

Bioethics Newsletter March 2019

Pill Testing

Facts and Arguments

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The spiritual consequences of drug use have not been addressed in the public debate. The use of Ecstasy and other mind-altering recreational drugs is a misuse of our free will. In entering the effect of these drugs we relinquish our free will, and make ourselves open to prevailing forces and influences. The Catechism describes the distribution of these drugs as 'direct co-operation in evil', since it encourages 'practices gravely contrary to the moral law'.

The following data was drawn from

- 1) ACT Government Health 'Pill Testing'
- 2) Report on the ACT GTM Pill Testing Pilot: a Harm Reduction Service. June 2018.
- 3) The Pros and Cons of Pill Testing, Parliament of Australia
- 4) The Medical Republic 18/02/19 'The Pros and Cons of Pill Testing at Festivals' by RP Scully

What is Ecstasy ?

Ecstasy is the illegal and frequently fatal party drug most commonly sought and consumed at music festivals. Recent deaths of young men and women associated with illicit drug use at festivals has led to the promotion of 'testing' of illegally purchased pills such as 'Ecstasy'. Ecstasy is an amphetamine related compound (presumed to contain: 3,4-methylenedioxymethamphetamine) called **MDMA**. It is also called "Molly".

It is generally sought and sold illegally at all-night dance parties, music festivals and nightclubs. It stimulates the person who swallows it to be energized and able to dance ceaselessly and 'rave' all night when the body would normally send messages to rest and respond to tiredness. It does this by increasing the activity of three chemical messengers of brain cells: Serotonin, Dopamine and Norepinephrine:-

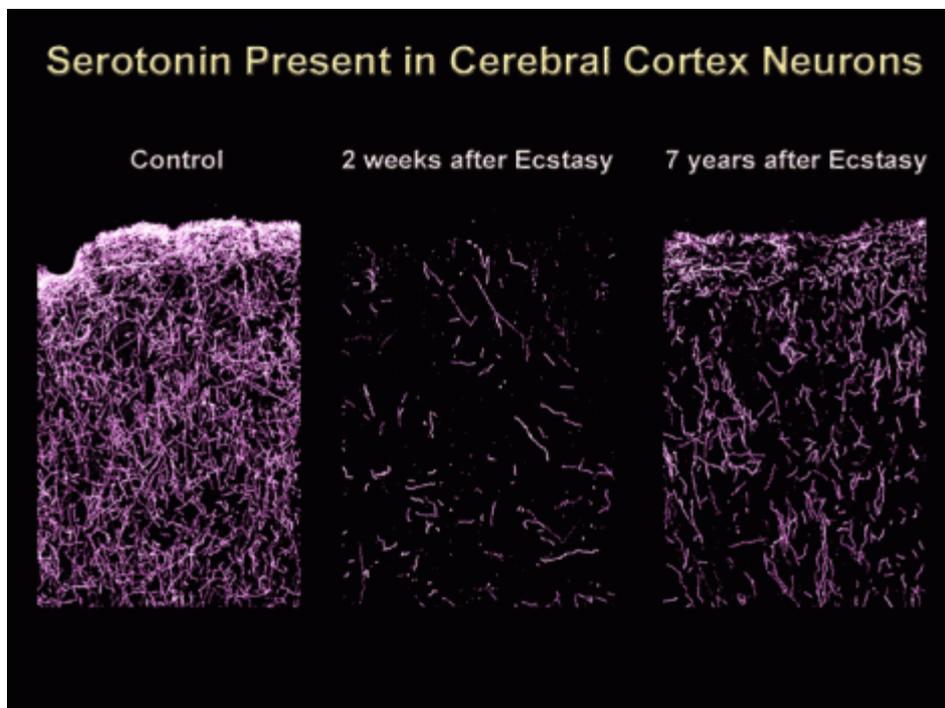
- **Serotonin** causes increased alertness, sexual arousal, heightened mood and altered perception.
- **Dopamine** causes a surge of feelings of increased pleasure and energy.
- **Norepinephrine** increases heart rate and blood pressure.

Users can become agitated, anxious, experience panic attacks, jaw clenching, paranoia, psychosis, serotonin syndrome, excess sweating, stroke and coma. The surge of serotonin also leaves the brain depleted of its normal supply of serotonin afterwards. This can cause confusion, depression, sleep problems, drug craving, and anxiety for weeks after use and long-term confusion, depression, poor

memory and attention deficits. It can also cause a sharp rise in body temperature. Liver, kidney and heart failure are also possible. No one knows how any individual will react to this drug, which can cause severe damage in a short time.

