. Workers should provide suggestions on dietary sources on these nutrients. Similarly, recommendations are given to workers taking care of institutional abstainers: 1) Basic nutrition education should be provided to the abstainers. 2) Female substance users need to increase their iron and calcium intakes. 3) Institutions should keep an eye on the amount of cholesterol and sodium in the meals. 4) Amongst male adolescent substance users, the importance of sufficient energy and protein intakes should be emphasized.