Introduction

The Oceans and Human Health Webinar was presented on June 29, 2022 and hosted by Dr. Matthew Gribble from the University of Alabama at Birmingham School of Public Health. The webinar included a suite of panelists to discussing how their organizations, research, and activities revolve around the complex connection between oceans and human health. Thematic elements such as climate change, harmful algal blooms, ecosystem services, and plastic pollution are present throughout the webinar.

Panelist Presentations (To view the presentations, please see the posted recording)

The first five presentations paint a picture of how government and academic researchers approach studying oceans and human health along with the current needs for further research ranging from climate change influences to creating a measure analogous to 'Burden of Disease' for evaluating the combined positive and negative influences oceans have on human health. The presenters also acknowledge the positive benefits that oceans provide to society from recreation to a food source that is integral in our society.

The next set of five presenters cover how communities and government agencies work to protect and maintain marine and costal communities along with the services provided by these environments. Community actions range from beach clean up days to the establishment of regional monitoring programs for harmful algal blooms to interfacing at the international level to drive policy changes. The ecosystem services include recreation benefits, food production – both subsistence and large scale, health benefits from improved water quality and aesthetics of clean environments.

The final five presenters focus on plastic pollution while approaching the issue from different levels (global vs local) and perspectives. All five presentations frame the importance for addressing plastic pollution and where the data/knowledge gaps remain. Additionally, the COVID-19 pandemic has possibly exacerbated plastic pollution in the last two years due to the necessity of using personal protective equipment around the globe and increases in hospital waste. The five presenters also discuss the need to target systems level changes for reducing plastic pollution.

The presentation portion ended on a positive note that preservation of the oceans is a selfish one because humanity benefits greatly from the resources and joys provided by the oceans. The benefit may be great enough to improve, treat, and prevent physical and mental illness.

Q&A Portion (answers are not quotes – synthesized for brevity)

Question: What are some alternatives to plastic containers? What are some options for people to reduce their plastic footprint?

Answer (Megan Jungwiwattanaporn, Pew Charitable Trusts): At an individual level, anything you can do like bringing your own non-plastic container to the store or purchasing at bulk-bins. Pew is working on initiatives for system wide changes so there are better delivery systems that reduce consumer reliance on plastics.

Answer (Trisia Farrelly, Massey University): Seeing a return to traditional practices in Oceania communities like woven baskets and organic matter for packaging, but really [plastic pollution] is a market issue and communities need to push up on decision makers to improve the systems.

Question: How do we design healthier products that contain less harmful products? What are some agenda setting things we can do to be more proactive about preventing toxics?

Answer (Anika Dzierlenga, National Institute of Environmental Health Sciences): Grantees are encouraged to investigate how to study large numbers of chemicals quickly, evaluating toxicity, and prioritization based on the toxicity information in a reliable and reproducible fashion to keep up with industry replacements. There are ongoing partnerships with the Environmental Protection Agency and Food and Drug Administration to update policy, but policy cannot keep up with industry always.