## Misuse of appetite- stimulant drugs in Babylon Shafaq K. Saleh\*,1

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#### **Abstract**

Drug misuse is defined as using of drugs for a non-therapeutic or non-medical purpose. In Iraq drug misuse is a major problem because almost any drug can be easily obtained from pharmacies. Appetite- stimulant drugs are example of drugs that are widely used without a prescription. The study included 230 patients who use these drugs in Babylon. A questionnaire included the following questions; age, sex, marital state, the reason for use the drug, whether the drug is prescribed by physician or not, type of drug used, the frequency of daily dose and lastly the extent of side effects of the drugs used. The results showed that the age range of 35% of subjects were (17-21) years old and 70% of participants were females. The study also showed that 62% of them are unmarried and the reason for use, in 48% of subjects, was to increase the body weight. Furthermore, this study revealed that about 68% of those subjects utilized these drugs without prescription and the steroids are the most drug type used (33%). Additionally, 44% of subjects used these drugs twice daily and 80% of subjects who used steroids developed marked side effects. It can be concluded that there is a misuse of appetite-stimulant drugs in subjects participated in this study and most of these drugs are not used on therapeutic or scientific bases.

Key words: Misuse of drug, appetite-stimulant, dexamethasone.

# سوء استعمال الأدوية المحفزة للشهية في محافظة بابل شفق كاظم صالح \*'

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سوء استعمال الدواء هو استعمال الدواء للأغراض غير الطبية وغير العلمية . في العراق يشاع سوء استعمال الأدوية وبامكان الكثيرين صرفها من الصيدليات بسهولة وبدون وصفة طبية ومثال ذلك الأدوية المحفزة الشهية والتي تصرف بدون وصفة طبية . الدراسة تضمنت ٢٣٠ مراجع في محافظة بابل ممن استعملوا هذه الأدوية , جمعوا بصورة متتابعة وبطريقة الاستبيان المتضمن الأسئلة التالية : العمر ،الجنس، الحالة الزوجية , أسباب استخدامها , وهل هو موصوف من قبل الطبيب أو لا و كذلك سئلوا عن نوع الدواء المستخدم، الجرعة الدوائية اليومية وأخيرا هل تم حدوث آثار جانبية أو لا أظهرت الدراسة أن أعمار ٣٥% من هؤلاء المراجعين تتراوح بين ٢١-١٧ سنة و ٧٠% منهم إناث . وكذلك أظهرت أن ٢٦% منهم كانوا غير متزوجين. وكان السبب عند ٤٨% في استخدام هذه الأدوية هو لزيادة الوزن .بالإضافة إلى إن ٦٨% من المراجعين الذين يستخدمون هذه الأدوية يو المنازع عند المراجعين النين يستخدمون هذه الأدوية بن ٤٤% من المراجعين النين ستخدمون هذه الأدوية مرتان يوميا و ٨٠% من الذين استخدموا الستير ويدات قد عانوا من الآثار الجانبية لهذه الأدوية. من هذه الأدوية غير علمية أو طبية .

الكلملت المفتاحية: سوء استعمال الدواء ، الادوية المحفزة للشهية ، ديكساميثازون .

#### Introduction

Drug misuse can be simply defined as using of drugs for a non-therapeutic or non-medical purpose <sup>(1)</sup>. Drug misuse is a term used commonly for prescription medications with clinical efficacy <sup>(2)</sup>. In Iraq drug misuse is a widely spread problem because almost any drug can be easily obtained from pharmacies and drug stores. Appetite-stimulant drugs are widely used without a prescription or medical supervision to gain body weight and improve outlook. Appetite stimulant drug is any drug which increases the appetite. Several studies have indicated that there is a strong association between self-perceived weight status and

weight control behavior (3,4). Paradoxically, in many developing communities like Iraq, fullness is culturally associated with beauty, prosperity, health and prestige, while slimming is perceived to be a sign of ill health or poverty, so utilizing these drugs to increase body weight in order to improve the shape of subject (5-7). Cyproheptadine hydrochloride is antihistaminic /anticholinergic and antiserotonergic agent In Iraq cyproheptadine is available in two pharmaceutical dosage forms; tablets and syrup and widely used as an appetite stimulant.

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Dexamethasone is an antiinflammatory and immunosuppressant. One of its side effects is increased appetite leading to significant weight gain and therefore misused for this purpose <sup>(9)</sup> . In Iraq dexamethasone is available in different pharmaceutical dosage forms like tablet, syrup and injection. Betamethasone is another glucocorticoid anti-inflammatory steroids with immunosuppressive properties (10). In Iraq betamethasone is available in different pharmaceutical dosage forms as tablet and injection. Tonics include mainly vitamins and , are available in different pharmaceutical dosage forms like tablet, syrup and injection.

This study was conducted to verify the misuse of appetite-stimulant drugs by people attending private pharmacies in Babylon.

#### **Subjects and Method**

The descriptive cross section study was conducted from March 2010 to July 2011 on a consecutive sample of 230 subjects, in Babylon. The subjects were collected from patients attending three private pharmacies in different locations to buy different types of appetite-stimulant drugs. A questionnaire was constructed and included the following questions: age, sex, marital state, reason for using the drug, whether it is prescribed by physician or used with out prescription, type of drug used, frequently daily dose used, and extent of side effects in the subjects of study.

