



Letter to the Editor

Incorporating One Health in health professions curriculum in the Dominican Republic

Incorporando One Health en el currículo de profesiones de la salud en República Dominicana

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Training the global health workforce to help manage emerging risks (including pandemic preparedness) and build health system resiliency is a priority for health professions programs. Incorporating One Health competencies – which emphasize multidisciplinary collaborations to identify innovative solutions that connect human, animal, and environmental health – can prepare trainees to excel in their academic teaching, clinical practice, community health activities, laboratory diagnostics, and policy decision-making (One Health High-Level Expert Panel et al., 2022; Frankson et al., 2016).

The *One Health Joint Plan of Action 2022-2026*, which includes the One Health emphasis on the four Cs (capacity building, collaboration, communication, cooperation), offers health professionals a framework to guide the development of community activities, comprehensive training courses, relevant policies, and engagement with stakeholders (Food and Agriculture Organization of the United Nations [FAO] et al., 2022). Hence, strengthening professional development opportunities in One Health across low- and middle-income countries, already affected by the global health workforce shortage, will support skills-based exercises for trainees, encourage staff retention, reinforce scientific innovation, and safeguard health system service delivery.

The Dominican Republic (DR), a middle-income Caribbean nation with 11 million residents, estimates 1.5 physicians (per 1,000 persons), when compared to Latin America and the Caribbean (3.0), United States (2.6), and United Kingdom (5.8) physicians (per 1,000 persons) (The World Bank, 2023). DR health professionals encounter specific limitations (“knowledge-action gap”) in leading clinical and community activities. First, few skill-building trainings offered to strengthen proficiencies in analyzing

complex health issues and preparing scientific reports may hinder effective teamwork and decision-making activities at local, regional, and national levels. Second, weak associations between networks of community primary care centers (*unidades de atención primaria*) and hospitals, airports, and border health services, including communication gaps, lack of a universal electronic portal for data entry, and limited access to Ministry of Health resources, can influence erroneous reporting into disease surveillance systems. Third, absence of a centralized hub to support epidemiological research may delay identifying real-time health priorities for Ministry of Health funding.

To address these challenges and advance scientific innovation, Universidad Católica del Cibao (UCATECI) leaders established the first Master of Public Health (Epidemiology) program in the northern DR – with One Health coursework – for health professional graduates in Fall 2021. This hybrid program fills a post-graduate training gap (required thesis) in the geographic region.

Students learn to evaluate national and international disease burden, identify at-risk populations, conduct epidemiological analyses, and assess and critique health policies. They incorporate social science concepts and traditional knowledge to embrace the holistic One Health approach and better understand community needs when working directly with residents. Students gain skills in oral and written scientific communication and are motivated to use innovative technology (e.g. YouTube, TikTok, Instagram) to share key health messages with target populations. In 2024, UCATECI leaders will launch the inaugural *One Health Newsletter*, encouraging students to publish their commentaries and fieldwork experiences.

Academic programs can incorporate One Health competencies in health professions education – including

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didactics like case studies, debates, role playing, and fieldwork – to prepare health professionals for high-level leadership positions (Chapman & Veras-Estévez, 2020). As a novel academic model in the Americas region, UCATECI's Master of Public Health program incorporates the One Health concept and empowers future leaders to address the 21st-century challenges, ensuring graduates are well-prepared to advance public health outcomes locally and globally.

These graduates can leverage their expertise to uphold communication and data sharing between local and national health centers and the DR Ministry of Health as well as organize epidemiological research networks to foster timely collaborations, which will streamline efforts to directly support national health priorities and the Sustainable Development Goals.

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Conflicts of Interest

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