

average retention period before the termination of employment contract was 4.9 years. The top 5 departments where employment contracts were relatively higher include nursing 15 (15.6%), internal medicine 12 (12.5%), public health 10 (10.4%), pediatrics 9 (9.4%), and surgery 9 (9.4%). About two-thirds (66.6%) of the faculty members who left were at the ranks of assistant professorship and above.

**Summary/Conclusion:** This study revealed that outflow of faculty has been continuously increasing in the period reviewed. This implies that the College had been losing highly skilled professionals with considerably higher costs in monetary terms. In this regard, an urgent response is required to retain or significantly decrease the outflow of faculty. Different motivation and retention mechanisms should be identified and implemented. Various modalities of faculty development programs should also be initiated.

### Developing national public health system capacity in low-resource countries through national public health institutes

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**Background:** More than 77 countries have established NPHIs to lead and coordinate public health including the U.S. CDC, Brazilian FIOCRUZ, and China CDC. NPHIs focus on a country's major public health problems; they use scientific evidence as the basis for policy implementation and resource allocation, and are accountable to national governments and the public. Their key functions include disease surveillance, detection, and monitoring; outbreak investigation and control; analysis for policy development; research; training; health promotion/education; and laboratory science. NPHIs provide a nationally recognized career home for public health practitioners.

**Structure/Method/Design:** Since 2006, the International Association of National Public Health Institutes (IANPHI) has strengthened the public health capacity of its member countries with over 50 country-led projects in more than 30 nations to develop or improve National Public Health Institutes (NPHIs). IANPHI is the only organization that strengthens NPHIs using an evidence-based international framework for NPHI development. Its unique peer-to-peer model features long-term strategic planning for national capacity; national NPHI plans serve as a road map for donor and country investment.

IANPHI's current portfolio includes projects in Guinea Bissau, Morocco, Mozambique, Nigeria, Tanzania, Liberia, Uganda, Togo, Rwanda, South Africa, Cote D'Ivoire, Malawi, India, and elsewhere. IANPHI's efforts involve four steps: undertaking strategic planning linked to national goals, implementing the policy changes necessary to create or expand the NPHI, developing a funding plan, and executing a project plan that brings together funds and technical assistance from national governments, IANPHI, and other partners.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** Development and execution of a long-term strategic plans for an evidence-based, sustainable NPHI that addresses major public health challenges developed or underway in 25 countries. Leveraging of \$50+ million in funds from other donors. Legislative/statutory approval of new or strengthened NPHIs in Ethiopia, Togo, Guinea Bissau, Saudi Arabia, Rwanda, Sweden, Malawi, Slovenia, Mozambique, El Salvador, Palestine, and elsewhere, with changes under consideration in South Africa, Kenya, France, and elsewhere. Increased technical capacity in 50+ projects—including emergency operations in Ethiopia, surveillance in Mozambique, laboratory

science in Nigeria and Guinea Bissau, and NCD surveillance in Tanzania—to better respond to major causes of disease and death and to integrate and benefit from vertical programs for HIV/AIDS, TB, Malaria, vaccine-preventable diseases, and others. Increased membership/funding from 39 country members to over 77.

**Summary/Conclusion:** Country-led public health agencies are the best way to ensure the self-sufficient and sustainable systems needed to address national priorities over the long term.

### Factors affecting community health volunteer utilization around Ranomafana National Park, Madagascar

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**Background:** Since scaling up efforts in 2008, the established network of community health volunteers (CHVs) in Madagascar has changed the potential for health care delivery in a country that remains in the lowest percentiles across multiple health indicators. As initial evaluations of the CHV program are released, there are still, to date, no known studies identifying which factors predict CHV utilization as a first choice when seeking health care in rural Madagascar. This study assesses the role of socio-demographic, geographic, economic, and symptom-related factors in the decision to first utilize CHVs in rural communities around Ranomafana National Park (RNP) in southeastern Madagascar.

**Structure/Method/Design:** This study was part of a larger project supported by the Emory Global Health Institute, which supports multidisciplinary teams working internationally, and Centre Val-Bio, an organization supporting biodiversity and conservation research in RNP since 2003. 10 households were randomly selected from 6 villages around RNP. A total of 303 individuals completed a survey, administered in Malagasy, inquiring about income, education, occupation, animal/environmental exposure, symptom history, and perceived illness experience. Major landmarks, including households, roads and the regional clinic, were recorded with GPS technology. All consenting participants received a physical examination from a registered nurse, corroborating active symptom reports with objective assessment. Participants who reported significant symptom history in the previous 4 weeks were asked about their health-seeking behavior, including their primary source of care for symptoms.

**Results (Scientific Abstract)/Collaborative Partners (Programmatic Abstract):** Trends in the data support the hypothesis that community health volunteers will be the first source of care regardless of multiple potential mediators, such as income or education level, proximity to infrastructure, or symptom severity. Further analysis will describe these relationships in more detail, stratifying for other variables such as age, gender, and individual community indicators.

**Summary/Conclusion:** As innovative solutions to Madagascar's complex health issues are sought after, the demand for health services must be measured in order to develop more effective, locally informed interventions. This study demonstrates the popular support of the CHV model in this region of Madagascar and asserts that continued investment in this resource is necessary and desired to improve the management of a wide range of health issues unique to this setting.