Introduction of the research and development items of detoxification psychological dependence medicine

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ABSTRACT

In order to let drug addicts withdraw their toxic mania, the work of drug prohibiting must be launched extensively to construct a quiet environment, so we put forward a systematic engineering imagine, which includes a comprehensive administration of medical psychology and society. Now we put forward the following report to explore the direction of the World Health Organization (WHO).

Keywords: Toxic Mania; Systematic Engineering Imagine; Medicine Psychology and Society

1. INTRODUCTION

At the present time, drug taking is a serious problem in the world. Even in China, more and more people take drugs. Close attention must be paid to this problem.

For many years, [1-4] people in the world have been waging a struggle against the drug taking. They have been making great efforts to reduce the illegal supply of drugs and reduce the illegal requirement of drug [5,6]. They have also adopted many practical and effective methods to make the drug addict stop using drugs.

Drug taking not only can seriously damage the health of the drug addicts but also lead to many social problems.

Because the drug-tolerance increases and the drug-dependence phenomenon of the addict's body appears, the drug-dose in the drug addict is increasing steadily, the frequency of drug using also increases. If the drug addicts have no justified pathway to earn enough money for drug, and they must satisfy their drug requirement, they do try their best to engage drug. Many drug addicts begin to rob, to steal, and to defraud in order to get much money for drug. A lot of drug addicts join in the organizations of the black societies. The drug addicts can also become drug dealers [7-9]. One addict can instigate many people to become drug addicts.

Drug taking has so much serious consequence. All of us must take this matter seriously, and use effective methods to help the drug addicts to give up this bad habit.

It is indicated by the data, that in present time, the treatments for the drug addicts lay particular stress on medical treatments. These methods cannot let the drug addicts give up toxicomania. After the medical treatments, the percentage of drug re-taking is very high, up to 98%.

According to the present information on detoxification, detoxification lays particular stress on medical detoxification which is dependent on drugs. The detoxification reaction is eradicated while the addiction is not. This can be shown relapse rate reaches as high as 98%.

2. ACCORDING TO RESEARCH, THE REASON FOR HIGH RELAPSE RATE IS

- 1) The drug-addicts can get a very strong understanding of the sentiments. The strong degree and pleased degree of this sentiment reflects far exceed the experience of sexual intercourse. As the time prolongs, the intensity of the joy and the experience caused by rug will gradually diminish until it disappears. At this time, the addicts must take more drugs in order to eradicate reaction. When the physiological dependence on drug disappears, the memory of sentiments reflects caused by drug taking appears in the addicts' mind again. It causes the addicts craving for the sentiments reflects caused by drugs [10-12]. We call this psychological craving for drug taking experience psychological dependence on drugs.
- 2) The feeling of craving—namely psychological dependence prompting the addicts whose give up reaction has disappeared this feeling, "One more time, and I'll never take it any more." But if they take it once their psychological dependence will be stronger and impossible to be get rid of. From the research result, we can see the reasons for high re-taking rate are not only the physiological dependence. Therefore, the crux of detoxification is to eradicate throughly the addicts' physiological and psychological dependence on drugs [13,14]. The



above-mentioned research has been verified by the French scientist Dr. Moiolonade's research institute.

This is the core of the problem that we need to research and solve. And the success of this research on the problem will lower greatly the addicts' re-taking rate after giving up an addiction. This is also an important problem of present detoxification research.

Dr. De-Qiu Lin, a professor of the Biotech Research Institute of South China Normal University in Guangzhou, China, has developed a kind of medicine called detoxification physiological dependence. That injection has become a latest new medicine for eradication physiological dependence. In clinical pharmacology, it has especially good new and safe effect.

3. THE MEDICINE FORM OF DETOXIFICATION DRUG DEPENDENCE

- 1) This is a kind of new injection which is developed by using modern molecular biology together with medical technology. It's a new and specific injection which is safe and effective with non-opiate-dependent. And it can lower the relapse rate.
- 2) Effect of detoxification drug dependence in medical clinical application.

This injection has overcome the defect of the previous drug of detoxification that will be addicted after they are used. The test to the heroin and morphine addicts' detoxification dependence rate reached over 95% after 20 - 30 day period of treatment used for neuron membrane to replace of acetylcholine. It could well control the symptoms of dreading cold and ache while detoxification dependence. The re-taking dropped greatly to less than 20%, resuming function of sexual desire is an immunologic specificity and procreate rate to 80%. It has a notable effect without any side-effect.

4. THE MEDICINE FORM OF DETOXIFICATION DRUG DEPENDENCE

This medicine is a toxicity-resistant preparation of biological projects to resistant and antibody to heroin and morphine. It can eradicate addiction thoroughly. If the addicts have taken this medicine, when they take drugs again, they'll have a physiological pernicious reflex (such as vomiting, ache) and psychological panic. In this way, the addicts keep clear away from drugs and stop taking drugs thoroughly.

5. EXAMPLE OF CLINICAL APPLICATION

The test LD 50 mg/kg has been carried out in the No.

307 Hospital of Military Medical College of China. Meanwhile the anti-worries and misgivings animal model has been made. This medicine has remarkable effect on animals

When the mice have become addicted to drugs after being injected with Heroin 4, the medicine A5 could get rid of the mice addiction to heroin, here are some typical clinical examples.

