

SUBSTANCE MISUSE IN
PREGNANCY-HOW RELIABLE
IS ROUTINE ENQUIRY IN
DETECTING WOMEN WHO
ARE SUBSTANCE ABUSERS
AND THE ROLE OF URINE
TOXICOLOGY.

Oniya O, Harvey S, Thomson A

BACKGROUND

- ✓ For the first time ever a separate chapter was included in the last Confidential Enquiry on Substance Misuse in Pregnancy.
 - ✓ 31 women were known to have died either directly due to or as a consequence of their substance misuse.
 - ✓ Diagnosis is often reliant on direct enquiry during antenatal booking and this is the recommended mode of detection.
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BACKGROUND

- Substance misuse is illegal.
 - Associated with a lot of social stigma.
 - Child protection issues and the real possibility of children being taken into care.
 - Some substance abusers will deny misuse during routine enquiry.
 - Visible intoxication at antenatal visit may prompt new diagnosis.
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URINE TOXICOLOGY

- ✓ Urine Toxicology is an effective method of detecting the presence of illegal substances.
- ✓ Usually offered only to known users to detect undeclared substances and compliance.
- ✓ Not employed as routine for women not known to be users.
- ✓ Result limited by timing :
 - Benzodiazepines & Cocaine - 3 days
 - Methadone & Heroin - 2 days
 - Amphetamines - 1 -3 days

AREA OF STUDY

- Paisley Area- significant population of women in childbearing age known to be substance abusers.
 - A Sample of these Women pregnant during the years 2004 / 2005 who had Urine Toxicology assay were audited.
 - 59 patients Identified. 33.5% of all referrals for Special Needs In Pregnancy.
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METHOD

Substances declared during routine enquiry at booking were correlated with Results obtained from Microbiology analysis of samples submitted for urine Toxicology.

AMPHETAMINES (Speed & Ecstasy)

■ History Yes	8	13.6%
■ Toxicology Positive	1	1.7%
■ History No	51	86.4%
■ Toxicology Negative	58	98.3%
■ Hx No & Tox. Positive	1	1.7%
Total users with Tox.	9	15.3%

AMPHETAMINES (Speed & Ecstasy)

- Only 1 woman (1.7%) was positive for amphetamines although 8 (13.6%) patients had admitted to regular use.
- None of the women using Amphetamines had positive Toxicology.

BENZODIAZEPINES

■ History Yes	18	30.5%
■ Toxicology Positive	33	56.0%
■ History No	41	69.5%
■ Toxicology Negative	26	44.1%
■ Hx No & Tox Positive	16	27.1%
Total Users with Tox	34	57.6%

BENZODIAZEPINES

- 33 (56%) patients were positive for Benzodiazepines.
 - 17 out of 18 who had admitted regular use had positive Toxicology.
 - An Additional 16 (27.1%) patients who had denied use of Benzodiazepines during routine enquiry had positive Toxicology.
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METHADONE

■ History Yes	41	69.5%
■ Toxicology Positive	31	52.4%
■ History No	18	30.5%
■ Toxicology Negative	28	47.5%
■ Hx No & Tox Positive	0	0 %
Total Users with Tox	unchanged	

METHADONE

- Only 31 (52.4%) out of 41 (69.5%) women known to be on Methadone tested positive.
 - All Toxicology positive patients had admitted to Methadone use during routine enquiry.
 - Urine Toxicology did not detect any additional patients.
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OPIATES (Heroin)

■ History Yes	32	54.2%
■ Toxicology Positive	29	49.1%
■ History No	27	45.8%
■ Toxicology Negative	30	50.9%
■ Hx No & Tox Positive	7	11.9%
Total Users with Tox	39	66.1%

OPIATES (Heroin)

- ❖ 32 (54.2%) patients had admitted to Heroin misuse. Only 22 (37.3%) tested positive.
 - ❖ 7 (11.9%) additional patients who were not known to be Heroin users had Positive toxicology.
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COCAINE

■ History Yes	5	8.5%
■ Toxicology Positive	4	6.8%
■ History No	54	91.5%
■ Toxicology Negative	55	93.2%
■ Hx No & Tox Positive	3	5.1%
■ Total Users with Tox	8	13.6%

COCAINE

- ❖ 4 (6.8%) women were Positive for cocaine.
 - ❖ Only 1 (1.7%) out of 5 (8.5%) patients who admitted use was found to be positive.
 - ❖ 3 (5.1%) additional women who had not volunteered cocaine misuse on routine enquiry had positive toxicology.
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DISCUSSION

- Although most women by far are honest about disclosing which substances are being abused in pregnancy there may still be underreporting during routine enquiry.
 - In known substance abusers other undeclared drugs are frequently used in addition.
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DISCUSSION

- During Detoxification, illicit use of Heroin may continue in addition to Methadone.
 - Amphetamines are unlikely to be detected on routine toxicology even in known users.
 - More women were likely to deny use of Benzodiazepine (16 patients 27.1%) and Opiate (7 patients 11.9%) .
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DISCUSSION

- ✓ Most patients on Methadone were already known to the system
 - ✓ Many patients on Methadone (10 patients 17%) tested negative
 - ✓ Urine toxicology is dependent on the interval between last use and time of testing.
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DISCUSSION

- ✓ It is possible to obtain Methadone illegally as some patients on prescribed Methadone will sell their medication to procure Heroin
 - ✓ The incidence of this has significantly reduced with the introduction of ingestion in the presence of the dispensing Pharmacist.
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DISCUSSION

- 3 additional patients (5.1%) Tested positive for cocaine.
 - Cocaine is expensive and more likely to be smoked in crack form.
 - Use is not as common as other substances.
 - Probably the least likely to be declared as use is often recreational just as is the use of Amphetamines.
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CONCLUSION

- ✓ Routine enquiry will continue to be the mainstay of detecting substance abusers in pregnancy and most women are by far honest about declaring which substances are being abused.
 - ✓ However a good proportion of women will still seek to conceal their substance misuse.
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CONCLUSION

- Routine urine toxicology will aid in recognising more patients and help monitor compliance in patients on detoxification programmes.
 - Routine Toxicology raises the issue of consent and confidentiality.
 - Advisable in patients already known to be abusers as toxicology will detect other illegal substances.
 - Should we be performing random Urine Toxicology on all /High risk women?
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