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PROPER TESTING STRATEGIES AND UNAMBIGUOUS COMMUNICATION IS THE BEST STRATEGY TO PROTECT OIL-SPILL AFFECTED POPULATIONS

MONITOREO ADECUADO Y COMUNICACIÓN INEQUÍVOCA, SON LA MEJOR ESTRATEGIA PARA PROTEGER A LAS POBLACIONES AFECTADAS POR DERRAMES DE PETRÓLEO

Fanny L. Casado^{1,2ab}

Dear Editor

Regarding the unfortunate oil spill occurred last January 15th on our coast, I would like to call the attention of your readership towards the need to formulate a proactive Plan of Action to address Environmental Health concerns and use the best practices to communicate risks for people whose livelihoods are closely intertwined with the affected areas.

First of all, we need to consider that there is an inherent shock that has already been felt when looking at wildlife being affected, the natural spaces that may look uninhabitable, and the prohibitions for work, feed and leisure in place. Therefore, measures to protect the mental health should be at the forefront and efforts to use unambiguous terms should be demanded.

Based on our cultural practices, we should be prepared to quickly define seafood safety and edibility. A spill that impacted so many animals and habitats may be perceived to significantly impact human health. However, that may not be the case if a proper follow-up is done since many of the edible species do have fast metabolic rates ranging from weeks to months. Testing strategies to quantify levels of oil-derived toxicants such as polycyclic aromatic hydrocarbons (PAH) in water and seafood tissue samples should be given priority since they are the most robust and there is a lot of data reported from other spills.

Since one of the biggest concerns is the bioaccumulation of PAH due to their carcinogenic properties, the communication should be in terms of probabilities of cancer based on assumed consumption rates, periods and species. Broadly speaking, cancer is a multi-factorial disease, and carcinogens play a role on it. But from a toxicologically point of view, carcinogens such as PAH do not have thresholds for exposures, meaning that any exposure is consider to pose risk. Nevertheless, our population is demanding to understand when it would be safe to resume the activities they used to do.

Yender, Michel and Lord⁽¹⁾ recommend using concepts of acceptable risks like the ones we take when drinking small amounts of alcohol and driving our cars. For example, the experts recommend to indicate that carcinogenic contaminants are found in certain ranges in different contexts of non-polluted areas of the globe and also depend on the style of cooking. Therefore, health authorities need to carefully manage the notions of acceptable and voluntary risks when communicating the current levels in species of interest, in a transparent and unambiguous way.

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