

Articles

Food service as public health space: health risks and challenges brought by the Covid-19 pandemic

A alimentação coletiva como espaço de saúde pública: os riscos sanitários e os desafios trazidos pela pandemia de Covid-19 (resumo: p. 11)

La alimentación colectiva como espacio de salud pública: los riesgos sanitarios y los desafíos presentados por la pandemia de Covid-19 (resumen: p. 11)

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The article discusses the hygienic quality of food commercialization, handling and consumption in light of necessary precautions to prevent contamination by SARS-CoV-2. The text draws attention to the health dimension of food security, which is little discussed in the public health field, despite being addressed in the National Food and Nutrition Policy. The relevance of the current research is substantiated by the association between hygienic-sanitary conditions in free fairs, supermarkets and restaurants by understanding them as risk areas for the spreading of the new virus, as well as guidelines published to help mitigating Covid-19 and the role played by Health Surveillance. Finally, it highlights the need of issuing regulations that take into consideration the sociocultural framework of agents inserted in the process and emphasizes the need of setting dialogue spaces to contribute to decode the concept of hygiene.

Keywords: Collective feeding. Pandemics. Coronavirus infections. Food hygiene. Health surveillance.



Introduction

The global crisis caused by the new coronavirus (SRAS-CoV-2) highlighted the food security importance, mainly when it comes to ensuring populations' permanent production and access to food, as well as its monitoring. However, there is a hidden issue often forgotten, namely: quality of what is eaten; besides nutritious, food must be safe, and these are inseparable aspects¹. Nevertheless, sanitary aspects in countries like Brazil, where food scarcity is a significant reflex of social inequality, are oftentimes not taken into account. Although this public health issue was significantly worsened by the pandemic.

The World Health Organization (WHO)² points out that Corona Virus Disease 2019 (COVID-19) is a respiratory illness whose contamination form occurs through person-to-person contact and through tiny drops generated by cough or sneeze by an infected individual. Although there are no evidences that contamination can happen through food intake and contact with food pacakges², food handing, selling and consumption environments are spaces for potential virus outspread. It is so, because they use to be indoor places where air circulation flow makes it easier for contaminated micro-particles to be carried^{3,4}.

Knowledge about the environmental and infectious⁵ dynamics of the new virus remains under study; however, controlled laboratory studies have already evidenced its survival on inanimate surfaces, such as those composing kitchen structures and food packages, for days^{6,7}. Still, the hypothesis of oral-fecal contagion was raised⁵. In case potential environmental contamination routes such as air, surfaces, sewage and greywater⁸ are confirmed, this finding will be a factor of deep concern, since basic sanitation in Brazil is far from fulfilling the real demand of the population. Results recorded in 2018 have shown that water supply reached 83.6% of the population, whereas sewage networks only reached 53.2% of it⁹.

Food production chain crosses geographic boundaries and settles in several environments so food can be taken to the tables¹. From the public health perspective, acknowledging such a trajectory is the way to highlight its different spaces and opens room to associated sanitation risks. Approaching the dimension connecting the scenario observed before the crisis to the urgency in providing care associated with preventing contamination by SARS-CoV-2 is essential to understand the context faced by involved agents, and to ensure their safety, as well as the safety of millions of people that have to eat out on a daily basis.

At the very beginning of the pandemic, measures were taken to avoid disease outspreading by avoiding situations likely contributing to people agglomeration. These measures made food supply centers, supermarkets, restaurants and similar businesses impose limited access to their facilities, since these spaces often welcome a large number of people. Their service capacity was reduced or even stopped; they had to somehow adapt to the new reality 10-12. Food trading in open environments, such as free fairs, presented different outcomes, namely: they were not addressed in some decrees, so they were cancelled, or not, depending on the local bureau in charge of issuing guidelines about their functioning 13,14. On the other hand, indoor spaces, like supermarkets, faced high demand from customers; restaurants launched alternative service modalities, such as delivery and take out.



Free fairs can be seen as health promoters given their broad offer of food *in natura*¹⁵. They encourage social relationships, since they transcend the market perspective through dialogue and the recognition of the very origin of what is eaten ¹⁶. Supermarkets, in their turn, are nowadays seen as important places for food purchasing, given their flexible work shifts and diversified offer of products; moreover, it does not demand the mediation of sellers. From the sanitation viewpoint, both scenarios must fulfil the standards in place to ensure security and the quality of products they make available for consumption ^{17,18}.

