

Status and Implementation of National Food Safety Guidelines in Pakistan

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IDENTIFYING THE PROBLEM

The enormous health challenges facing the country at present, indicated by the staggering high rates of child and maternal mortality, a dilapidated health coverage, widespread prevalence of communicable and non-communicable diseases, and scarce resources have meant that several significant health issues have been divested of limelight. Among them is the issue of food safety. Gastroenteritis outbreaks and food poisoning episodes have now become a common feature of news stories in the country, not to mention the hundreds of patients who visit government and private hospitals every month, and those unreported cases, that do not have access to healthcare facilities, and are therefore left to suffer in silence. According to the Pakistan Demographic and Health Survey 2006-07, almost a quarter of all children under 5 years had a diarrheal episode in the 2 weeks preceding the survey. Further, in 2006,¹ diarrhea claimed around 40,000 lives of children under 5 years² (refer to footnote for calculation), making it the fourth highest cause of child mortality in the country, after birth asphyxia, sepsis and pneumonia.¹ Worldwide, food and water borne diarrheal diseases have been estimated to claim a confounding 2.2 million lives annually.³ Besides diarrhea, the most common symptom, food borne diseases can lead to liver and kidney failure, neurological disorders, cancer, reactive arthritis, paralysis and death. It has been estimated that around 2-3% of all food borne diseases eventually lead to long-term consequences.

Besides being detrimental to the health of individuals, and hence burdening the already dilapidated national health facilities, food borne illnesses also have a tremendous impact on individual productivity, adversely affecting economic development.⁴ Furthermore, because

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the poor are more prone to be inflicted with such illnesses due to a lack of awareness concerning hygiene, poor sanitation facilities, unhygienic handling of food, purchase of low cost substandard food products, and consumption of stale food, food borne diseases serve to perpetuate a vicious spiral of decreased productivity and poverty.³ In developing countries like Pakistan, where around 38% of all children under 5 years are moderately to severely underweight, and 42% stunted,² food borne diarrheal diseases exacerbate malnutrition, leaving children with a enfeebled immune system⁵ and hence susceptible to a myriad of illnesses such as acute respiratory infection, pneumonia, and measles.

Recently, news reports of the adulteration of packaged milk in the country with melamine, a substance used to manufacture plastics, and its contamination with urea, detergents and other products, surfaced in the media.⁶ Furthermore, a few months ago, the Pakistan Council of Research in Water Resources, reported that as many as 33 brands of bottled water being marketed publicly in the country were unsafe for consumption, 22 possessing bacteriological contamination, and 14 chemically contaminated with arsenic, potassium, fluoride and sodium.⁷ Such and other similar incidents of food poisoning and gastroenteritis outbreaks in the country have succeeded in raising some concern from consumers and other stakeholders on the implementation and status of consumer food safety laws in the country. A striking case of food poisoning occurred in 2007 at a luncheon at a military training centre, following which 57 of the 110 personnel who attended the feast reported sick at a military hospital. The cause was later traced to yoghurt served at the feast.⁸

NATIONAL FOOD SAFETY LEGISLATIONS

Legislation governing food safety has been enacted in Pakistan, the principal Acts being the 'West Pakistan Pure Food Ordinance 1960', and 'Cantonments Pure Food Act, 1966'. The two ordinances present a rudimentary framework for ensuring food safety at all levels of the food chain, that is, from its production, transport and storage to its eventual sale to customers,

as well as penalties for individuals or organizations that violate their provisions. Enforcement of the ordinances has been deemed the responsibility of local authorities. The two legislations have been a subject of criticism by lawyers on various grounds, including the fact that they do not provide for consumer compensation in case harm is inflicted on them by the consumption of substandard food products. Consumer compensation has also been sidelined in the section of the Pakistan Penal Code dealing with the adulteration of food and drink. The Indian Food Safety and Standards Act, 2006, on the contrary, has an independent section addressing the issue of compensation (Article 65).⁹

