

# TRACES OF OPIATES IN SHISHA COLLECTED IN NAIROBI, KENYA

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# SHISHA

- The term shisha is derived from the Persian word shīshe and refers to a syrupy tobacco mix with molasses, honey, vegetable glycerol and a variety of apple, grape, guava, lemon, mint, that is smoked through water.
- Term is also used to refer to an instrument for vaporizing and smoking flavored tobacco in which the vapor or smoke is passed through water before inhalation.

# SHISHA / HOOKAH / WATERPIPE



# SHISHA

- Shisha smoking is popular among urban populations particularly in Middle East and Asia and increasingly also in Africa and the rest of the world.
- In an article “Greek addicts turn to deadly shisha drug as economic crisis deepens” (Helena Smith, The Guardian, 16 May, 2013), shisha was referred to as 'cocaine of the poor'.

# HAZARDS OF SHISHA SMOKING

- Similar to those associated with cigarette smoking.
- Include lung cancer, esophageal cancers, chronic bronchitis, lung emphysema, low birth weight, precipitation of asthma attacks and pneumonia.
- Pipe-sharing in shisha smoking use may also transmit infectious diseases such as TB and hepatitis.

# HAZARDS OF SHISHA SMOKING

- Potential role of shisha use as a gateway to other addictive substances such as cannabis and heroin (Javaid Khan, 2013).
- Exact ingredients are often unknown due to 1. poor labeling, and 2. manufacturing methods are not standardized.

# BACKGROUND

- Within the last few years, there has been a rapid growth in the number of pubs, cafes and restaurants offering shisha smoking across Kenya.
- These outlets are increasingly attracting people from different backgrounds, most of whom are youthful.
- Little is known about the composition of shisha consumed locally, especially possibility of adulterated with prohibited substances.

# BACKGROUND

- Even less is known about what socio-economic or health effects shisha smoking in the country
- NACADA has a mandate of curbing drug abuse by citizens of Kenya, especially the youth and children
- NACADA embarked on an exercise to collect shisha samples with a view to testing for any addictive and prohibited constituents.



# OBJECTIVES

The core objectives of this exercise were therefore to:

- 1 Collect random samples from different parts of Nairobi.
- 2 Test the collected samples.
- 3 Present results for further discussion.

# SAMPLING

- A total of 8 samples were collected.
- Some of the samples collected were in their original manufacturers' packaging while others were collected in small portions from the point of use.
- The samples were then transmitted to Bora Biotech laboratories in Nairobi.

# ANALYSIS

- Sample analysis was conducted using an immunological rapid screening test that uses disposable test devices (Drugwipe<sup>®</sup>, Securetec, Germany).
- Test devices have a detection limit of 10ppb.
- Manufacturer's instructions were followed.
- These test devices are recommended as appropriate for screening for cocaine, heroin (opiates), marijuana, and amphetamines by US department of Justice (NIJ Guide 601-00).

# DRUGWIPE STRIP



# ANALYSIS

- Different test devices were used on each sample to test for cocaine, heroin (opiates), marijuana, and amphetamines. Each sample was therefore tested four (4) times using a different device to test for each substance.
- The results from each test were read as either positive (detected presence of the substance) or negative (no presence of the substance detected).

# RESULTS

- A total of eight samples were analyzed (Table 1).
- All samples were negative for cocaine, marijuana,
- All tests were positive for opiates.
- The amphetamine test was negative for seven samples and positive for one sample

	Source	Sample Type & Identity	Cocaine/ Crack	Cannabis (Marihuana/ Hashish/THC)	Opiates (Morphine, Heroin)	Amphetamines/ Methamphetamines/ Ecstasy
1	Al fakher tobacco trading co. united Arab Emirates	AL FAHER (Banana)	Negative	Negative	Positive	Negative
2	Nakhla Tobacco Egypt	Mizo (orange tobacco)	Negative	Negative	Positive	Negative
3	Al Fakher United Arab Emirates	Al-fakher (micotine grape)	Negative	Negative	Positive	Positive
4	AL FAKHER (Nicotine UAE)	ALFAKHER (strawberry)	Negative	Negative	Positive	Negative
5	AL FAKHER (Nicotine UAE)	ALFAKHER (Orange)	Negative	Negative	Positive	Negative
6	AL FAKHER (Mimt)UAE	ALFAKHER (MINT)	Negative	Negative	Positive	Negative
7	AJMAU (Tobacco) UAE	Golden Layalina (strawberry)	Negative	Negative	Positive	Negative
8	Unmarked	Aluminum pack	Negative	Negative	Positive	Negative

# DISCUSSION AND CONCLUSIONS

- The occurrence of traces of narcotic drugs in the increasingly popular shisha is a great cause of concern.
- There is need for an elaborate survey involving a larger sample size and covering a wide range of outlets from across the country.
- Further, verification of positive samples using confirmatory methods such as gas chromatography combined with mass spectrometry (GC/MS) is required.



THANK YOU