

RESEARCH PAPER

Mentoring Cambodian and Lao health professionals in tobacco control leadership and research skills

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Design: The aim of the programme was to ultimately affect public health practice and policy in the Kingdom of Cambodia and Lao People's Democratic Republic (Lao PDR) by training key health professionals to conduct tobacco control research.

Setting: Encouraged by the World Health Organization's Framework Convention on Tobacco Control, a global partnership formed to build effective leadership to develop and guide national tobacco control agendas. The partners were the Ministries of Health (Cambodia and Lao PDR), non-government organisations (Adventist Development and Relief Agency in Cambodia and Laos) and an academic institution (Loma Linda University, Loma Linda, California, USA).

Subjects: 16 health professionals, 10 from Cambodia and 6 from Lao PDR, were selected by local advisory committees to enter a two-year, intensive tobacco research graduate certificate and research training programme.

Intervention: We developed a "Global Tobacco Control Methods" (GTCM) 28 unit certificate programme that was offered in five sessions from September 2003 to September 2005 at the National Institute of Public Health, Phnom Penh, Cambodia. As part of their coursework, the 16 trainees actively participated in the development and implementation of two research projects. In the first project, "Healthy Doc Healthy Patient" (HDHP), trainees adapted an existing, self-administered questionnaire designed to assess health practices and beliefs of medical students in Cambodia and Lao PDR. The second project involved the design of a national prevalence of tobacco use and health beliefs study in Cambodia using a multi-stage, cluster sample method. Trainees were sponsored to attend and present at international tobacco control conferences to enhance their awareness of the tobacco epidemic.

Results: As of September 2005, 14 trainees (8 from Cambodia and 6 from Lao PDR) completed the courses in the GTCM certificate programme. The HDHP study sampled four medical school classes (years 3, 4, 5 and 6) in both Cambodia (n = 330, 71.1% response rate) and Lao PDR (n = 386, 87.3% response rate). As part of the Cambodian adult tobacco prevalence study in Cambodia, 13 988 adults (ages \geq 18 years) were interviewed from all 22 provinces during the summer of 2005. Over the two years, more than half of the trainees participated substantially in local and regional tobacco control and research activities. Programme challenges included the trainees' limited English language and computer proficiency skills, both of which improved during the two years.

Conclusions: With the successful completion of the certificate programme, the remaining two years of the grant will be used to prepare the trainees for positions of leadership within their Ministries of Health and other agencies to implement effective tobacco control policies based on locally-derived research findings.

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It was the stated intent of the Request for Proposals from the National Institutes of Health (NIH) Fogarty International Centre to foster collaborations between tobacco control researchers from the United States (USA) and developing countries. The funding opportunity allowed the Ministry of Health (MOH) and Adventist Development and Relief Agency (ADRA) in two countries, the Kingdom of Cambodia and Lao People's Democratic Republic (Lao PDR), to develop a novel capacity building and research partnership with Loma Linda University (LLU). ADRA is an international non-governmental development agency with 15 years of local operations in Cambodia and Lao PDR. The World Health Organization Western Pacific Regional Office and local Tobacco Free Initiative directors served as advisors to the project.

Collaborative tobacco projects between ADRA staff and the MOH before 2001 had gained recognition in Cambodia and Lao PDR. When the NIH Fogarty initiative was announced the ADRA country directors asked for an academic alliance with LLU to design a proposal to meet the needs of these low income nations. The project's strategic planning sessions in

2001 were based on six initial assumptions provided by local key informants. First, there were no highly qualified tobacco control leaders in either country to serve in the capacity of In-country Co-investigators with publications and research qualifications. Second, an established relationship existed between the MOH in each country, the World Health Organization (WHO) and ADRA to conduct tobacco control projects. A few health professionals were gaining recognition for their work on tobacco initiatives with the Rockefeller Foundation. Third, the WHO Framework Convention on Tobacco Control (FCTC) momentum was building internationally and each country recognised the need for well-trained local government leaders. Fourth, tobacco control activities (for example, surveillance, anti-tobacco media

