

Public health risks related to food safety issues in the food market: a systematic literature review

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Abstract

Background: Food safety is one of the key areas of focus in public health. The local and international food marketing continues to have significant impacts on food safety and health of the public.

This systematic review of literature was, therefore, conducted to identify common public health risks related to food safety issues in the food market.

Methods: All published and unpublished quantitative, qualitative, and mixed method studies were searched from electronic databases using a three step searching.

The methodological quality of the included studies was assessed using mixed methods appraisal tool (MMAT) version 2018.

The included full-text articles were qualitatively analyzed using emergent thematic analysis approach to identify key concepts and coded them into related non-mutually exclusive themes. We then synthesized each theme by comparing the discussion and conclusion of the included articles.

Emergent themes were identified based on meticulous and systematic reading. Coding and interpreting the data were refined during analysis. **Results:** The analysis of 81 full-text articles resulted in seven common public health risks related with food safety in the food market. Microbial contamination of foods, chemical contamination of foods, food adulteration, misuse of food additives, mislabeling, genetically modified foods (GM foods), and outdated foods or foods past their use-by dates were the identified food safety-related public health risks in the food market. **Conclusion:** The results of this review imply that the local and international food marketing continues to have significant impacts on health of the public. The food market increases internationalization of health risks as the food supply chains cross multiple national borders. Therefore, effective national risk-based food control systems are essential to protect the health and safety of the public.

Countries need also assure the safety and quality of their foods entering international trade and ensure that imported foods conform to national requirements.