

# 我国部分地区吸毒人群中止咳药滥用流行病学调查

刘志民 吕宪祥 连智 穆悦 郭平安 欣

**摘要** 目的:了解吸毒人群中含可待因、麻黄素成分止咳药滥用的一般情况和滥用性质。方法:采用自制的“止咳药使用情况调查表”,对重庆等6地区戒毒机构中收治的海洛因成瘾戒毒人员进行调查。调查内容包括使用止咳药的经历、使用性质(医疗使用还是非医疗滥用)以及滥用史等基本情况。采用匿名自行填写,集体集中回答,并统一收回调查表方式。结果:收回1415例有效调查问卷,其中“非医疗目的滥用”63例,占该群体总数的4.5%。滥用者的平均年龄为(27.0±7.1)岁,男性44例,女性19例。滥用止咳药原因比较复杂,其中既有“临时替代其它成瘾药物”的因素,亦有“增加娱乐场所气氛”和“好奇心驱使”等原因;加之该群体大多有多药滥用经历,故难以确定止咳药滥用性质。滥用场所既有娱乐场所,也有自己家中。药物依赖性调查显示,15.9%的止咳药滥用者在停用后出现可以忍受(轻度程度)的戒断症状;17.5%的个体出现对止咳药的“渴求感”,“视觉类比量表”(VAS)平均分值为(39.1±29.0)mm。结论:含可待因、麻黄素成分的止咳药具有一定的滥用潜力,加之吸毒人群非常规长期大量使用以及多药滥用,可加大此类止咳药的滥用潜力和药物依赖性。由于许多止咳药属于OTC药物,无特殊管理,故对止咳药滥用问题应引起重视。

**关键词** 止咳药 可待因 麻黄素 吸毒人群 流行病学调查 药物滥用

近年来,在我国部分地区出现含可待因、麻黄素成分的止咳药滥用问题。为此,国家药品监督管理局安全监管司委托中国药物依赖性研究所开展一次止咳药滥用的流行病学调查[见药管安函(2000)35号文件]。止咳药滥用人群可大致分为社会上一部分非吸毒人群和吸毒人群两部分。为了解止咳药在吸毒人群中的滥用目的、性质等一般情况,我们对重庆、沈阳、北京、南宁、广州和上海等地区戒毒机构中收治的海洛因成瘾者进行了调查。

## 1 对象与方法

采用自行设计的“止咳药使用情况调查表”,于2000年5~8月先后对重庆等6地区戒毒所收治接受戒毒治疗的海洛因成瘾者进行调查。调查内容包括:吸毒者中医疗用途使用和非医疗目的滥用止咳药的基本情况、主要滥用原因、滥用量、频率、滥用场所、滥用后的主要症状;采用“视觉类比量表”(VAS)测量滥用止咳药后的欣快或舒服感觉。为尽可能可以保证调查结果的真实性,采用匿名集体填写,并统一收回调查表的方式进行调查。在填写调查表前讲明此调查的目的和注意事项,逐项解释调查内容,要求被调查者如实认真填写。在上述6地区中,广州的调查在“自愿”戒毒所中完成,重庆、广

西、上海、沈阳和北京的调查在强制戒毒所中完成。采用Epi-INFO录入统计,统计以调查表中各项有效应答项目为准。

## 2 结果

### 2.1 一般情况

6地区共调查药物滥用者1536例,其中有效问卷1415例(份),占被调查人员总数的92.1%。地区分布为:重庆市413例,沈阳市58例,北京市297例,南宁市290例,广州市156例,上海市201例。在1415例有效应答者中,“没用过”止咳药的979例,占69.2%;“用于止咳目的的用过”373例,占26.4%;“非医疗目的的滥用”63例,占4.5%。滥用的止咳药品多达10种以上(具体品种略),其中主要是糖浆剂。滥用者包括沈阳市15例(占该地区被调查者总数的25.9%),北京市9例(占3.0%),广西自治区7例(占2.4%),重庆市13例(占3.1%),广州市5例(占3.2%),上海市14例(占7.0%)。63例止咳药滥用者的平均年龄为(27.0±7.1)岁,男性44例(占69.8%),女性19例(占30.2%);其中无业者35例(占55.6%),个体经商者12例(占19.0%),工人6例(占9.5%),学生2例(占3.2%),农民、民营企业、国企、公司、离退休、服务业、演艺人员各1例(分别占1.6%)。

