



INTERNATIONAL PERSPECTIVES ON MEDICINES *ABUSE* AND DEPENDENCE

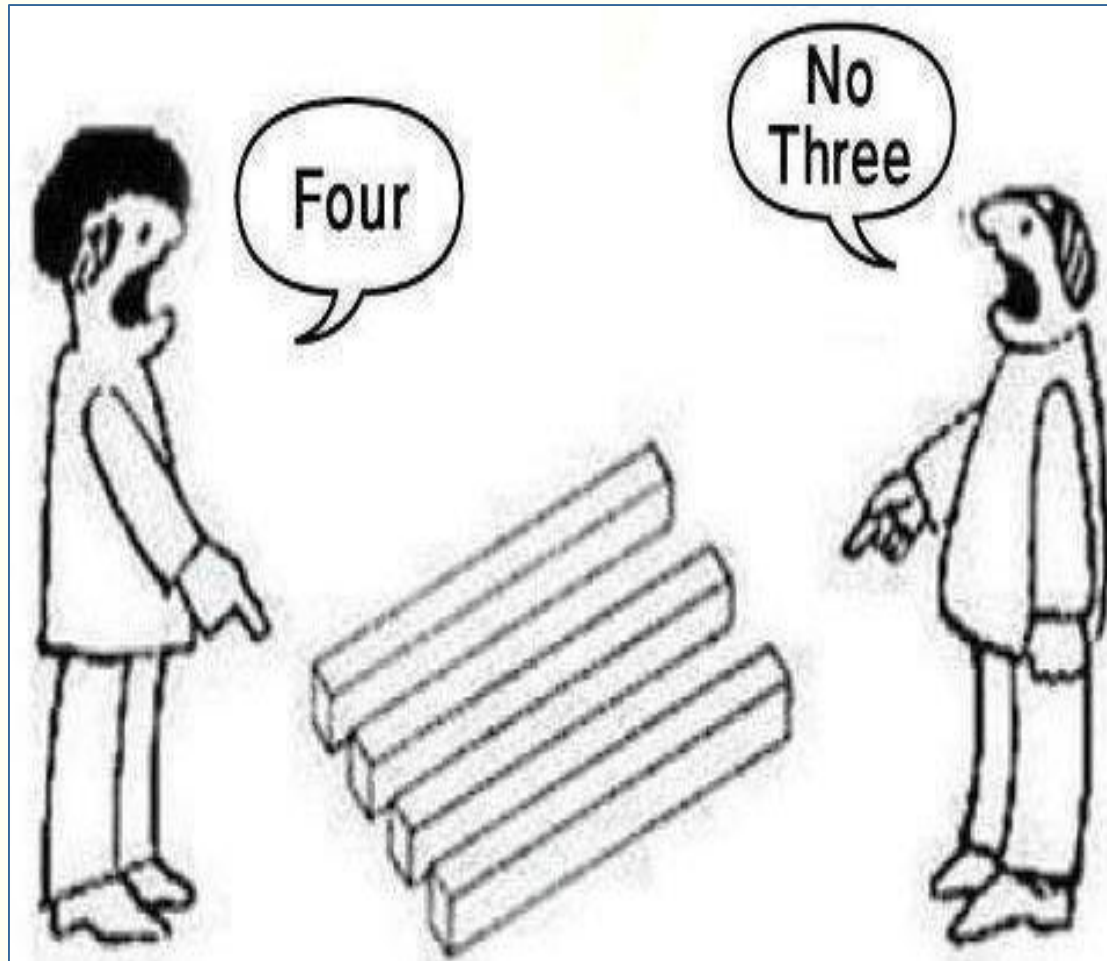
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Perspective

Medicines



- OTC (Non-Prescription)
 - GSL
 - Pharmacy Only
- Prescription Only Medicines (PoM)
- Controlled Drugs (schedules)
- Misuse vs. Abuse



□ CASE REPORT □

**Intoxication with Over-the-Counter Antitussive Medication
Containing Dihydrocodeine and Chlorpheniramine Causes
Generalized Convulsion and Mixed Acidosis**

