



## RAISING FOOD SAFETY TO STREET FOOD VENDORS IN URBAN AREA

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In Malaysia, urbanization increases urban population through rural-urban migration and has caused urban food concerns due to the increasing demand for food as well as changes in the eating behavior of the urban population (Ali & Abdullah., 2012; Habib et al., 2011). Malaysians enjoy eating out more due to time constraints and an abundance of restaurants and fast-food chains (Vijayakumar & Amalina., 2018 and Sidik & Rampal., 2009). Besides, with the increasing number of working mothers, urbanization, and the increases in household income, eating out is the primary choice for most people as they spend more time at work and less time preparing food at home (Ceyhun Sezgin & Sanlier, 2016).

Street food trends on 'world food' stems from the recent popularity of cooking shows, travel and food shows and social media influences. A hawker or street vendor can be described as a trader selling any merchandise, water, food, or items of everyday use to a community using a temporary stall, structure or a cart, in a street, lane, sidewalk, footpath, public park or any other public places (Panwar & Garg, 2015). The existence of hawking activities in Malaysia can be traced as far back as the days before independence. During that time, street vendors could be seen only in primary locations such as town centres. This can be seen through the creation of small businesses selling local food and drinks such as "cendol", shaved ice, banana fritters, fish crackers and many more on the streets and along the sidewalk. According to Kuala Lumpur City Hall (DBKL), hawkers include sellers at morning markets, stalls, markets, and kiosks (Mui, Badruzaman & Ahmad, 2003). A street mobile hawker means a vehicle, whether self-propelled or services that are offered or exposed for sale in a public area but does not include any vehicle that is used for the purpose of

transporting and delivering good, pursuant to a prior order placed for delivery of the good. Nowadays, street food has become more accepted where consumers get to taste street food from around the world such as those that are promoted at Thai food festivals, food tourism fairs and cultural events.

Hence, the urban lifestyle has created a significant food consumption trend where the consumer prefers eating out, street food or ready-to-eat foods which are often cheaper, fast and easily accessible (Ismail et al., 2016). Generally, street food vendors are mobile vendors with limited access to clean water supply for cooking and washing, thereby leading to poor hygienic practices. Poor hygienic practices can cause transmission of pathogens from the hands of food handlers, resulting in contamination of food and can contribute to vast foodborne outbreaks (Khampa et al., 2017). Water and foodborne disease can lead to a permanent health problem, disability, and death if they are not treated immediately (Ismail et al., 2016). The dominant contaminant bacteria that are commonly found are *Enterobacteriaceae* followed by *Staphylococcus spp.* and *Bacillus cereus*. *Pseudomonas aeruginosa* detected under the fingernails of food handlers could also be the consequence of touching tainted uncooked food like meat, chicken, fish, and fruits and vegetables that have not been washed (Kharel, Palni & Tamang, 2016).

Street food vending should be taken as a serious health matter, looking at its potential to pose a direct and indirect risk to the population. Our role is to ensure that the best practices of food safety and hygiene are implemented and related environmental health aspects are well taken care of. Social protection is never a losing investment because it is the responsibility of all to ensure

urbanites can consume safe and clean food. In order to achieve the status of a sustainable and developed nation by 2030, Malaysians should attain a better health status and wellbeing, to be more productive individuals who are less prone to disease, and thus are able to earn more and improve their livelihoods.

### **HIGHLIGHTED ISSUES FROM MUHF 2019**

The discussion aims to enhance the standard of food safety, focusing on street food vendors in Malaysia in order to protect the public from food and waterborne diseases. The rising trend of street foods in Malaysia has become a challenge, especially with illegal street food vendors as they are always mobile and have minimal access to clean water supply. Moreover, the food supply trend has shifted to online selling where the vendors prepare foods at their homes before sending them to customers through delivery services. Online orders and the delivery mechanism of the food have disconnected consumers with the food makers. Consequently, the Ministry of Health has difficulties in monitoring and conducting regular inspections at home kitchens, in addition to the other challenges in foodborne disease investigations.