Music artists have promoted it in songs to our youth as something marvellous: “..all gold everything”; “..palms rise to the universe as we moonshine and molly..feel the warmth we’ll never die..we’re like diamonds in the sky”. It was first produced in 1912 by the pharmaceutical company Merck, but not marketed as such.

The image below shows sections of the brain neocortex of monkeys who were given Ecstasy twice a day for 4 days. The slide on the left was from a monkey given a saline placebo. The purple stain lighting up is serotonin. The middle slide is a section of monkey brain 2 weeks after Ecstasy dosing. The section on the right is monkey brain serotonin 7 years after receiving Ecstasy:



What is Pill Testing?

At the 2018 “Groovin the Moo” festival in Canberra, a pill testing trial was carried out. Most festival drug pills/capsules claim to be ‘Ecstasy’. During this trial, illicit drug users could enter a tent and decide how much of their illegally bought tablet they would give to be tested. The more they provided the better the test. An infrared spectrometer (light test) determines as best it can the chemicals present against a database of 30,000 known chemicals and 750 psychoactive drugs within about a minute. That small fragment of pill is then discarded. The result is given a white, yellow or red category. White means the drug you bought from a drug runner is what you expected. Yellow means there is another known substance in with the expected illicit drug. Red means there is either an unidentifiable substance present, or an unexpected substance linked with increased harm/multiple overdoses/death.

However, Ecstasy itself is linked with deaths, so it is unclear how the red category, signifying danger, differs from the white category assigned to this known potentially fatal illicit drug. Despite all the short-term and long-term harms and many deaths from Ecstasy, an Ecstasy tablet, for example, was given a white rating in this trial. It would be given a 'white rating' in future pill testing.

Having rated Ecstasy 'white' in the trial, the test 'commonly'¹ triggered a discussion of the risks of that substance. It was explained that the test is not foolproof. The trial records that of 125 presentations, only 5 users, ie 4%, were noted to have discarded their pill into a bleach bucket to be destroyed. (Pill testing advocates have misrepresented this figure as one in five users ie 20% rather than five out of 125² which is 4%). The test could not measure the concentration of the drug and cannot do so without much more sophisticated and expensive equipment, giving a much slower result.

The Case Against Pill Testing

Police and NSW Premier Gladys Berejiklian have spoken against 'pill testing'.

The Premier has said she is horrified that young people are not heeding the warnings about the dangers of illicit drug use. Young music goers know the message about these drugs, unequivocally, and yet will still buy illegal, garage-made pills from pushers to help them dance all night. It is not a question of being ignorant of the harms possible.

Victorian police have advised the health minister that pill testing would 'give people a false, and potentially fatal, sense of security about illicit drugs'.

As patrons who used the pill testing tent in Canberra's 'Groovin the Moo' pill testing trial were informed by the waiver they all signed:

No test results provide evidence of purity.

No test result provides evidence of safety

No test result provides evidence of dose/strength

No test result provides information about how you (your body/brain) will respond to the pill.

What may turn out to have been safe for one person, however, may not be safe for another.

The pill testing trial waiver did not prompt users to notify dealers to police, even when 'red' category results emerged from pill testing. The dealers and their drugs are not removed from the venue. Police are not able to be present during testing to interrogate users as to the specific source of their white, yellow, or red category drugs.

A 'white' result awarded to a tested pill, means the pill resembles what the user expected. Implicit in a 'white' result is a clearance or a degree of approval for use by the medical profession, even if this is not stated. There will be a false sense of security that the pill is cleared for use. This could paradoxically increase illegal drug purchase and usage. The complacency and confidence pill testing

¹ GP Dr Rob Page in The Pros and Cons of Pill Testing at Festivals *Medical Republic* 18/2/19.

² The Pros and Cons of Pill Testing at Festival *Medical Republic* 18/2/2019.

creates in turn, funds and supports the garage manufacturers of Ecstasy and their business turnover, putting more drugs onto the streets and festivals or whatever venue attracts consumers.

Those in favour of pill testing argue that it enables warning of 'red' category results to be messaged about. A communication sent to ravers at a Falls festival in Lorne recently said:

'Serious Drug Alert: There is an extremely dangerous orange pill in circulation.

Regardless of pill variation, one pill can kill. Seek medical if you feel unwell.'

But this also applies to every ecstasy pill – thereby made to seem less deadly. Contradictory messages are being sent.

