The Possible Health Impact Of Mobile Wheel-Barrow Bound Live Cooking Eatery: The Inherent Danger To The Society

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ABSTRACT

Ideal eateries are sited in buildings where food vendors sell cooked food to their customers. These customers are usually not exposed to the smoke that comes off firewood or charcoal used in preparing the food. They are also not exposed to the intense heat that comes off the cooking fire. However, mobile wheel barrow bound cooking eatery poses potential health hazards to the food vendors, customers and passers-by as the mobile eateries are constantly “being wheeled along”. The smoke from the live fire when inhaled can predispose to respiratory diseases and death in serious cases. The food vendors are also affected by intense heat from sunlight which may predispose to skin cancers. This review is aimed at highlighting the potential health risks of mobile live cooking eatery to the eatery owner, customers and the society at large.

Key words: Mobile food vendors, Inhalational injury, Food-borne diseases, Health impact

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HEALTH IMPACT

Inhalation injury is an acute respiratory system insult that results from direct thermal injury, carbon monoxide poisoning, or toxic chemical inhalants, such as fumes, gases and mist.[1] The black smoke being emitted from mobile wheel barrow live cooking eateries is inhaled by the food vendors and all passers-by, and settles in the lungs. In most cases, damage to the upper and lower airways is the result of chemical injury from products of combustion such as ammonia, nitrogen dioxide, sulphur dioxide and chlorine. These irritants damage the mucosa and cause oedema and air way obstruction, causing cough, hoarseness of voice, difficulty in breathing, respiratory failure and death in most cases. Adigun[2,3] and colleagues in Ibadan did a retrospective study on patients that suffered from inhalation injury and recorded a mortality of 78%. The reasons adduced for this high mortality was lack of facilities for monitoring blood gasses and as well as for ventilatory support.[4] In a related study among 13 victims of inhalational injury in Kamataka, India, lung injury was noted to progress over the first few days and became worse in 72hrs. Respiratory failure manifested after several weeks, necessitating repeated interventions such as mechanical ventilation and surgery.[5]

Smoke inhalation can also trigger asthmatic attack. Cross sectional studies have provided evidence of association between poor air quality and incidence of asthma. [6-8] One of those studies, carried out in an urban population, showed that the association between asthma morbidity and air pollution was stronger in children than in adolescents and adults. [8]

Erythema ab Igne (EAI) also known as toasted skin syndrome is a rare skin disease that can occur with recurrent heat exposure. Zarah *et al*[9] in the US in 2020 published a case report of a 34 year old female who was reported with an history of repeated heat exposure who was later clinically diagnosed with erythema ab igne. It presented as hyper-pigmented, erythematous, non-blanching reticular rash on her right forearm and lower quadrant of her abdomen. The skin disease has propensity of transforming into cutaneous malignancy.[9] The food vendors are also exposed to intense heat from sunlight which contain ultraviolet radiation that may also predispose to skin cancer.[10]

Mobile food vendors are probably never certified healthy by any healthcare personnel. They may never have been screened for tuberculosis and hepatitis B, and if infected may pass on these infections easily to the customers. These food vendors also do not wear face masks, thus easily spreading food borne diseases[11-13]. Alfred and colleagues in South East Nigeria found a high incidence (13.8%) of pulmonary tuberculosis among food vendors.[11] In a related study in Benue State, out of 250 non-vaccinated food vendors sampled, 27 (10.8%) had hepatitis B infection.[12] A study carried out in Abeokuta, Nigeria revealed that 97% of food vendors were infected with one or more faeco-orally transmissible parasites. [13]

Food vendors have also been noted to wheel their mobile cooking contraption into patrol stations to sell food to their customers. This is

a high risk hazardous action that may trigger off a fire explosion in the advent of patrol leakages, with resultant high morbidity and mortality.

Conclusion

Mobile wheel-barrow live cooking eatery poses grave health dangers to the mobile vendor, the customers and passers-by. The health impacts range from inhalational injury to the respiratory tract with resultant breathing difficulty, respiratory failure and death in serious cases; faecoral transmissible infections and risk fire explosion in petrol stations.

Recommendation

There should be public enlightenment campaign on the potential grave hazards mobile wheel barrow live cooking eateries pose to the health of food vendors and citizens. This can be done via social/electronic media or places such as churches, mosques and markets. Posters and bill boards could also be put in strategic public places to create awareness on this issue.

Food should be prepared in a place set aside exclusively for that purpose, while the place of preparation should be kept clean at all times and should be far from possible sources of contamination. Government should put in measures to discourage this practice by providing designated and affordable shops for selling cooked food.

Also food vendors must be screened for Tuberculosis, hepatitis B and other faeco-orally transmissible diseases by health care personnel before being certified to handle food.

Law enforcement agencies should also be empowered to arrest or prosecute individual engaged in such unwholesome practice.

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