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RISK FACTORS ASSOCIATED WITH OUTBREAK OF METHANOL POISONING IN SOUTH-EASTERN DISTRICTS OF ONDO STATE NIGERIA– MAY 2015

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Introduction: On 13th of April three people from Irele LGA, Ondo State Nigeria were reported having symptoms of headache, blurred vision, respiratory difficulty and loss of consciousness. All died within 24-72 hours of onset of symptoms. The State Ministry of Health was alerted and researchers investigated the outbreak.

Methods: They conducted a community-based case control study. 19 cases and 57 controls were interviewed using a semi-structured interviewer administered questionnaire. Descriptive statistics and odds ratio were done. They also collected blood and urine samples from three cases as well as remnants of consumed gin for toxicology analysis.

Results: There were 39 suspected cases, 29 deaths and a case fatality rate of 74.4%. Mean age of cases and controls was 40.4±12.5 years and 31.9±11.3 years. Among risk factors studied, consumption of local gin [OR=17.2 (95% CI: 4.6-84.0)], other alcohol consumption [OR=24.2 (95% CI: 4.0-555.6)]. Levels of methanol toxicity in the three blood samples were 0.28g/L, 0.21g/L and 0.15g/L. Methanol was detected in the urine samples at a level of 0.018g/L. Methanol samples in the three samples of local gin were 125g/L, 65g/L and 9.6g/L.

Conclusion: Local gin contaminated with methanol was the major risk factor for the occurrence of the outbreak. It was recommended that enforcement of regulatory measures should be made to address the sale of illicitly produced alcoholic drinks to forestall future outbreaks. Sensitization of public report early to the facility if the signs and symptoms were noticed for prompt treatment to reduce the complications.

BIOGRAPHY

Adefisoye O. Adewole is a field coordinator at the African Field Epidemiology Network, Asokoro Abuja. He is a graduate of the Nigeria Field Epidemiology and Laboratory Training Programme and holds a Master's Degree in Public Health from the University of Ibadan. He coordinates the Malaria Frontline Project which is being implemented in two northwestern states (Kano and Zamfara). His interest is multidisciplinary in nature and this is due to his public health background. As an epidemiologist, he has supported research activities of under-graduate and post-graduates' students (Master's level) in the area of malaria, epidemiology and medical statistics, reproductive health, leadership and management.

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