Overall, free fairs and guidelines about their hygienic and sanitary aspects concern the local government. Because they take place in public places, their structure challenges microbiological security, since there is no access to drinking water in these places, a fact that makes hand washing harder, as well as the washing of surfaces by marketers who try to reduce visible dirt on counters and utensils – they often use water of unknown origin to do so. Precarious work conditions are clear when one observes the lack of public restrooms in free fairs, as well as of waste collection spots. These matters are associated with lack of concern with cleaning the area by both marketers and buyers, with simultaneous food and money handling, as well as with compromised personal hygiene¹⁹⁻²¹. Food storage at inappropriate temperature is also a conjuncture reflex.

Although their items are more organized and better displayed, supermarkets' fulfilment of the legislation in force overall ranges from regular to dissatisfactory^{18,22}. Based on the literature, these spaces present deficiencies linked to their buildings^{18,23}, lack of integrated pest control and lack of documentations required to house commercial establishments^{19,20,23}. Furthermore, there are flaws associated with people management, such as lack of labor health certificates and precarious personal hygiene; as well as with good food production practices, such as lack of temperature control in the embedded food chain and inappropriate storage conditions for food types that present crossed contamination risk²⁴.

The discussion gets wider and gains new complexity layers when we take into account places used to produce meals; not just their infrastructure, whose layout is sometimes not planned and favors contact between employees, but as a place where "[...] agents, inputs and objective and mental structures interact to produce the meal possible"25 (p. 112). Temperature inadequacies throughout the production chain and care related to food handing are pointed out as the main factors associated with food outbreaks²⁶⁻²⁸. Such a scenario is worsened by the bad conservation and hygiene condition of equipment and utensils, by the use of sanitizing elements that are not registered in the Ministry of Health and by lack of drinking water control. Handlers' behaviors and attitudes repeated themselves in the assessed locations: speaking and eating during food handling; resistance/lack of attention to the hand washing protocol, precarious personal presentation, among others²⁶. Food service users also help contamination, since, most of the time, they do not sanitize their hands before getting close to the distribution counter, they talk while they serve their plate and use utensils available for food preparation to organize food on their plates²⁹. By taking into consideration the comparison proportions, similar conditions regarding - either production facilities and flow of employees and customers - were observed in free fairs, supermarkets and restaurants²⁶.



The legislation standardizes, guides and addresses the need of qualification on hygienic and sanitary issues, but it does not ensure that the process will be respected and followed. If, on the one hand, employees must be guided about the good practices and have access to the necessary instruments to exercise their activity, on the other hand, companies in the food sector must account for legal adjustments; they must provide medical examinations, equipment for individual protection, uniforms, training and manage all involved processes. However, these dimensions are not always addressed in evaluation instruments³⁰. Yet, Health Surveillance (VISA) is in charge of systematically acting to ensure that standards are followed.

The carried out diagnostics shows a critical sanitary situation in spaces handling and selling food. However, results do not mobilize changes in individuals composing this sector, or in the observed phenomena; although complex, they are reduced to blaming handlers. So, what, in fact, is the problem?

Based on the assessment of the food selling establishments, the collection tool, similarly to a picture, emphasizes only one dimension of the scene – infrastructure and handlers' actions -, in other words, only the surface of the problem is observed, but it does not measure the life conditions and background of the ones who actually make the production process happen. It does not take into consideration the social and labor inequalities faced by these people. Their low schooling puts them in position of exhausting work shifts in unsafe environments at intense pace and neglected ergonomic recommendations. The little valorization of their work and the reduced perspective of career progression reflect on high turnover and absence²⁵. Yet, many of these workers live in human agglomerates with precarious basic sanitation service, a fact that increases their vulnerability to COVID-19. How is it possible not to interconnect such aspects to the sanitary reality in the food service sector in Brazil?