Moreover, the legislations do not specifically address food safety of street vended products. Street vending is a booming culture in Pakistan because it caters to the low- and middle-income class through source of diverse and inexpensive food, besides providing an opportunity for self-employment with minimum capital costs. However, with the scrumptious and economical food that it offers, street vending comes with a major public health risk to the general population. Numerous studies in developing countries worldwide have reported poor food hygiene of street vended products. This is due to microbiological contamination of raw food, with contaminated water, by infected handlers, and due to inadequate cleaning of utensils, besides inadequate cooking and/or reheating, and vending of stale food. A similar study on the microbial assessment of street vended juice in Pakistan found contamination with yeast and moulds in all the samples analyzed, and with E.coli in nearly half.¹⁰ In order to combat the health risks of street vended foods, the World Health Organization requires countries to adopt a multifaceted approach, by formulating and implementing laws governing street vended food on one hand, and registering street vendors, and medically examining them for infectious diseases, on the other. Furthermore, inspection at regular intervals is advocated to ensure compliance. Not surprisingly, Pakistan has not passably addressed any of these strategies for street vended food safety.

The Pakistan Hotels and Restaurants Act¹¹ requires that all hotels and restaurants be officially registered, failure to which will entitle the owner to pay a monetary penalty. The registration of a restaurant under the Act is an acknowledgement that the retailer has, besides other provisions, conformed to certain minimum health and hygienic standards, and that all of its staff have acquired medical fitness certificates of being free of any communicable disease. Retail of substandard food

and beverages is a crime under the law, liable to a fine. The extent to which this legislation is being implemented has not been formally documented, but the deplorable state of hygiene at the vast majority of hotels and restaurants all over the country has cast a shadow on its execution. Whether such hotels and restaurants are not registered at all, or they have been granted licenses without reasonable inspection remains to be determined.

The Pakistan Standards and Quality Control Authority, established under the PSQCA Act 1996, is the premier national organization responsible for setting national standardization guidelines, and for testing products for quality.¹² Since the body commenced functioning in 2000, it has adopted standard specifications for a comprehensive list of over 26,000 commercially available commodities, including food products.¹³ The organization tests products for their quality based on the standard specifications, and issues licenses to manufacturers whose products conform to the quality specifications.

In contrast to the fragmented legislation addressing food safety in Pakistan, the Indian Parliament passed a comprehensive and consolidated Act to contend with the issue.⁹ Under the Act, a body similar to the PSQCA, Food Safety and Standards Authority of India, was established with similar responsibilities but catering specifically to food products, instead of a wide array of commercially available items, as does the PSQCA. The Authority maintains an updated and detailed online directory of the name, contact information and other details of its personnel, from the chairperson to the food commissioners of individual states, principal secretaries, and laboratory officers. This is in stark contrast to the situation in Pakistan, where the very 'local authority' that is responsible for implementing the food laws remains under a shadow of ambiguity, let alone the names and contact information of 'food inspectors' that are required to be appointed under the law. The Indian Food Safety and Standards Authority also maintains 'fact sheets' for several individual states, presenting besides other information, the status of the implementation of Food Safety and Standards Act, and the challenges that need to be addressed. Such documents, if they exist, have unfortunately not been made public in Pakistan, casting a shadow on the implementation of the legislations.

THE WAY FORWARD

Addressing food safety at national and provincial levels is imperative to safeguarding public health and averting

the direct and indirect adverse consequences of food borne illnesses. What is required foremost is a commitment by the national and provincial health ministries to address the issue, following which an effective strategy needs to be chalked out in light of the WHO guidelines for strengthening national food control systems to revise existing food laws, ensure stringent enforcement, and develop inspection and laboratory testing facilities.

Independent studies evaluating the strategies, policies and standard specifications adopted by the PSQCA in relation to food items, as well as the extent to which the body has succeeded in attaining its objectives, are non-existent. Given the prevalence of food borne diseases in the country, it is highly likely that the National Food Safety Legislations are not being enforced properly, and the PSQCA has shortcomings in its functions. Poor enforcement of these legislations has been indicated in numerous studies reporting the contamination of commercially available food and water, and use of non permitted food colours.¹⁴⁻¹⁶ Furthermore, in the recent issues of the adulteration of packaged milk, and contamination of bottled water, apparently no penalty was awarded to the companies engaged in the offence, or at are least made public.