### 2.2 止咳药初始滥用主要原因、场所与来源

#### 2.2.1 滥用原因

北京大学中国药物依赖性研究所(100083)。

在 63 例止咳药滥用者中, 有 11 例未按此项目要求回答问题, 视为无效应答项目。在其余 52 例有效应答者中, 为“增加环境(如歌舞厅)气氛”滥用 12 例, 占 23.1%; 因“好奇心驱使”滥用 10 例, 占 19.2%; 为“临时替代其它成瘾药物”(如海洛因)而滥用 7 例, 占 13.5%; 为“提精神”滥用 5 例, 占 9.6%; 为“缓解精神压力, 放松自己”滥用 4 例, 占 7.7%; 由于“朋友介绍或影响”而滥用 3 例, 占 5.8%; 为“增加其它药物(毒品)效能”而滥用 1 例, 占 1.9%; 因“其它原因”滥用 10 例, 占 19.2%。

### 2.2.2 滥用场所

滥用止咳药的主要场所包括(多项选择回答): “自己家中”29 例, “歌舞厅”、“迪厅”27 例, “游戏机室”3 例, “桑拿浴室”3 例, “工作场所”2 例, “学校”1 例, “其它场所”5 例。

### 2.2.3 药品来源

止咳药物的主要来源(多项选择回答): 医院 7 例, 个体诊所 11 例, 国营药店 20 例, 个体/私营药店 30 例, 娱乐场所 15 例, 桑拿浴室 1 例, 游戏机室 1 例, 亲朋好友所赠 3 例, 黑市 8 例。该群体购买止咳药的平均价格为(24.8 ±13.7)元/瓶。

### 2.3 止咳药滥用剂量、频率与时间

该群体止咳药糖浆剂的平均累积滥用剂量为(16.2 ±26.5)瓶; 止咳药片剂平均累积剂量为(61.3 ±87.7)片。其中在一段时间中连续每天滥用止咳药者 15 例, 占该群体总数的 23.8%, 偶尔或间断滥用者 43 例, 占 68.3%。每次平均滥用止咳药糖浆剂的剂量为(26.9 ±24.7) ml, 每日平均使用(2.1 ±1.4)次; 最多时平均每次使用剂量为(38.5 ±32.7) ml, 每日平均使用(2.7 ±1.4)次。

### 2.4 使用止咳药后的症状与反应

使用止咳药后的症状与反应详见表 1。

### 2.5 戒断症状与欣快效应程度

10 例(占该群体总数的 15.9%)止咳药滥用者在停用后出现一种或几种“戒断症状”, 戒断症状分布为(多项选择回答): 失眠 4 例, 心悸(心慌、“闹心”)4 例, 全身不适 3 例, 厌食 2 例, 全身无力 1 例, 恶心、呕吐 1 例。

采用视觉类比量表(VAS)自我评价测量使用止咳药后的“欣快或舒服感觉”, 结果表明, 该群体平均欣快效应为次中度[VAS = (39.1 ±29.0) mm]; 其中 11 例(占 17.5%)对止咳药有“渴求感”。

### 2.6 同时滥用的其它精神活性物质

该群体中 34 例(占 54.0%)在使用止咳药的同

表 1 使用止咳药后的症状与反应

症状与反应	有效应答人数 (n)	有症状人数 (n)	百分率 (%)
兴 奋	59	16	27.1
活动明显增加	60	9	15.0
欣快感	60	8	13.3
头晕头痛	60	5	8.3
失 眠	59	6	10.2
飘飘欲仙	60	10	16.7
烦躁不安	59	7	11.9
心 悸	59	16	27.1
心律不齐	59	8	13.6
体温增加	60	6	10.0
恶心呕吐	60	13	21.7
惊 厥	60	1	1.7
癫痫发作	60	1	1.7
昏 迷	60	4	6.7
幻 觉	60	10	16.7
厌 食	60	8	13.3
镇 静	60	8	13.3
全身松弛	60	9	15.0
昏 睡	60	8	13.3
呼吸变浅变慢	60	4	6.7
便 秘	60	3	5.0
其它症状	60	5	8.3

