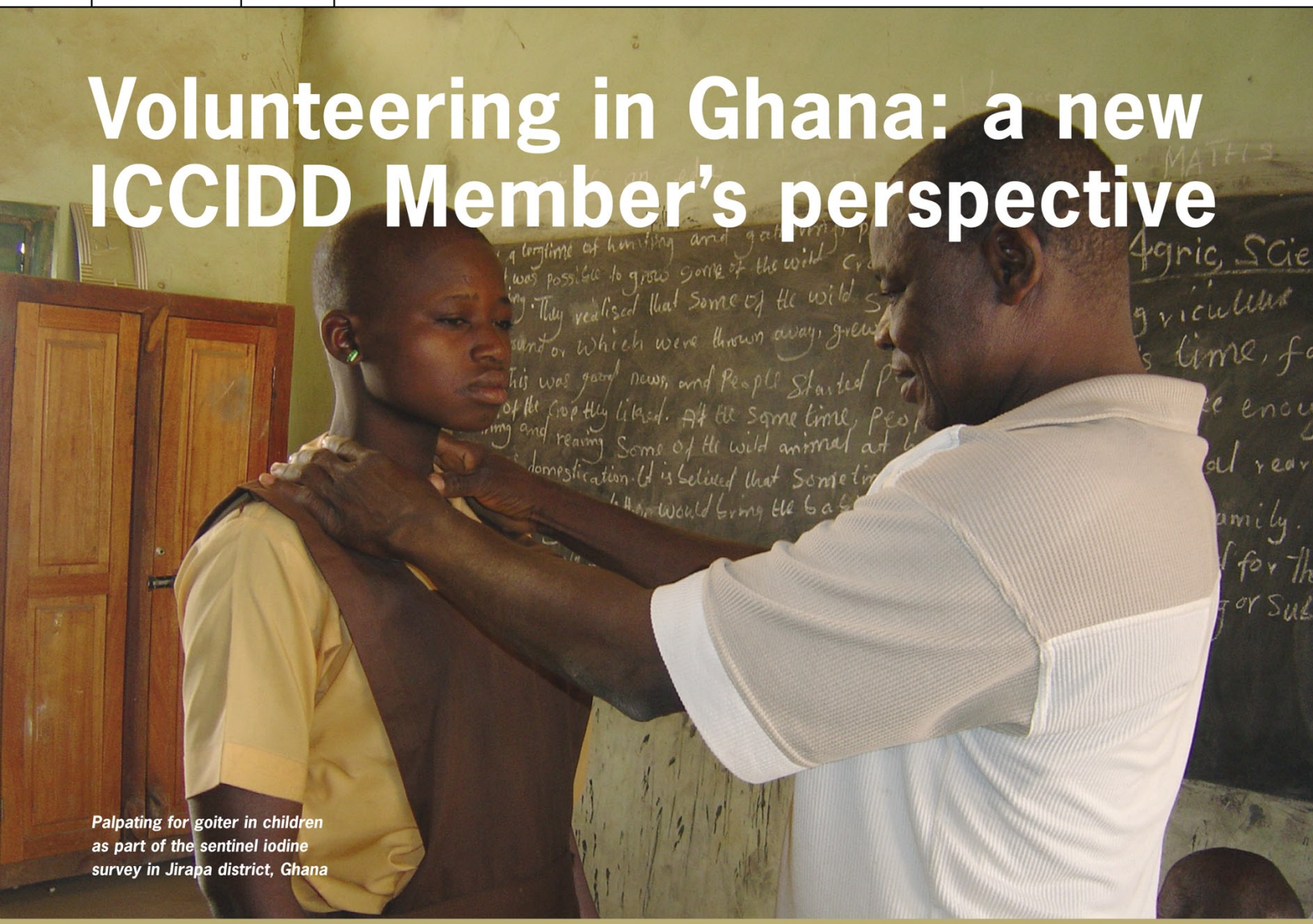
Volunteering in Ghana: a new ICCIDD Member's perspective



Palpating for goiter in children as part of the sentinel iodine survey in Jirapa district, Ghana

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"…when I watched my team members travel into the village equipped with questionnaires I had helped compile, urine vials I had cleaned, and knowledge of the importance of iodine I had taught – for me it was a proud moment."