Minnaert and Freitas³¹ go farther in this debate by exposing the disregarded face of scholars and policy-makers in charge of developing good food handling practices: hygiene concepts can differ between agents who share the same space. According to the aforementioned authors, coercion, punishment and control standards in free fair environments do not take into account the network of meanings set by the involved social groups. This is the case of marketers, whose care towards food lies on knowledge inherited for generations; according to them the real threat lies on their daily routines and disease transmission through food is linked to the flu. On the other hand, inspectors and cleaning agents understand environment organization as hygiene³¹. Neglecting that the symbolic universe substantiates the understanding about such practices means keeping the vicious cycle running, and it does not lead to social changes, but to stigma and blaming.

The pandemic worsened the chronic problem associated with the security of food under VISA's control. Despite its broad scope, which includes "a whole set of actions capable of ruling out, decreasing or preventing risks, and of intervening in sanitary issues (...)"³², its delay in responding to COVID-19 has evidenced the asymmetry in its actions in comparison to those taken by the Brazilian National Health System (SUS). Although public health emergency was declared in February 3rd, 2020³³, two technical



opinions³⁴ regarding the food sector were only issued on April 6th, 2020. It made states and municipalities anticipate recommendations based on general rules to face the virus, including care at meal production chain, with emphasis on São Paulo¹¹⁻¹³.

Experiences lived abroad³⁵ were not used to prepare the country as a collective group. The current neoliberal context and the strong economic pressure had impact on decision-making, which made states and municipalities face public hazardous situations - rules set, in March 2020, to stop the disease from spreading were flexibilized^{11,36} and policy-makers resisted to impose more rigorous rules. After six months of pandemic, on September 9th, 2020 Brazil recorded 128,653 deaths due to COVID-19; 1,136 deaths within 24 hours³⁷.

Despite such a sad reality, the trend to reopen the sales and services sector has been consolidated. Most people in the bars and pubs sector have returned to their activities in comparison to conviviality spaces such as restaurants and dinners. Despite the still large number of contamination cases and death, low perception about the risk posed to the population is outstanding; it points out that the outspread of scientific guidelines on SARS-CoV-2 impact on health are not enough to sensitize people. Interpretations about the received information – influenced by sociocultural experiences – change the risk perception of individuals and/or collectivities, as well as justify the actions taken, themselves³⁸⁻⁴⁰.

Accordingly, when it comes to COVID-19, actions limited to the publication of decrees and technical standards may not be enough to boost behavioral changes in businessmen, in their employees and in the community. Governments, the industry, producers, sellers and consumers must share accountability⁴¹ to ensure that decision-making will be properly implemented.

Strategies set to face the pandemic mainly covered the damage-mitigation field, based on the availability of hospital beds and the acquisition of hospital equipment and medication, including the ones without proven efficacy^{42,43}. Such a strategy has been demobilized by parallel forces that are putting themselves in the position of taking back the economic activity. Problem transposition is complex and needs several action fronts. Paying attention to the consequences without reasoning about the causes means only taking care of palliative measures. Outcomes from this way of acting lead to increased number of contamination cases and death⁴⁴; there is no perspective about having the problem solved in the short-term, mainly when it comes to the immunological protection of the population^{45,46} and to the possibility of ruling out risks in locations that can face agglomerations (schools, universities, church, night clubs, gyms, restaurants, among others).

The food sector is walking at the margin of the health crisis and suffers with lack of organization at managerial sphere. The new situation demands the effective implementation and maintenance of already regulated good hygiene practices. New demands³⁶ such as the availability of 70% alcohol and places to hand washing; guarantee of distancing between people; sanitation of contact points such as electronic devices' bottoms, handrails, carts and baskets; air conditioning and utensil cleaning; food security; employees' health and food delivery conditions were added to these new conducts. It is also necessary sanitizing environments outside the commercial establishments.



Although WHO⁴¹ acknowledges sanitary risk as a component of food security, what one sees in the Brazilian reality is the inefficiency of actions taken to control such a risk, although the "Promotion of Adequate and Healthy Food" is addressed in the National Food and Nutrition Policy (PNAN)⁴⁷. As public policy, PNAN also addresses the reinforcement of management mechanisms, as well as professional qualification based on the following guidelines: 1) Food Control and Regulation; and 2) Labor Force Qualification. Although standards, such as RDC n. 275/2002, were elaborated based on PNAN⁴⁸ and took into account the enhancement of the food sanitary surveillance and control system, interlocution between this policy and sanitation legislation guiding VISA's actions are not taken into account. It is important highlighting that such regulations were not updated and the small number of states and municipalities that have complementary standards for the federal legislation⁴⁹.