时使用过其它精神活性物质。其中包括(多项选择回答): 海洛因 28 例, 鸦片 2 例, 哌替啶 7 例, 美沙酮 9 例, 丁丙诺啡 6 例, 曲马多 10 例, 地西洋 15 例, 硝西洋 1 例, 艾司唑仑 12 例, 三唑仑 19 例, 安钠咖 1 例, 摇头丸 17 例, 大麻 4 例, 其它药物(毒品)2 例。

## 3 讨 论

此调查涉及西南、华南、华东、东北和北京地区, 大体上反映了截至 2000 年夏季之前上述地区吸毒人群中滥用止咳药的基本情况。

### 3.1 关于滥用原因与性质

吸毒者中止咳药滥用性质比较复杂, 难以确定。根据国外止咳药滥用的调查显示, 美国的止咳药主要作为一种“舞会药”在娱乐场所用于娱乐目的滥用; 而南亚地区(印度、巴基斯坦)止咳药滥用则主要发生在海洛因滥用者中, 似主要用于替代阿片类使用<sup>[1~3]</sup>。这里主要从以下几个方面对我国吸毒者中止咳药滥用情况进行一些分析: 第一, 从滥用原因看, 止咳药滥用者既有“增加环境(如歌舞厅)

气氛”，“好奇心驱使”、“提精神”等娱乐场所中特定的用药因素，也有“临时替代其它成瘾药物”的原因。第二，从同时滥用的其它精神活性物质分析，54% (34/63) 的人有同时滥用除止咳药外其它精神活性物质的经历。其中既有阿片类(如海洛因等)，也有镇静催眠药和摇头丸、大麻等。从上述同时滥用物质(毒品)不同的药理、毒理学特征亦可以反映出该群体止咳药滥用性质的复杂性。第三，从用药场所看，主要是“歌舞厅”、“迪厅”等公共娱乐场所和“自己家中”，这两类场所滥用止咳药目的显然是不同的：前者(娱乐场所)倾向于利用止咳药(麻黄素)的兴奋作用，而后者(家中用药)则倾向于利用止咳药中某些成分(可待因)的替代作用。第四，从止咳药本身药理作用分析，该群体滥用的止咳药主要是含麻黄素和可待因成份的复方制剂，这两种成份都具有一定的药物依赖性，故都可能造成滥用，而是否造成滥用或成瘾主要取决于止咳药用量和持续使用时间。从几种所滥用的止咳药品所含磷酸可待因和盐酸麻黄素的量分析，如果滥用者非常规滥用，一瓶或数瓶同时使用加之使用其它药物(毒品)或酒精(例如，该群体中 34 例在服用止咳药的同时使用其它精神活性物质)，无疑会对精神神经系统产生很大影响，甚至发生中毒，持续使用会发生药物依赖性。特别是个别止咳药含麻黄素成分较高，这一方面造成滥用潜力大的问题外，也极易发生急性过量中毒(按该群体每次平均使用剂量和次数计算，已接近麻黄素规定使用的极量范围)。

