Supplementary Material

Pharmacies as Potential Providers of Harm Reduction Services: A Preliminary Online Survey

Edward James[1], Thomas L Robertshaw[1], Andrew D Westwell[1] and Andrew P Smith[2]

[1]School of Pharmacy and Pharmaceutical Sciences, Cardiff University, King Edward VII Avenue, Cardiff, CF10 3NB, UK
[2]School of Psychology, Cardiff University, 63 Park Place, Cardiff, CF10 3AS

Corresponding author: edward.james.correspondence@hotmail.com

Data and Information Sheets Provided to Participants

Basic Information

Alcohol (ethanol) is the psychoactive substance in drinks such as beer, wine and vodka responsible for their well-known intoxicating effects.

Tobacco is a plant used in products such as cigarettes and cigars and is typically smoked. Tobacco can be used for its psychoactive properties and is often used as an aid to relaxation.

Cannabis (hemp / marijuana) is a plant used in a broad range of ways and some individuals consume cannabis for its psychoactive properties.

MDMA (3,4-methylenedioxymethamphetamine) is the primary psychoactive compound typically found in the tablets or powders commonly referred to as ecstasy.

Psilocybin is the primary psychoactive compound found in a broad range of different fungi commonly referred to as magic mushrooms.

The following data and information was provided to participants after participants input data regarding perceived relative harm:

There has been considerable research on these topics in recent years. Relevant references can be found in the debrief section.

Deaths attributed to alcohol per 100,000 consumers per year = 10-100

Deaths attributed to tobacco per 100,000 consumers per year = 800-1200

Deaths attributed to cannabis per 100,000 consumers per year = 0-1

Deaths attributed to ecstasy per 100,000 consumers per year = 1-10

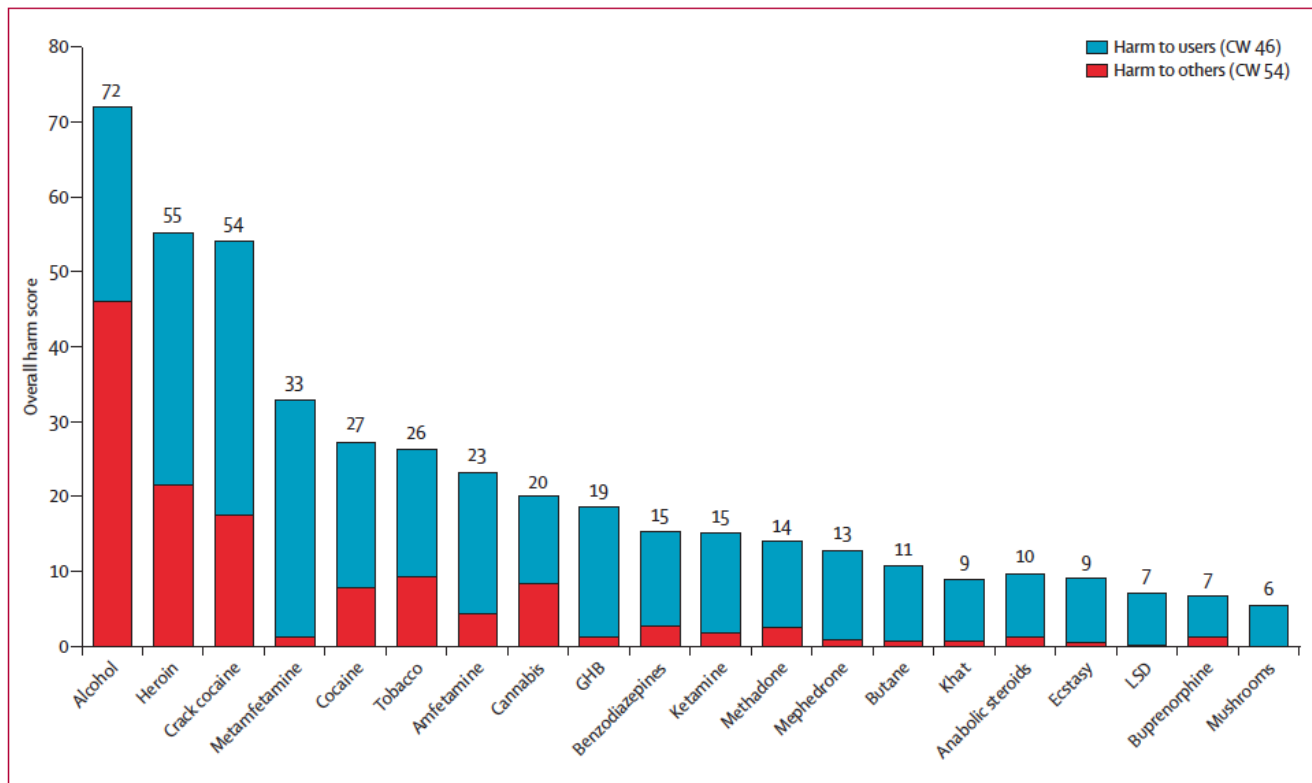Deaths attributed to psilocybin per 100,000 consumers per year = 0-1

Figure 2: Drugs ordered by their overall harm scores, showing the separate contributions to the overall scores of harms to users and harm to others
The weights after normalisation (0–100) are shown in the key (cumulative in the sense of the sum of all the normalised weights for all the criteria to users, 46; and for all the criteria to others, 54). CW=cumulative weight. GHB=γ hydroxybutyric acid. LSD=lysergic acid diethylamide.

