LETTER to the EDITOR

Editorial Process: Submission:01/05/2024 Acceptance:02/16/2024

Fruit and Vegetable Consumption Promotion Model and Prevention for Cholangiocarcinoma: A Direct Hit to the Target?

Asian Pac J Cancer Prev, **25 (2),** 365-365

Dear Editor

We would like to discuss on the published article "Development of Fruit and Vegetable Consumption Promotion Model in a High-Risk Population for Cholangiocarcinoma in Thailand: An Action Research [1]. The goal of the study was to create a model for increasing the intake of fruits and vegetables in a Thai population at high risk of cholangiocarcinoma (CCA). The framework for developing the model was action research, which involved data analysis, questionnaires, and group discussions. The methodology, known as the "NONGBO NO-CCA Model," had elements including encouraging chemical-free farming, community involvement, exchanging experiences and ideation for preventive tactics, and community healthcare support networks. Individuals at risk for CCA demonstrated notable increases in their knowledge, attitude, and behavior about the consumption of fruits and vegetables when the strategy was put into effect. According to the study's findings, proactive CCA prevention that works requires active community involvement.

When debating the arguments against this action research, it's critical to take the study's constraints and possible biases into account. First off, the 38-person sample size might not accurately reflect the total high-risk population in Thailand for CCA. Although a multi-stage sample technique was employed in the selection process, there can still be issues with extrapolating the results to a larger population. Furthermore, the research depends on self-reported information obtained from surveys, which could be influenced by social desirability bias and inaccurate responses.

Moreover, other risk variables including opisthorchiasis, alcohol consumption, and nitrosamine intake are not addressed by the study, which concentrates on increasing fruit and vegetable consumption as a preventive intervention for CCA. It is crucial to take into account a thorough strategy for CCA prevention that takes into account several risk variables at once.

Furthermore, long-term follow-up data are lacking from the study to evaluate the model's long-term effects on fruit and vegetable consumption and the incidence of CCA. To assess the model's long-term efficacy, participant tracking over an extended duration would be beneficial. Nevertheless, it is necessary to assure the safety of the vegetable and fruit to be consumed. In developing countries, the heavy use of insecticide is not uncommon and the insecticide contamination is the vegetable or fruit is related to the risk for CCA development [2].

Finally, the study makes no attempt to investigate possible obstacles or difficulties in putting the concept into practice and maintaining it in the community. Many factors could make it difficult for the concept to be widely adopted, including socioeconomic position, cultural attitudes, and availability of reasonably priced, high-quality fruits and vegetables. Additional investigation into these obstacles and an assessment of the model's viability and sustainability would yield important insights.

In conclusion, while the study provides valuable insights into the development of a model for promoting fruit and vegetable consumption in a high-risk population for CCA, it is important to consider the limitations and potential biases in the research. Future studies should address these limitations and explore the comprehensive prevention of CCA, including addressing other risk factors and evaluating long-term outcomes and sustainability of interventions.

Conflict of interest

The authors declare no conflict of interest.

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