Manabe², Tetsuji Yamashita¹

INDIA

codeine-containing cough syrups: a

**Opinion of community
medications in A**
Taghareed A

**Abuse and Misuse of Prescription and
Nonprescription Drugs from Community
Pharmacies in Aden City—Yemen**

Ebtesam A. Abood & Mayyada Wazaify

Egypt

Abo el Ela^b

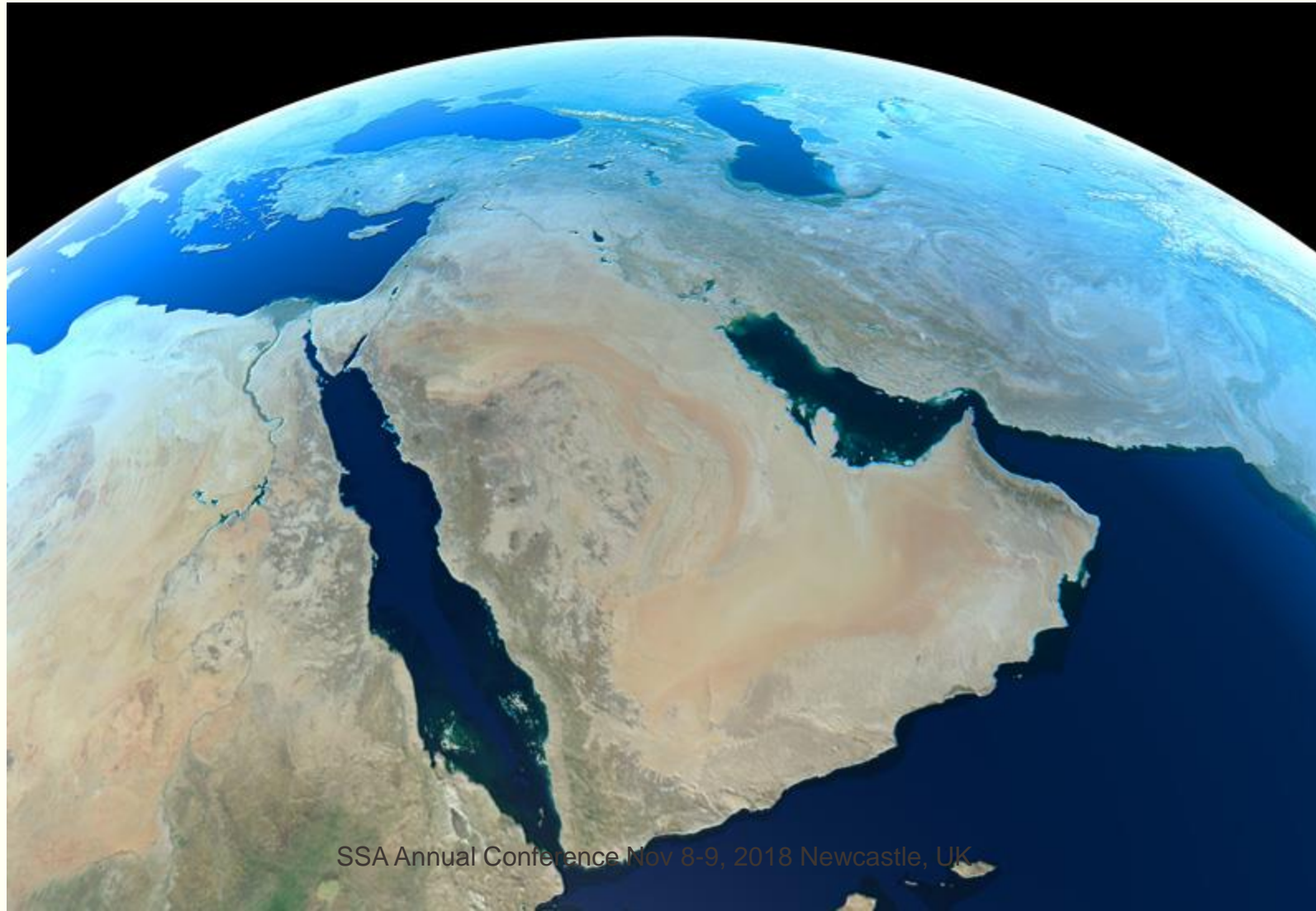
**Over-the-counter and prescription medicine misuse in Cape
Town — findings from specialist treatment centres**