### 3.2 止咳药滥用导致的症状

从该群体使用止咳药产生的症状分析，既有麻黄素产生的拟交感作用，如兴奋、体温增加、心悸、心律不齐、烦躁不安、活动增加以及失眠等症状；也有可待因产生的阿片类作用，如：全身松弛、镇静、昏睡、昏迷和呼吸抑制等症状。对于某一个体，滥用止咳药后究竟产生中枢兴奋作用还是中枢抑制作用，除主要取决于单次用药剂量以及多药滥用因素外，该个体所期望或追求的用药效果和环境因素应该说也起了一定作用。例如，绝大多数在娱乐场所(迪厅)滥用止咳药的个体所期望的是兴奋效应(麻黄素的作用)；而海洛因成瘾者在家中滥用所期望的则可能主要是替代效应(可待因的作用)。但止咳药中可待因究竟有多大的替代(海洛因)作用，以及多大量才能达到替代作用有待进一步研究。从理论上分析，止咳药中单纯可待因替代海洛因的作用很小。这是由于可待因的等效镇痛剂量仅为吗啡的

1/13(肌肉注射途径用药)和 1/3(口服用药)；而吗啡的等效镇痛剂量是海洛因的 1/2<sup>[4]</sup>。这意味着如果一个海洛因成瘾者每次海洛因用量 100 mg，那么需要 2 g 以上可待因才能起到替代作用(如果某种止咳药水可待因含量为 1 mg/ml，则需要喝 2 000 ml)，这显然是不太实际的。

### 3.3 止咳药的药物依赖性

非常规滥用(如大剂量连续使用)止咳药可以产生一定程度的身体依赖性和精神依赖性。精神依赖性强于身体依赖性。

综上所述，止咳药所含包括具有滥用潜力成分可待因、麻黄素在内多种活性成分，在非常规滥用情况下可导致多种效应，加之该群体绝大多数有滥用其它精神活性物质(吸毒)的经历，故难以准确、客观判断单纯止咳药导致的中毒症状和戒断症状。此外，除药物本身作用外，滥用者个体所期望的用药效应以及用药时的环境因素应该说也起到一定作用。根据本调查结果，尽管从调查的 6 地区整体看吸毒者中滥用止咳药者仅占一小部分(4.5%)，但个别地区高达 25.9%。根据国际上止咳药滥用的动向<sup>[1-3]</sup>，以及我国香港特别行政区也曾发生止咳药的滥用问题<sup>[5]</sup>。加之多数止咳药属于 OTC 药物，无特殊管理，一旦出现问题，流行速度和影响范围也会更快、更广的具体问题，故对止咳药滥用应引起重视。问题的另外一个方面是，对于含有可待因、麻黄素成分的止咳药(水)这样一类人民群众常用和疗效较好的止咳药物，如何在新形势下，做到既保证人民群众用药方便、有效，又能减少、杜绝非医疗目的流失，预防滥用，是当前应研究的一个课题。

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(2002-01-04 收稿 2002-02-28 修回)

### Evidence-based Medicine :A Revolution of Clinical Medicine in 21st Century

Zha Zhongling

Zhongnan Hospital , Wuhan University , Wuhan 430071 ,P. R. China

Xiong Fangwu , Fu Ying

Editorial department of Chinese Journal of Pharmacoepidemiology

**ABSTRACT Objective :** To make more medical and pharmaceutical professionals to understand the evidence-based medicine , promoting it to be applied widely. **Method :** The origin , developing condition , basic feature , practice procedure , wide application , as well as evidence-based medicine and pharmacoepidemiology of evidence-based medicine are expounded. **Conclusion :** The evidence-based medicine is a certain tendency of develop for clinical medicine in 21st century , it will be developed in more field in future.

**KEY WORDS** Evidence-based medicine ; Clinical medicine

### Preliminary Study on the ICH Harmonized Guidelines of Drug Safety Monitoring

Wang Lanming , Li Shaoli

Center for Drug Reevaluation , SDA , Beijing , 100061 ,P. R. China

**ABSTRACT** The history and progress of International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use(ICH) were introduced briefly , some issues on the topics concerning the drug safety monitoring were reviewed , and their inspiration and reference for the relevant works in China were discussed.