Main public concerns in food safety are in regard to the knowledge, attitude and practice (KAP) among food handlers that influence food safety and hygiene throughout the chain of storage, processing, production, preparation and retailing (Ismail et al., 2016). Street vendors usually leave solid waste like a bag of garbage at the junction of the street for collection by the local authorities. Worse still, some of them even bury or burn their garbage near their stall due to the ignorance of the law and lack of awareness of the environmental impact of such actions (Cabaltica et al., 2016). In addition, poor mentality and the money-oriented mindset of most of the street food vendors in Malaysia restrict them from seeking advice or consultation with a competent person or the authority. Vending stalls were left dirty during operational hours, even though the units themselves were designed properly. Foodstuffs are left uncovered and vulnerable to contamination by dust and insects. Ice meant for use in drinks is stored together with ice used to cool drinks and other food. Tableware are sometimes in poor condition and are regularly subjected to washing in buckets situated on the floor. Their storage is also improper. Seasonings are kept in unsuitable containers and spoons, and those that meet the specifications (made from food grade materials and proper sizes) are inadequately shielded from contaminants. Trash containers are left uncovered or are not fitted with foot pedals to lift the lids for hygienic operation. Cooks work without wearing aprons or covering their head. Lastly, some vendors have not undergone proper hygiene and food handling training so

they can prepare food that are fit for consumption (Reboucas et al., 2017).

The link between local authorities and the street food vendors can be further improved. In Malaysia, local authorities enforced the Food Establishment By-Laws, Food Handlers By-Laws and Hawkers By-Laws. Businesses permits and licenses are issued by the local authorities while the food premise inspection is done by both agencies, Ministry of Health Malaysia and the local authorities. According to Alimi (2016), the by-laws that spell out provisions to ensure only clean and safe food are sold on the streets are weakly enforced in most of the developing countries due to the lack of staffing to enforce such rules and regulations. Movements of the street food vendors to different locations every day limit the Malaysian Food Act 1983, Food Hygiene Regulations 2009 and the by-laws in addressing food safety issues. It has been identified that the movement of the street food vendors, is affected by time and weather which determine their profit. As mobile vendors are moving from one place to another, foodborne investigation work will be complicated due to the poor traceability of the vendors' route.

Currently, food sampling activities are being carried out by Ministry of Health Malaysia, but the number of food sample taken from the street food vendors did not represent the variety of food being sold in the market. The surveillance method being practiced is more to targeted analysis, which focuses on specific parameters and for a known marker that is characteristic of a particular grade of product. Thus, there was an imbalance ratio between the number of foods sampled and the total population of street food vendors. Besides that, government to government coordination of food safety has not been sufficiently monitored and is not well characterized. Food ingredients and additives imported from neighbouring countries also contribute to risk factors such as the exceeding concentration of additives and contaminants in food products and in meals (Dawson et al, 1996).

From the discussion, few strategies were recommended to address and raise the food safety standards with regards to the urban street food vendors. Knowing that street food sectors can aid the economic growth and tourism industry in our country, there is a sense of urgency to uplift the overall quality of the street food. Smart partnerships between the federal government, local authorities and related stakeholders can lead to the cooperation and collaboration among public and private interests. The Malaysian Association of Environmental Health (MAEH) can play a role as a consultant for the street food vendor, to advise them on the food safety and hygiene standard. The food handlers need to be facilitated with ample training on personal hygiene, clean and safe food handling and environmental cleanliness. For

example, a remedial action has the primary requirement of a three step washing procedure (washing with soapy water, rinsing, and repeat rinsing) using three different sinks which are positioned no less than 60 cm from the ground. Hawkers with soups, curries, and mixed dishes on their menu are faced with the significant obligation of keeping the food heated and under cover to ward off the growth of bacteria and reducing cross contamination. Then, storage of raw and semi cook ingredients must be improved to keep insects out.