Bronwyn Myers, Nandi Siegfried, Charles D H Parry

South Africa



*Data from **THIS** part of the world...*



SSA Annual Conference Nov 8-9, 2018 Newcastle, UK



Outline:

- Mostly reported PoM and OTC drugs of abuse
 - Unusual Methods/Drugs/Mix of abuse
 - User Experiences (Qualitative Research)
- Methods to limit the problem

Table 2

Most frequently reported drugs sold without a prescription and recognized by Jordanian pharmacists working in community pharmacies as drugs of abuse/misuse. Profile of a typical suspect is listed to reflect that the drug class and drug abuse/misuse is associated with the corresponding character

Misuse/Abuse**2010**

Drug class	Number (%)	Profile of typical suspect	
		Sex	Age group (in years)*
Nonprescription drugs			
1. Systemic nasal decongestants	243 (61.8)	Males*	26–50*
2. Cough and cold preparations	242 (61.6)	Males*	26–50*
3. Analgesics	127 (32.3)	Equal	No preference
4. Antihistamines	110 (28)	Equal	Less than 26*
5. Laxatives	50 (12.7)	Females*	No preference
6. Disinfectant alcohol	34 (8.7)	Males*	No preference
Prescription drugs			
1. Sedative hypnotics (BDZ)	209 (53.2)	Males*	26–50*
2. Antibiotics	113 (28.8)	Equal	No preference
3. Anticholinergic/anti-Parkinson's drugs	55 (14)	Males*	Less than 26*
4. Misoprostol	28 (7.1)	Females*	26–50*

**p* value less than 0.05.

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Medicinal Misuse

Abuse and Misuse of Prescription and Nonprescription Drugs Sold in Community Pharmacies in Jordan

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2016

Jordanian community pharmacists' experience regarding prescription and nonprescription drug abuse and misuse in Jordan – An update

Mayyada Wazaify^a, Ebtesam Abood^b, Linda Tahaine^c, and Abla Albsoul-Younes^a

Table 2. Drugs recognized by Jordanian community pharmacists as being abused/misuse in 2014 and profile of typical suspects

Drug class				Profile of t	
	Nonprescription drugs (n = 727)	Frequency	At your pharmacy (n)	Pattern of suspected use	Sex
Cough and cold preparations	182	131	↑	Males	26–50
Systemic nasal decongestants	152	111	↑	Equal	26–50
Analgesics	124	112	↑	Equal	No preferences
Antihistamines	128	85	↑	Equal	26–50
Laxatives	84	46	↑	Females	26–50
Alcohol 70.0%	43	37	↑	Males	26–50
Prescription drugs (n = 372)					
Sedative hypnotic (BDZ)	158	78	↑	Males	26–50
Antibiotics	100	48	↑	Equal	No preference
Anti-Parkinson drugs	46	23	↑	Males	26–50
Misoprostol	4	4	Stable	Females	No preferences
Eye drops ^a	25	12	↑	Males	No preferences
Pregabalin ^b	76	31	↑	Males	No preferences
Others					Chlorpheniramine (n = 14), corticosteroids (n = 7)

^aCyclopentolate, naphazoline, and antazoline (different brands).

^bReported in different brand names (e.g., Lyrica, Galica, etc.) in addition to generics.



User Experiences

*“Patient: A medical prescription. There would be a patient, we’d sometimes prescribe him 75, **I’d give him 75 and hide 25, yeah... 100, I’d give 75 and hide how much? 25...**A prescription and another prescription, until I take the full dose” Participant 14*

Interviewer:Shouldn’t they be discarded in the presence of witnesses?