Andrew Leibie, a scientist with Safework Laboratories and a member of the International Association of Forensic Toxicologists, has raised his own concerns about pill-testing:

On-site testing is not very accurate and would take a sophisticated laboratory to become so.

Concentrations of ecstasy and methamphetamine which are more lethal not detectable.

On-site testing cannot test for new designer drugs – hence the false sense of security again. 100 new illicit substances enter the market each year and may be added to Ecstasy etc and be undetected initially by pill testing.

The 'Knock out Games of Destiny dance festival' informs ravers who may be considering illicit drugs: 'We have plenty of ambulances and medics and stuff...we've got you covered if anything is wrong with you, we've got the medics at the back of the arena'. A young attendee died. Reliance on medicine as an antidote is potentially false reassurance and may further encourage illicit drug use.

Another concern is that pill testing is driven by those who are seeking to legalize these drugs. This has been suggested recently, when Dr Rob Page who has worked at the Sydney injecting clinic argued that the punitive approach wasn't working. However, that conflicts with the Ecstasy and Related Drugs Reporting System³, which found that drug users are saying these drugs are becoming more difficult to obtain.

The limitations of testing kits are also at issue. The cost of mobile laboratory testing and the turnaround time to more reliable results puts them out of the range of music festivals expenditure. Hence the recent complaints by music artists seeking to perform live at National venues.

The Case for Pill testing:

Professor Alison Ritter of the National Drug and Alcohol Research Centre says a lack of public information about the content of specific pills meant drug users could not make informed choices. While advocating for pill testing she also said 'The concern is putting out this type of information says that using other forms of ecstasy would therefore be safe.' She suggested:

- testing might place pressure on manufacturers to stop using adulterants;
- visits to pill-testing booths might provide another opportunity for information and support;

- pill testing could change behaviour with 'code red' results discouraging drug consumption overall
- pill testing enables data capture about what is in the marketplace, with potential activation of a warning system. [such as the message quoted above from the Falls festival].

Dr. Alex Wodak, president of the Australian Drug Law Reform Foundation says giving people an amnesty to test illicit drugs would not reduce drug taking but would reduce the chance of ingesting a bad pill. (He cites no references for this). He went on to say 'If we had testing and 10% of drug dealer A's supply was getting rejected at the drug testing counter, then word would get around' - ie pill testing might change the black market.

At the Canberra festival pill testing trial, 50% of 85 samples tested weren't what the user anticipated. Five of these samples were observed to be discarded in the amnesty bin.

It has been stated that pill testing changes behaviour ⁴. [There is no statistically adequate reference for the effectiveness of this claim. The claims made on this website referenced below are not substantiated by the usual standards of evidence based medicine].

Conclusions

As a GP of 40 years standing and an accident and emergency hospital doctor currently, I draw the following conclusion. There is a false assumption that an illegal drug is safe if it contains what you expect. The seizures associated with Ecstasy use, however, that I have come across have been associated with low sodium levels in the bloodstream. The consumption of large volumes of water, as is recommended, in the context of all-night high energy dancing and sweating does not replace the electrolytes lost. As the Journal of Internal Medicine Nov. 2016 reported: 'pill testing at best gave an artificial shine of safety. It is this artificial shine of safety which can be dangerous'. This is borne out in an interview with a festival goer at the Bendigo Music Festival who said:

'The fact they can test it and make sure that they are going to be safe is definitely a good thing. It could make you want to take more drugs. It would definitely give you peace of mind'.

Drug dealers could capitalize on this confidence to promote sales. Pill testing will inevitably increase complacency around recreational drug use. A recent ABC Q&A segment was very pertinent. The panellists were selected to be a majority favouring pill testing. Of two doctors present, neither were in family medicine/general practice and neither are exposed to the toll of drug use at a community level. None of the three 'experts' favouring pill testing expressed any concern regarding the financial support each purchased pill – white red or yellow category – provides to the illegal drug industry and its business. If more ecstasy producers of 'white' category pills flourish as a result, there will be more lethal and illegal ecstasy on the streets and its price will likely therefore reduce, making it more accessible. Evidence based medicine standards are not met for the implementation of pill testing.

⁴ The Pros and Cons of Pill Testing Parliament of Australia

<https://www.google.com/search?q=the+pros+and+cons+of+pill+testing+parliament+of+australia.&oq=the+pros+and+cons+of+pill+testing+parliament+of+australia&aqs=chrome.69i59j69i60j69i57.23458j0j7&sourceid=chrome&ie=UTF-8>

The foreseeable consequence of more prevalent ecstasy availability has not been addressed for Australia.