#### **Results and Discussion**

#### Variation of age

The results showed that 18 subjects (8%) using appetite-stimulant drugs were under 12 years old , 56 subjects (24%) were between 12-16 years old, 80 subjects (35%) were between 17-21 years old, 60 subjects (26%) were between 22-45 years old and 16 subjects (7%) were more than 45 years old (Figure 1). These numbers indicated that appetite-stimulant drugs are used mostly by teenagers and young adults .

#### Variation of sex

The results indicated that 69 of the subjects (30%) used appetite-stimulant drugs were males and 161 (70%) were females at a ratio 1:2.3 as females always tend to improve their look as concluded from the answers of participants during interviewing .

#### Marital state

The study revealed that 143 (62%) of subjects who used appetite-stimulant drugs were single (unmarried), while 87 (38%) of

them were married. These results indicated that the unmarried subjects, perhaps most of them, are trying to increase their body weight to improve their shape and to look more attractive & healthy by other people.

#### The reason for using appetite-stimulant drugs

When the subjects of study were asked about the reason for using appetite-stimulant drugs, 110 (48%) of them attributed the cause to low body weight, while 85 subjects (37%) used it to improve shape and outlook, and 35 subjects (15%) said that they used it just for general health (Figure 2). These results indicated that most of the subjects using these drugs were either to increase body weight or for better outlook. The desirability of a particular body size is not simply an autonomous, individual choice, but is mediated by cultural factors. In some countries there is a desire to lose weight but in other countries there is a desire for fullness (11).

#### Drug prescribed by physician or not

The results showed that only 74 subjects (32%) used appetite-stimulant drugs prescribed by physician or under medical supervision while 156 subjects (68%) used these drugs without physician prescription, these results showed that there is a great misuse of such drugs and most of them are used without prescription or supervision by medical experts.

#### Type of appetite-stimulant drugs used

Seventy six of the subjects used steroids (33%), while 62 subjects used cyproheptadine (27%), 28 of them used tonics(vitamins and minerals) (12%), and 46 subjects used combinations of these agents (28%) (Figure 3), and these results showed that steroids and cyproheptadine are the most types used locally because they believe that steroids are the most effective and fast drugs to increase body weight (based on the community experience).

### Frequency of daily dose of appetite-stimulant drugs

Ninety two subjects (40%) used these drugs once daily, 101 subjects (44%) used it twice a day, 32 subjects (14%) used it three times a day while only 5 subjects (2%) used it more than three times a day (Figure 4). These results indicated that most of subjects prefer to use the drugs 1-2 times a day rather than several times per day as it is more convenient.

#### Side effects

According to our findings ,only 10% of the subjects used general tonics suffered from side effects, mostly gastric

problems (like nausea), 50% of the subjects used cyproheptadine experienced sleepiness and headache while 80% of subjects who used steroids suffered from sever side effects (like edema, acne, dry scaly skin and increased sweating) (Figure 5). Cyproheptadine causes drowsiness as is common with first-generation antihistamines. Nausea and vomiting are noted commonly in people with neuromuscular disorders. Cyproheptadine can also cause oversleeping (10 hours) in children and adolescents (12)

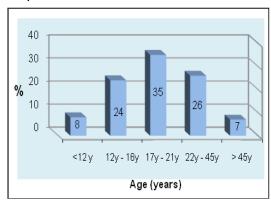


Figure 1: Variation of age

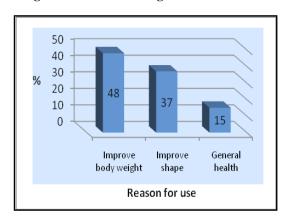


Figure 2: Reason for using appetitestimulant drugs

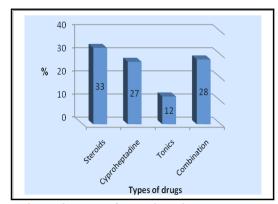


Figure 3: Type of appetite-stimulant drugs used

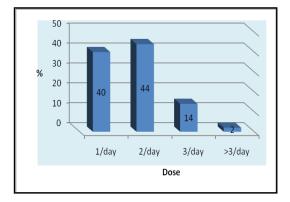


Figure 4: Frequency of usage of appetitestimulant drugs per day

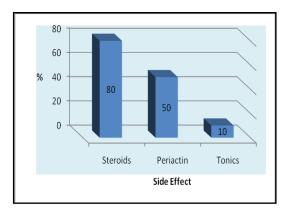


Figure 5: Drugs and their side effects

#### Conclusions

The results obtained from this study, showed that there is a misuse of appetitestimulant drugs in the subjects participated in this study in Babylon which are not used on therapeutic bases and without physician supervision. The misuse of appetite-stimulant drugs is high among young age females and used by unmarried more than married subjects. Most of the subjects used these drugs to increase body weight and improve out look (not due to diseases) and most of them prefer to take appetite-stimulant drugs twice a day. Dexamethasone was widely used appetitestimulant drug and the majority of subjects used steroids had suffered from sever side effects.

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