On the other hand, there is a need to identify a body or organization that can provide technical support in food surveillance system, including instrumentation aspects. Having an in-situ field sampling using reliable, rapid test kits can provide an on-site result. This will balance the number of food sampled based on the number of street food operator and take control over foods that are being sold. Food samples which show the presence of microbes using the rapid test kit will be further analyzed in accredited laboratories of the Ministry of Health. Moreover, in-situ tests can save more time and costs in order to ensure the samples analyzed meeting the criteria for risky foods. A study conducted in Putrajaya found that 55 percent of the ready-to-eat food samples are unsuitable for consumption after being tested positive with coliform bacteria and *Staphylococcus aureus* (Shafizi et al, 2016). The probability of contamination to happen when food handlers did not wash their hands properly while maintaining contact with other surfaces are ranged from 60 to 80 percent (Lubran et al., 2010). The adulteration of tableware was considerably reduced where there is a piped water supply. Food surveillance is essential in identifying emerging issues and new trends, and in assessing the risks from farm to table. These are important to gain, raise and maintain the consumer confidence and will eventually bring in food acceptability. Approximately 3/4 of the hawkers used water carried from their own residence or from the neighbouring areas in water containers to use at their stalls. A number of vendors allocated less than one litre of water for each customer in terms of washing and preparing food, clearly showing that they did not clean their food and utensils sufficiently (Duangmal et al, 2015).

Systematic application and fair licensing on business registration, as required by the Food Safety Information System of Malaysia (Domestic FoSIM), should be made available for street food vendors to register their business. The mechanism is widely known and is easy to use. This system will allow the authority to keep track of their businesses. In order to tackle the seasonal food festivals, there should be a proper mechanism such as a short briefing on licensing requirement, food safety by-laws and training on food handling in advance. Thus, strengthening the guidelines and regulations and strictly enforcing it would ascertain that the dangers of eating street food are reduced

significantly (Jores et al., 2018). With a comprehensive food law in place, partnerships between the federal government and the local authorities can establish a framework to provide sufficient information in order to maintain and improve effectiveness, respond to the queries and problems of all street sellers, such as to improve food preparation and storage, provide sufficient hygiene and sanitation, and to enhance waste removal facilities.

Although the authorities is the main catalyst in ensuring the food safety in our country, consumers also play an important role in choosing a healthy street food. Implementing a new strategy, such as appointing public figures to promote food safety and hygiene among street food vendors on social media, will bring a big impact on equipping street food customers with the knowledge necessary for making healthy food choices and increase their awareness on food safety aspects rather than the popularity of the food itself. This information and promotion be easily accessible on the Ministry of Health and MAEH pages. Moreover, adopting strategies from developed countries such as the one by 'Just Eat UK', a portal for food takeaways and deliveries which allow consumers to rate the food hygiene of the food they receive, and whether they experience food related illness after the consumption. This strategy empowers the public to indirectly help authorities to take quick remedial action and preventive measures.

At the end of the session, it can be concluded that street food sectors should be officially recognized as they represent an important role in urban food consumption for millions of low and middle-income, while keeping significant culture, in particular belonging and identity. However, an effective monitoring mechanism of the street food vendors should be well established since it may pose serious health risks to the public and also jeopardize the credibility of environmental health practitioners. Hence, proper trade management by all stakeholders such as food vendors, consumers, governments, food and health professionals amongst academicians and the local authority will help to ensure that street food is safe for consumption for the urban dwellers.

## CONTRIBUTION STATEMENT

The MAEH Urban Health Forum was held at Langkasuka Hotel, Langkawi from 17-18 June 2019. FAS, MSS, NMHNAH, IZK, PP, NAW and SAAR conceived the forum, applied for and obtained the funding from the Malaysian Association of Environmental Health, Majlis Perbandaran Langkawi Bandar Pelancongan, Langkawi Development Authority (LADA) and Universiti Teknologi MARA and also drafted the first version of the charter. TEO, MAMM, MRB, MPM, RAB, NN, MFRY and AS analysed the issues. All participants contributed to

the focus group discussion that produced the charter and approved the final version.

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