*Patient: Yes, in the presence of witnesses... The principle is that there should be 2 staff members, 2 nurses present, one to draw [the drug] and the other to be a witness. ...**This never used to happen... It was an issue of trust**” participant 14*

*“Interviewer: Where did you get the prescription from? Patient: From a psychiatrist. umm, I was tired, yeah..., I couldn’t get up, ...couldn’t talk, ...couldn’t walk, I told him my situation is such and such, he asked me, **‘so in conclusion, which medicine [do you want]?’**. I would say to him: ‘for example, zolam’, I said to him ‘for example prazin’ And I would tell him ‘I would prefer that you prescribe prazin because this is what my life is about,/...Interviewer: You took prescriptions from them. One physician or more than one? Patient: There were two” Participant 11*



BRIEF REPORT

Abuse and Misuse of Prescription and Nonprescription Drugs from Community Pharmacies in Aden City—Yemen

Ebtesam A. Abood^a and Mayyada Wazaify^b

- N=170/200 (RR=85.0%) community pharmacists
- 57.7% reported to have a problem of PoM/OTC drug abuse
- Some patients were reported to either chew or possess Khat **while at the pharmacy**
- Mixing Khat with medicines (64.1%)
- **Top 3 reported medicines** (see table)



Table 3. Frequency of the most commonly suspected active ingredients of abuse/misuse (prescription and nonprescription drugs; $n = 423$) as reported by responding community pharmacists in Aden city.

Suspected drugs of abuse	Number (%) of responding pharmacists
Prescription drugs	
→ 1. Alprazolam	69 (16.3%)
→ 2. Tramadol	43 (10.2%)
3. Amoxicillin	31 (7.3%)
Non-prescription drugs	
→ 1. Ketoprofen	48 (11.3%)
2. Chlorpheniramine	24 (5.7%)
3. Codeine containing preparations	19 (4.5%)
4. Disinfectant ethanol	22 (5.2%)



Methods Used to limit the problem

1. Hiding product and reporting that the product is not available (31.0-44.1%)
2. Refusal of sale and insisting on prescription (9.4-14.8%)
3. Did nothing and just sold the product (3.8-20.6%)
 - Selling less than requested amount of product
 - Others (advice, referral etc)



The Use of Unconventional Substances and Tools in Narghile Smoking; a Pilot Study in Jordan

Najla S. Dar-Odeh^{1*}, Mohammad M. Beyari², Mariam Al-Abdalla¹,
Mohammad H. Al-Shayab¹, Wakas S. Abdulrazzaq³, Shadi Jarar¹,
Malek Al-Issa¹ and Osama A. Abu-Hammad⁴

- **Aim:** To investigate the prevalence and pattern of unconventional practices related to narghile smoking including the use of medications, fruits, and alcohol, among a sample of café patrons.

British Journal of Medicine & Medical Research
3(4): 2042-2053, 2013

Methods:

- Two out of five cafés have agreed to the distribution of the questionnaires.
- Number of subjects invited for participation was 96.
- A total of 61 subjects have agreed to participate (63.5%).
- Age range was (16-64) years with a mean of (27.5±9.2) years.



Table 3. Pattern and attitudes towards narghile smoking including unconventional practices among narghile smokers. Soft drinks include lemon and milk. Drugs include antihistamines, paracetamol, and cannabis. N=number of responders

Practice/ attitude	N (%)
Introducer [n (%)= 55 (90.2%)]	
Alone	3 (5.5)
Friends	43 (78.1)
Colleagues	3(5.5)
Relatives	6 (10.9)
Companions [n (%)=49 (80.3)]	
Friends	49 (100)
Favourite place [n (%)=52 (85.2)]	
Café	47 (90.4%)
Home	4(7.6%)
Farm	1(2%)
Unconventional practices [n (%)=48 (78.7)]	
Uses apple head	29 (47.5)
Uses melon or watermelon tank	10 (16.4)
Adds ice to tank	32 (52.5)
Adds milk or other soft drinks to tank	6 (9.5)
Adds alcohol to tank	4 (6.5)
Adds drugs to tobacco or tank water	6 (9.5)