"How can I help?" I asked Jack Ling on a February morning in 2006. With a background of medical research in Africa and a future in endocrinology, I had become increasingly fascinated but also disturbed by the current state of IDD control.

ICCIDD had never before sent a volunteer into the field. More importantly, what could I offer? A medical degree and enthusiasm were my assets, but clearly I was not an expert in iodine deficiency. Fortunately, Professor Ling spread the message on my behalf. David Haxton, Executive Director, raised the issue with the UNICEF Representative in Ghana, and I was invited to join an upcoming sentinel zone survey of iodine deficiency in northern Ghana in January and February 2007.

A baseline iodine deficiency survey of Ghana conducted between 1991 and 1994 revealed that iodine deficiency was serious in all 27 regions of the country and most severely affected the northern regions. Once the government mandated consumption of iodized salt in 1996, annual

household surveys conducted by Ghana Health Service have served as process indicators. However, over the past decade, no biological impact assessment has been performed to evaluate the current state of IDD.

Rebecca Ahun of UNICEF (left) and Marla Barkoff at Songor Lagoon, Ghana

A collaborative effort to conduct a sentinel zone impact assessment was being planned between UNICEF Ghana, the Department of Nutrition and Food Science at the University of Ghana, and the Nutrition Unit of Ghana Health Service, incorporating the recommendations of ICCIDD through the Regional Coordinator's reports. So on January 1, 2007, I boarded a plane to Accra. I was, I hoped, on my way to help.

Upon arrival in Accra, I was warmly greeted by the UNICEF Ghana team, including Dorothy Rozga, Mark Young, and Rebecca Ahun, the USI project officer. Meetings were arranged with J. Armah of Ghana Health Service and E. Asibey-Berko at the University of Ghana, the Focal Point for ICCIDD in Ghana. We all sat down to discuss the sentinel zone survey, and I quickly learned that my experience was to be richer than expected. At that first meeting, I realized that I was sitting in on the very early stages of the survey planning.

My first four weeks were spent preparing for data collection, designing population sampling strategies, reading WHO manuals on IDD surveys, and absorbing the literature. The greatest learning for me, however, took place in the Dr. Asibey-Berko's iodine laboratory. As a physician in the United States, when I want a UI level, I check off a box on a piece of paper. Five days later, another piece of paper with a value arrives in my folder. This is all I previously knew about UI testing. Under the guidance of the senior lab technician Joyce, I spent one week learning to measure iodine content in salt and urine.

I journeyed with Ms. Ahun to Songor Salt Project, one of the largest salt producers and iodizing centers in Ghana, which markets its product as Diamond Salt. We spent hours watching and speaking with many of the lagoon's salt collectors, processors, and packagers. I saw two iodizing sprayers at work and used the pocket-sized spot testing kit for qualitative measure, in lieu of quantitative data.

Small scale producer of Ghanian salt

Within a mile of the large-scale salt production, we visited a family washing and drying locally collected salt. Their portable iodizing sprayer had malfunctioned six months prior to our visit, so they were loading their non-iodized salt into polyethylene bags indistinguishable from those used at Songor. Upon passing the first police check point on the road back to Accra, Ms. Ahun questioned the stationed officers about their use of test kits to ensure passage of only iodized salt to market. The three police officers were unaware of the importance of the kits, despite the fact Ms. Ahun had delivered them to the check point during a previous visit. A law against the production of non-iodized salt means little if a government cannot enforce it.

Once preparations were finalized, we embarked on a two-day road journey to the northern district of Jirapa, one of the most severely iodine deficient districts in the baseline survey. Ms. Ahun and I visited the main Jirapa market and spent time with the women selling salt. These women shared their knowledge about iodized salt, some stating that "it's good for the neck" and "it keeps the neck small."

Demonstrating salt iodine test kits to a salt seller in the Jirapa market, Ghana

The next step involved training staff in executing the school and household questionnaires, goiter palpation, and urine collection. The teams were comprised of educators, nutrition officers, and statisticians with an impressive mix of gender, age, and language skills. I was thrilled to see our efforts come into action by spending time with school children, discussing iodated salt in the villages, palpating necks, and sampling household salt. For many physicians, these activities may not have seemed glamorous or exciting, but when I watched my team members travel into the village, equipped with questionnaires I helped compile, urine vials I had cleaned, and knowledge of the importance of iodine I had taught, for me it was a proud moment.