



Methanol Poisoning outbreak in Boutillier Port-au-Prince, Haiti October 2015

Authors: Natacha Théard¹, K. Pierre¹, S. Corvil¹, P. Adrien¹, P. Dely¹

Affiliation: ¹MSPP-DELR

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Background

- Methanol is a toxic chemical compound
- Formula CH_3OH .
- Methanol poisoning is rare but potentially serious.
- Incidence is unknown.

Background (con't)

- October 26th 2015: abnormal neurologic syndrome causing death occurring in Boutillier notified to Epidemiology Laboratory and Research Directory (DELR)
- Reported Clinical characteristics:
 - Sudden blindness
 - Vomiting
 - Asthenia

Objectives

- A case investigation was conducted on notification day:
 1. Characterize the outbreak
 2. Determine the cause of deaths
 3. Propose preventive and control measures

Boutillier

- Suburban area of Port-au-Prince
- Rural population in poor settlement area
- High level of local distilled alcohol consumption: most affordable

METHODS

- Retrospective description by field investigation.
- Case
 - Anyone leaving in Boutillier and surrounding areas, who reported having one or more of the following signs/symptoms: sudden blindness, vomiting, asthenia from October 20-26, 2015 after drinking pure alcohol
 - Survivors and community interview
 - Interview of family where death cases occurred

METHODS (cont'd)

- Serum sample collection on survivor
- Local drinkable alcohol samples collection
- Data were entered and analyzed in Microsoft Excel
- Verbal consent was obtained from participants
- Awareness to the community on probable alcohol drinking
- Referring survivors to hospital

RESULTS

- 7 Cases interviewed
 - 2 survivors
 - 5 deaths
- Specimen
 - 6 samples of pure alcoholic for beverage
 - 1 serum sample

NB: Serum specimen collected for 1 survivor was not tested

RESULTS

Table 1. Cases characteristics, n=7

Variables	n	%	Mean
Socio-Demographic			40 (21-50)
Clinical Manifestations (Sudden blindness, severe headache and muscular weakness)	7	100	
Vomiting	2	28.6	

NB: Local alcohol drinking prior to symptoms: 100%
Sex ratio male/female: 5/2, lethality rate 71.4%.

Results (cont'd)

- Alcohol sample
 - Trace of Methanol detected by center for disease control and prevention (CDC) Lab in Atlanta
- About 500 people briefed on methanol poisoning probability prior to samples testing

Limitations

- Low response rate among household selected
- Serum specimen collected for survivor was not tested

Actions Taken

- Survivors referred to hospital
- Parents of victims informed about methanol poisoning.
- Population informed about methanol poisoning risks in local alcohol distribution.
- Population advice on prompt health care seeking if any similar case occurs

Conclusion

- Confirmation of methanol poisoning throughout local alcohol consumption
- Contamination source unknown
- Clinical picture similar to literature description and causes death
- Public health concern as this poisoning frequently happens in Haiti
- Avoidable by control in alcohol distribution and drinking

Recommendations

- Suspend alcohol sale in the area up to testing
- Set up a systematic local alcohol quality control
- Sensitize general public on risks and actions to take if ever
- Further study to identify the primary source of liquor intoxicated with methanol

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