**KEY WORDS** Post-marketing Surveillance ; Adverse drug reaction ; ICH

### A Randomized Controlled Trial of Lizhuchangle and Cisapride In Treatment of Habitual Constipation

Huang Qiaoyun

Traditional Chinese Medicine Hospital of Tianhe District , Guangzhou , 510655 ,P. R. China

**ABSTRACT Objective :** To investigate the effects and safety of Lizhuchangle combined with cisapride in the treatment of habitual constipation. **Method :** 128 patients with habitual constipation were randomly divided into three groups such as A(48 cases) , B(42 cases) , C(38 cases) . Patients in group A were treated with Lizhuchangle combined with cisapride. patients in group B treated only with Lizhuchangle , patients in group C treated with tablet Rhei et natrii bicarbonatis. **Results :** The short-term cure rate was 87.5 % in group A , 80.95 % in group B , 76.32 % in group C ,  $P > 0.05$  compared among three groups. After six months , the total recur rate , in the three groups were 9.52 % , 29.42 % , and 89.95 % respectively. Group A compared with group B ,  $P < 0.05$  , Group B compared with C ,  $P < 0.01$  , Group A compared with C ,  $P < 0.01$ . **Conclusion :** There was no statistically difference among the three groups in short-term. There was a statistically difference among the three groups , the recur rate of group A was the lowest.

**KEY WORDS** Lizhuchangle ; Cisapride ; Constipation ,habitual

### Drug-induced Malingering : Two Cases of Analysis and Literature Review

Liao Haolei

Third Brand , Wuhan University Hospital , 430071 ,P. R. China

Zheng Xuemei

First Worker 's Hospital of Wuhan Iron and Steel Company

**ABSTRACT Objective :** To understand the clinical feature of drug-induced malingering. **Method :** Two cases of malingering were analysed and literature-related were reviewed. **Result :** The drug-induced malingering was able to be diagnosed early by the malingering patient 's special clinical expression. **Conclusion :** Doctors and pharmacists , especially at first clinical position , should possess some edge subjects knowledge about social medicine and medical psychology to diagnose early and treat immediately the drug-induced malingering.

**KEY WORDS** Drug-induced malingering ; Social medicine ; Psychology ,medical ; Case analysis ; Review ,narrative

### Epidemiological Survey on Cough Syrups Among Drug Abusers in Part Regions of Our Country

Liu Zhimin , LüXianxiang , Lian Zhi , Mu Yue , Guo Ping , An Xin

National Institute on Drug Dependence , Peking University , 100083 ,P. R. China

**ABSTRACT Objective :** To survey and assess the general condition and abuse nature of cough syrups containing codeine phosphate mixed with ephedrine hydrochloride. **Method :** A retrospective survey on cough syrups abuse was carried out in heroin addicts who were admitted to provide the detoxification in 6 regions of Chongqing , Shenyang , Beijing , Nanning , Guangzhou and Shanghai. Original data input and data analysis were conducted by EPF-INFO. **Result :** Sixty-three cough syrups abusers(4.5 %) were screened from 1 415 cases of heroin addicts in 6 regions. Most of them were male(44/63) and mean age was  $(27.0 \pm 7.1)$  years. The reasons of cough syrups abuse in this group were complex and multifactorial. The main reasons of initial cough syrups abuse were " cough syrups substitute for other addictive drug " , " effects of enjoyment " , " satisfaction of curiosity " , and " recovering spirits " . The main sites of cough syrups abuse were at public entertainment place and home. Thirty-four cases had the experience of polydrug abuse. 15.9 % of

cases experienced the mild withdrawal syndromes produced by cough syrups; 17.5 % of cases had the craving for cough syrups. The mean value of "Visual Analogue Scale"(VAS) was (39.1 ±29.0) mm. **Conclusion** : Cough syrups containing codeine and ephedrine had certain abuse potential in heroin addicts. especially, combination of codeine/ ephedrine in cough syrups with other drugs abuse. Because of most cough syrups are OTC drugs, therefore, the problems of cough syrups abuse need to be emphasized.