Research has suggested that of the 5 substances listed **alcohol is the most harmful** to consumers and to others followed by tobacco as the second most harmful, then cannabis, then MDMA and the **least harmful are magic mushrooms (psilocybin)**:

Most harmful	-	**Alcohol**
	-	**Tobacco**
	-	**Cannabis**
	-	**MDMA**
Least harmful	-	**Magic Mushrooms**

Research has suggested that out of alcohol, cannabis, MDMA and psilocybin, the **most positive is psilocybin** followed by MDMA when the long-term effects on physical and mental wellbeing are taken into consideration.

Most positive	-	**Psilocybin**
	-	**MDMA**
	-	**Cannabis**
Least positive	-	**Alcohol**

Cannabis

Cannabis has been found to be an effective therapeutic aid for the treatment of medical and psychological disorders including:

- Spasticity
- Nausea
- Loss of appetite
- Chronic pain
- Asthma
- Anxiety
- Epilepsy
- Glaucoma
- Neurodegenerative diseases including multiple sclerosis and Parkinson's
- Insomnia
- Involuntary muscle twitching as observed in Tourette's syndrome
- Depression
- Neuropathy
- Spinal cord injury
- Panic attacks
- Arthritis
- Gastrointestinal problems
- Cramps
- Migraine
- Unwanted weight loss
- Allergies
- Chronic fatigue syndrome
- Fibromyalgia
- Bone disorders
- Stress
- Carcinoma
- Anger
- Visual impairment
- Genitourinary problems
- Limited mobility

MDMA

MDMA has shown a lot of potential as being a useful therapeutic agent:

- Currently in clinical trials for post-traumatic stress disorder (PTSD) therapy.
- Clinical trials are ongoing for MDMA-assisted psychotherapy for anxiety associated with life-threatening illness.
- Has been used in empathy training for couples experiencing interpersonal difficulties.
- MDMA may prove to be an effective probe and treatment for a range of social behaviours.

MDMA is one of the most commonly used recreational drugs across the globe:

- MDMA enhances emotional empathy and prosocial behaviour.
- It is known as an 'empathogen' as it enhances empathy.
- Please consider how the psychosocial effects of MDMA contrast to the effects of alcohol.
- Due to MDMA's illegal status as a recreational drug the MDMA taken by consumers is often of poor quality and in many cases does not include MDMA and does include other more harmful compounds such as PMA.
- As the contents of ecstasy pills and MDMA powders are extremely variable, and no reliable advice on safe consumption practices are typically given by distributors, the dangers of recreational consumption of MDMA are greatly worsened by the current methods of production and distribution.

Psilocybin

Psilocybin has shown a lot of potential as being a useful therapeutic agent:

- "Psilocybe mushrooms have been used for millennia for healing purposes, but were only discovered by modern science in the late 1950s."
- Clinical trials are ongoing for the treatment of anxiety in patients with advanced-stage cancer.
- Clinical trials are ongoing for the treatment of alcohol dependence.
- Studies have suggested that psilocybin could be an effective aid for the treatment of depression.

Magic mushrooms are a naturally occurring entheogenic psychoactive substance (can be used in a religious, shamanic, or spiritual context):

- It has been found that psilocybin can induce 'mystical' experiences.
- Mystical experiences induced by psilocybin can lead to a long-term increase in the personality trait of openness.

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Support Scores for Alcohol and Tobacco in Pharmacies

Alcohol in pharmacies

Question: "If pharmacies were to be the primary legal vendors of **alcoholic** drinks with available NHS support from GPs and mental health workers to help manage problem drinking this would be a *positive* change that you would support."

Education	Mean (SD)	Mode	N
All Participants	5.34 (2.91)	1	103
Non University-Educated	4.98 (2.73)	1	43
University Educated	5.6 (3.03)	7	60

Tobacco in pharmacies

Question: "If pharmacies were to be the primary legal vendors of **tobacco** products with available NHS support from GPs and mental health workers, to **1.** Help people quit smoking and **2.** Advise people about the dangers before trying smoking for the first time and during the consumer's lifetime, this would be a *positive* change that you would support."

Education	Mean (SD)	Mode	N
All Participants (103)	5.87 (2.99)	7	103
Non University-Educated (44)	4.77 (2.96)	1	44
University Educated (59)	6.69 (2.76)	7	59