1) Mr. Dong, male, a cook in Guangzhou China. He had been addicted to heroin for two years and took 0.5 grams per day. He had been forced by his family to stop taking drugs.

After he took this medicine, he stopped taking drugs; when he smelt the drugs, he would vomit immediately.

- 2) Mr. Yap, male, 24 years old, a driver in Qingyuan, China. He has begun to take drugs since 1995. After taking this medicine, he put on 5-odd kg in weight. His psychological drug dependence disappeared and he got a good appetite. The effect was so notable that he hasn't taken drugs for nearly one year.
- 3) Hong, Female, 31 years old, a saleswoman in Huaihua of Hunan province, China. She had been addicted to heroin for two years. She had substituted Miltrexone for heroin, but it had no effect. After taking this medicine, her energy returned completely. She had given up drugs thoroughly and didn't want to take drugs anymore. Then she put on 3 kg in weight. She said, "Just like me for myself".

6. COMPARISON BETWEEN THIS MEDICINE AND PRESENT DETOXIFICATION DRUG

At present most of the medicine used by Institute of Detoxifcation in China is Miltrexone imported from American.

It has some toxicity effect, while the traditional Chinese Medicine used in present China lays particular stress on nourishing. Neither can eradicate addiction thoroughly. Especially they have no effect on eradication of psychological dependence. But our detoxification psychological dependence injection is a kind of new, safe and specific medicine that can eradicate psychological dependence and has a good prospect. The research of Professor has applied for patent right of China.

REFERENCES

- [1] Kuzmin, A.V., Gerrits, M.A., van Ree, J.M. and Zvartau, E.E. (1997) Naloxone inhibits the reinforcing and motivational aspects of cocaine addiction in mice. *Life Sciences*, 60, 257-264. doi:10.1016/S0024-3205(97)00130-6
- [2] Corrigall, W.A., Coen, K.M., Adamson, K.L. and Chow B.L. (1999) The mu opioid agonist DAMGO alters the

- intravenous self-administration of cocaine in rats: Mechanisms in the ventral tegmental area. *Psychopharmacology*, **141**, 428-435, doi:10.1007/s002130050853
- [3] Nestler, E.J. (2001) Molecular basis of long-term plasticity underlying addiction. *Nature Reviews*, 2, 119-128. doi:10.1038/35053570
- [4] Robinson, T.E. and Kolb, B. (1999) Alterations in the morphology of dendrites and spines in the nucleus accumbens and prefrontal cortex following repeated— Treatment with amphetamine and cocaine. *European Journal of Neuroscience*, 11, 1596-1604. doi:10.1046/j.1460-9568.1999.00576.x
- [5] Bibb, J.A. et al. (2000) Cdk5 regulates action of chronic cocaine. *Nature*, 352-357.
- [6] Chen, J.S., et al. (2000) Induction of cyclin-dependent kinase 5 in hippocampus by chronic electroconvulsive seizures: Role of ΔFosB. The Journal of Neuroscience, 20, 8965-8971.
- [7] Whiseler, K., Kelz, M.B., Chen, J.S., Nestler, E.J. and Self, D.W. (1999) Effects of conditional overexpression of ΔFosB in nucleus accumbens on cocaine self-administration and relapse to cocaine-seeking behavior. Society for Neuroscience, 25, 811.
- [8] Peakman, M.C., Colby, C., Perrotti, L.I., Tekumalla, P., Carle, T., Ulery, P., Chao, J., Duman, C., et al. (2003) Inducible brain-region specific expression of c-jun in transgenic mice decreases sensitivity to cocaine. Brain Research, 970, 73-86. doi:10.1016/S0006-8993(03)02230-3

- [9] Yuferov, V., Zhou, Y., Spangler, R., et al. (1999) Acute "binge" cocaine increases mu-opioid receptor mRNA levels in areas of the rat mesolimbic mesocotrical dopamine system. Brain Research Bulletin, 48, 109-112. doi:10.1016/S0361-9230(98)00155-5
- [10] Zubieta, J.K., Gorelick, D.A., Stauffer, R., et al. (1996) Increased mu opioid receptor binding detected by PET in cocaine-dependenct men is associated with cocaine craving. Nature Medicine, 2, 1225-1229. doi:10.1038/nm1196-1225
- [11] Staley, J.K., Rothman, R.B., Rice, K.C., et al. (1997) Kappa2 opioid receptors in limbic areas of the human brain are upregulated by cocaine in fatal overdose victim. The Journal of Neuroscience, 17, 8225-8233.
- [12] Mash, D.C. and Staley, J.K. (1999) D3 dopamine and kappa opioid receptor alterations in human brain of cocaine-overdose victims. *Annals of the New York Academy* of Sciences, 877, 507-522. doi:10.1111/j.1749-6632.1999.tb09286.x
- [13] Trujillo, K.A. and Akil, H. (1995) Excitatory amino acids and drugs of abuse: A role for N-methyl-D-aspartate receptors in drug tolerance, sensitization and physical dependence. *Drug and Alcohol Dependence*, 38, 139. doi:10.1016/0376-8716(95)01119-J
- [14] Tzchentke, T.M. and Schmidt, W.J. (1998) Blockade of morphine and amphetamine-induced conditioned place preference in the rat by Riluzole. *Neuroscience Letters*, 242, 114-116. doi:10.1016/S0304-3940(98)00023-8