**KEY WORDS** Cough syrup; Codeine phosphate; Ephedrine hydrochloride; Study, epidemiology; Drug abuse

### Survey of Clinical Drug-used for Upper Respiratory Tract in Different Grade of Medical Organizations

Yang Jingbo, He Guozhen, Yang Renhe

Hubei Traditional Chinese Medicine and Materia Medica High College for Professional Training, Jingzhou 434100, P. R. China  
Dong Shifu

Tongji Medical College, Huazhong Science and Technology University

**ABSTRACT Objective** : To understand the present drug-used condition of patients with upper respiratory tract infection in Jingzhou city, providing the foundation of drug-used for clinical safe, effectiveness, lower cost in treatment of upper respiratory tract infection in future. **Method** : A retrospective survey and statistical analysis were conducted by randomized method in 2 746 cases of patients with upper respiratory tract infection in different medical organizations. The analysed drugs were antibacterials, glucocorticoids, analgesic-antipyretics. **Result** : The unreasonable using rate were 52.62 %, 41.73 %, 21.87 %, respectively in above three kinds of drugs, of which the unreasonable drug-used in children was more serious, especially at grass-roots medical units. **Conclusion** : The unreasonable drug-used in treatment of upper respiratory tract should be highly cared in medical professionals. The reeducation and training to medical professionals should be emphasized, determining the action of rational drug-used in the treatment of upper respiratory tract infections.

**KEY WORDS** Upper respiratory tract infection; Antibacterials; Glucocorticoids; Analgesic-antipyretics; Drug-used, rational

### Study on Clinical Use of Antibacterials in Neurosurgery

Luo Qin

Affiliated Brain Department Hospital, Nanjing Medical University, 210029, P. R. China

**ABSTRACT Objective** : To reveal the using discipline of antibacterials in neurosurgery. **Methods** : The using conditions of the antibacterials in discharged patients of neurosurgery on May, April, and March in 1998 were analysed. **Result** : The former three antibacterials are cephalothin, penicillin and other  $\beta$ -lactams; the higher dose of antibacterials are used to prevent and treat intracranial infection in neurosurgery; penicillin and ceftriaxone sodium are often used in combination; the therapy duration was general ten days. The antibacterials are frequently used at two hours before surgery. **Conclusion** : Because of the particularity of infecting position in central nerval system, the application of the antibacterials in neurosurgery exhibits its characterization. When preventing and curing the infection of the central nerval system, it is important to understand the antimicrobial spectrum of antibacterials and the effective drug concentration entered cerebrospinal fluid and brain tissue fluid. It should not be neglected to choose properly for the administration timing of antibacterial drugs for the prevention of wound ifation of post-surgery.

**KEY WORDS** Antibacterial; Neurosurgery; Drug utilization

### Analysis of Antibacterials Used in 850 In-patients

Zhang Yong'en

Department of Pharmacy, Buji People's Hospital, Shenzhen 518112, P. R. China

Huang Xiaohua

Infection Control Department, Buji People's Hospital, Shenzhen

**ABSTRACT Objective** : To understand rational use of antibacterials. **Method** : 850 medical records of the patients discharged from this hospital between Jan. 2001-Spt. 2001 were randomly selected and the data were analysed. **Result** : 1) The using rate of antibacterials in the hospitalized patients was 70.1 % (596/850). 2) The rational using rate of antibacterials were in the perioperative period of 232 patients receiving surgery (77.2 %). 3) The total unreasonable using rate of antibacterials was 32.9 % (196/596 cases), of which, nonindicated use of antibacterials (24.5 %), inappropriate use in combination (5.1 %), prolonged duration (19.4 %), unreasonable frequency of administration (15.8 %), frequent switch of antibacterials (12.2 %), shorter duration than necessity (10.2 %) and unreasonable use in perioperative period (12.8 %). 4) the microbiological assay and drug sensitivity test were carried out only in 7.4 %, which was too low. **Conclusion** : Rational use of antibacterials should be strengthened in the clinical practice.

**KEY WORDS** Antibacterials; Drug utilization, rational

### Cost-effectiveness Analysis of Mifepristone vs Buserelin for Uterine Leiomyoma

Huang Liping, Zeng Chunying, Chen Guanrong

Wuhan City Fourth Hospital, 430030, P. R. China

Fu Ying