Pa

it is almost ineffective in intense pain and has no depressant effect on respiration. Although paracetamol has been used clinically for more than a century, its mode of action has been a mystery until about one year ago, when two independent groups (Zygmunt and colleagues and Bertolini and colleagues) produced experimental data unequivocally demonstrating that the analgesic effect of paracetamol is due to the indirect activation of cannabinoid CB₁ receptors. In brain and spinal cord, paracetamol, following deacetylation to its primary amine (p-aminophenol), is conjugated with arachidonic acid to form N-arachidonoylphenolamine, a compound already known (AM404) as an endogenous cannabinoid. The involved enzyme is fatty acid amide hydrolase. N-arachidonoylphenolamine is an

Alfio Bertolini¹, Anna Ferrari¹, Alessandra Ottani², Simona Guerzoni¹,
Raffaella Tacchi¹, Sheila Leone³

Most commonly reported medicines to be added are paracetamol, aspirin, ophthalmic preparations. (Dar-Odeh et al., 2013). A courtesy of Mr Ahmad Jaber, a dental student at the University of Jordan



Ophthalmic drops abuse in community pharmacy setting: a cross-sectional study from Jordan 2017

Mayyada Wazaify, Mahmoud B. Alali, Mahmood A. Yousef & Samir Qammaz

Table 2. Ophth:

Drug class

Nonprescriptio

Prisoline (naph
Eye bright (W
water)

Naphcon-A (na
Ophtazoline (a
Others

Prescription Dr
Cyclopentolate
Others

Int J Ment Health Addiction
<https://doi.org/10.1007/s11469-017-9868-2>



ORIGINAL ARTICLE

The Misuse and Abuse of Ophthalmic Preparations: a Scoping Review of Clinical Case Presentations and Extant Literature

Waed Al-Khalaileh¹ • Mayyada Wazaify^{1,2} • Marie Claire Van Hout³

20).
abuse suspect
ioeconomic status (mainly)
moderate (50.5) (55.0)
moderate (69.6)
moderate (80.0)
moderate (41.1)



Sulfonylurea Drug Abuse “OLD -NEW!”

- “Hypoglycemic Rush”
- Web-based Discussions + 2 Case Reports (Marchetti et al., 1988+ Svirski et al., 1996)
- “*Factitious hypoglycemia*” >> surreptitious use of insulin or insulin secretagogues (sulfonylureas, meglitinides).
- **Reasons:** Self-harm, seeking attention or “euphoria”
- **Majority:** Medical personnel, patients with DM and their families
- Substance use and insulin misuse were not related to glycemic control or DM management (Snyder et al., 2016)



“I like the feeling. until it starts getting crazy intense, then it's like I guess I should do something about this”,

“Mild hypoglycemia feels good to me. I feel like I have been day drinking”,

“I know alot of people describe having a hypo like being drunk, but at least you know why you're drunk.”

“I bet if there was a way to safely get your levels down to a hypo level and keep them there people would use it as a drug.”



Finally.... Expect the Unexpected...



Wazaify M, et al., J Addict Neuropharmacol 2015, 2: 007

HSOA Journal of Addiction and Neuropharmacology

Case Report

Death of a Middle-Aged Man after Long Term Abuse of a Combination Anticholinergic, Beta Blockers and Narcotic Drugs: A Suspected Münchau- sen Syndrome Case Report

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At the age of 43, he started to have an “unexplained” bradycardia and it was then felt that the pacemaker maybe was coming to an end of its life as he was getting more of his “fainting episodes”. The pace maker was changed, removed and had to be reinserted a few months later. After three months, the pacemaker wound site became infected (it seemed that the patient reopened the wound over the pacemaker himself), requiring prolonged intravenous antibiotic therapy. Thus, the pacemaker was removed because of infection. His baseline rhythm was sinus bradycardia, and it was discovered by the resident doctor that the patient was secretly taking beta blockers (bisoprolol). The resident noticed it in his drawer when asking him to see his medications and asked him about it and he said it was prescribed for him. So, to maintain his slow heart rate and retain the medical attention the patient was requesting atropine frequently from the nursing staff to “improve” his heart rhythm. Then, the author Saba Madae'en (MS) discovered by accident that the patient was also getting Artane[®] (trihexphenidyl) secretly from a friend over the phone.



**Thank You for
listening**

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