Research pertaining to the implementation of food laws and the functioning of PSQCA, as well as baseline surveys on the prevalence and burden of food borne diseases on the country's health resources are crucial for addressing the food safety concerns of our people. The media, NGOs and professional medical societies should play a role in promoting safe practices related to food handling, transport, and storage, and in exerting public pressure on the government to enforce food safety legislations. Ordinary citizens can engage in a constructive role by filing complaints under the two Pure Food Laws, if they suspect a product or organization is violating their provisions. Readers can learn more about the scope of public intervention in the following article: Food Safety Legislation in Pakistan: Identifying Entry Points for Public Intervention.¹⁷

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REFERENCES

1. Pakistan Demographic and Health Survey 2006-07. [National Institute of Population Studies (NIPS) and Macro International Inc.] 2008.
2. Pakistan Demographic Survey – 2007 [Internet]. Islamabad: Federal Bureau of Statistics-Government of Pakistan; 2009 Dec [cited 2010 Jul]. 36 p. Available at: <http://www.statpak.gov.pk/depts/fbs/statistics/pds2007/pds2007.html>.
3. World Health Organization. WHO global strategy for food safety: safer food for better health. Geneva, Switzerland. WHO; 2002. 27p.
4. World Health Organization. Food safety- an essential public health issue for the new millennium. Geneva, Switzerland. WHO; 1999. 16p.
5. Unite for children [Internet]. UNICEF. Pakistan, Statistics; [updated 2010 Mar 2; cited 2010 Sep 15]. Available at: http://www.unicef.org/infobycountry/pakistan_pakistan_statistics.html.
6. Melamine, detergents in packaged milk, court told. Dawn [Internet]. 2009 Dec 10 [cited 2010 Aug 6]. Available at: <http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/news/pakistan/16melamine+detergents+in+packed+milk+court+told-hs-07>.
7. Kiani K. More than half of bottled water brands in Pakistan are unsafe. Dawn [Internet]. 2010 May 8[cited 2010 Aug 4]. Available at: <http://www.dawn.com/wps/wcm/connect/dawn-content-library/dawn/the-newspaper/front-page/more-than-half-of-bottled-water-brands-unsafe-850>.
8. Siddiqui MS, Nadeem SF. Epidemiological investigation of an outbreak of food poisoning traced to yogurt among personnel of a Military training center. Pak Armed Forces Med J 2007; 57:194-200.
9. Food Safety and Standards Act, 2006, No. 34 OF 2006.
10. Abid H, Ali J, Hussain A. Microbial assessment of un-bottled synthetic juices sold in Peshawar. Pak J Med Res 2010; 49:5-9.
11. The Pakistan Hotels and Restaurants Act, 1976, Act No. LXXXI of 1976.

12. Pakistan standards and quality control authority [Internet]. PSQCA; [cited 2010 Aug 6]. Available at: <http://www.psqca.com.pk/about/index.htm>.
13. Pakistan standards and quality control authority [Internet]. PSQCA; [cited 2010 Aug 6]. Available at: <http://www.psqca.com.pk/sdc/adoption%20of%20standards.htm>.
14. Anwar MS, Chaudhry NA, Tayyib M. Qualitative assessment of bacteriological quality and chlorination status of drinking water in Lahore. *J Coll Physicians Surg Pak*. 2004;14:157-60.
15. Anwar M, Chaudhry N, Tayyab M. Bacteriological quality of drinking water in Punjab: evaluation of H2S strip test. *J Pak Med Assoc* 1999; 49:237-41.
16. Hassan SS, Bashir S, Khokhar I, Tehseen M. Quality assessment of synthetic food dyes in candies and chewing gums. *Pak J Med Res* 2006; 45:96-100.
17. Siraj M. Food safety legislation in Pakistan: identifying entry points for public intervention. Islamabad, Pakistan: Consumer Rights Commission of Pakistan. 5 p.