Pandemic outcomes shone light on the fragility of VISA's management, which, although decentralized, was not capable of aligning science and social communication to other spheres in the government. It must assume its role in the daily experienced difficulties and in organizing actions to prevent diseases and to promote health. It must take actions to coordinate cooperation actions between states and counties in order to engage them in the construction of a sanitary framework, since it may be the answer to demands that go beyond food service, given the different Brazilian realities. Lack of articulation between VISA and local realities makes it harder to consolidate the National Sanitary Surveillance System as instrument to support SUS^{49,50}.

Among challenges faced by this public organ, one finds the qualification of its own professionals; the use of new technologies, economic investment and its efficient application; process evaluation, as well as improvement of its communication capacity, since it is a space for knowledge exchange aimed at forming sanitary awareness and the equitable regulation of sectors comprising the food production chain. The National Sanitary Surveillance Agency must reassess its nature and solve structural issues. The use of financial resources by base organs composing the hierarchy of the system and the acknowledgement of human resources' competences in sub-units of the federation can favor the capillarity of actions^{1,50}. It is necessary moving forwards in the elaboration of an articulated agenda about projects and programs to reinforce good practices throughout the food production chain.

Although inserted in a national policy, the discussion about the sanitary aspect of food and nutritional security remains poor. One can observe the need of making more coherent propositions feasible, as well as propositions in compliance with food harmlessness. The issue goes beyond issuing more directive legislation; responses must allow making diagnoses closer to reality and take into consideration the symbolic and cultural entanglement of actors in this process. Yet, structured and cooperation actions must be taken at different work spaces in order to enable diagnoses and professional qualifications, and, consequently, to contribute to decode the concept of hygiene in the *modus operandi* of the involved parts.



Authors' contributions

All authors actively participated in all stages of preparing the manuscript.

Conflict of interest

The authors have no conflict of interest to declare.

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O manuscrito discute a qualidade higiênica de espaços de comercialização, manipulação e consumo de alimentos à luz dos cuidados necessários à prevenção da contaminação por Sars-CoV-2. O texto chama a atenção para a dimensão sanitária da segurança alimentar, pouco discutida no âmbito da saúde pública, apesar de presente na Política Nacional de Alimentação e Nutrição (PNAN). A relevância desse trabalho é assegurada pelo paralelo traçado entre as condições higienicossanitárias de feiras, supermercados e restaurantes, percebendo-os como espaços de risco de disseminação do novo vírus, as orientações publicadas para a mitigação da Covid-19 e o papel desempenhado pela Vigilância Sanitária (Visa). Por fim, aponta a necessidade de regulamentações que considerem o arcabouço sociocultural dos agentes inseridos no processo e reforça a necessidade da instituição de espaços de diálogos que contribuam para a recodificação do conceito de higiene.

Palavras-chave: Alimentação coletiva. Pandemias. Infecções por coronavírus. Higiene dos alimentos. Vigilância sanitária.

El artículo discute la calidad higiénica de espacios de comercialización, manipulación y consumo de alimentos, a la luz de los cuidados necesarios para la prevención de la contaminación por SARS-CoV-2. El texto llama la atención para la dimensión sanitaria de la seguridad alimentaria, poco discutida en el ámbito de la salud pública, a pesar de presente en la Política Nacional de Alimentación y Nutrición. La relevancia de este trabajo tiene como base el paralelo trazado entre las condiciones higiénico-sanitarias de las ferias, supermercados y restaurantes, percibiéndolos como espacios de riesgo de diseminación del nuevo virus; las orientaciones publicadas para la mitigación de la Covid-19 y el papel desempeñado por la Vigilancia Sanitaria. Por fin, señala la necesidad de reglamentaciones que consideren la estructura sociocultural de los agentes inseridos en el espacio y refuerza la necesidad de la institución de espacios de diálogos que contribuyan para la recodificación del concepto de higiene.

Palavras clave: Alimentación colectiva. Pandemias. Infecciones por coronavirus. Higiene de los alimentos. Vigilancia sanitaria.