Abbreviations: ADRA, Adventist Development and Relief Agency; FCTC, Framework Convention on Tobacco Control; GTCM, Global Tobacco Control Methods; HDHP, Healthy Doc Healthy Patient; Lao PDR, Lao People's Democratic Republic; LLU SPH, Loma Linda University School of Public Health; MOH, Ministry of Health; NGO, non-government organisation; NIH, National Institutes of Health; WHO, World Health Organization

messages, research, etc) would be quite low on the list of government priorities without external funding. Fifth, scheduling the location of the mentoring programme and classroom teaching in Asia rather than in the USA would minimise the impact of such a programme on the trainees' current work responsibilities. Sixth, there was no reliable, nationally representative baseline estimate of the tobacco epidemic impact in either country. Each of these parallel the barriers for tobacco control research in developing countries listed in a report by Research for International Tobacco Control in 2002.¹

Tobacco is a major cause of deaths throughout the world, claiming the lives of an estimated 13 000 persons every day.² The prevalence of smoking among men over the age of 15 years was estimated in 1999 (unless otherwise noted) at over 72.8% in Vietnam (1995), 66.7% in Cambodia, 49.2% in Malaysia (16 years and older, 1996), over 41% in Lao PDR (1995), and 38.9% in Thailand (11 years and older).³ These statistics are often derived from limited pilot studies from a local area (hence are not based on nationally representative samples), and they may not reflect current practices in both urban and rural areas. In most of Asia, men have higher smoking rates than women, but in certain subgroups of women in Southeast Asia the smoking prevalence may be higher, and youth initiation of smoking is growing.⁴ Without reliable estimates using similar methodology over time, changes in the tobacco epidemic cannot be accurately monitored. In addition, monitoring and surveillance requires funding sources beyond what is available in very low income countries.

When we designed the project in 2001, it was learned that Thailand had recently passed an increased tobacco tax that funded a tobacco control agency, ThaiHealth, and achieved remarkable tobacco control improvements in just a few years.⁵ Our project built on the momentum of the initial tobacco training workshops conducted since 1999 by WHO. Later the Rockefeller Foundation supported the Southeast Asian Tobacco Control Alliance that initially involved four Western Pacific Rim countries (Malaysia, Vietnam, Cambodia and Thailand), but now invites participation from all of the regional neighbours including Lao PDR.

The project's long-term goal was to enhance the capacity in Cambodia and Lao PDR to conduct research and develop effective, comprehensive plans that would address local tobacco epidemic issues and enhance the national implementation of the WHO FCTC objectives. Our specific aims involved close integration between the capacity building activities primarily in the first two years (through the 28 unit graduate certificate programme) and assigned roles for the trainees in progressively more independent research projects over the last three years of the grant period, including 200 field practicum hours. The final culminating activity will be to create a realistic Five Year Tobacco Control Research Plan for each country with the capacity to obtain external funding to achieve the goals of the proposed research.

Capacity building and mentoring plans

The selection of Cambodian and Lao trainees

After forming local Steering Committees, the members selected the most suitable candidates from government and non-government organisations (NGOs) who would most likely utilise the mentoring and training to improve the tobacco control agenda in their respective countries. The candidates had to: (1) apply for graduate training at Loma Linda University School of Public Health (LLU SPH), (2) demonstrate English proficiency, and (3) obtain permission from their employers to participate in a 28 unit graduate level certificate programme from LLU on a part-time basis (2003–2005).

Sixteen positions were made available for full scholarship in the mentoring programme. Ten trainees from Cambodia and six trainees from Lao PDR were accepted into the newly designed "Global Tobacco Control Methods" certificate programme.

Global Tobacco Control Methods certificate programme

The mission of LLU SPH is "to prepare and support public health professionals for service locally, nationally and internationally". The distance learning programmes offered by the school started 25 years ago in response to growing health professional needs in the field. Since that time, more than 1000 individuals have received their master of public health (MPH) degrees through LLU SPH "off-campus" programme. The primary purpose of distance education programmes is to provide graduate training in public health to motivated mid-career health professionals who otherwise would not be able to pursue this line of study.⁶ Extending public health training in tobacco control to Asia was a familiar process to many of the faculty who already had taught similar courses to health professionals in Africa and South America.

The first task was to develop the proposed "Global Tobacco Control Methods" (GTCM) 28 unit certificate programme by a multidisciplinary faculty group at the LLU SPH. The LLU SPH faculty group designed three new courses to provide the trainees with a thorough foundation for tobacco control knowledge and skills on topics such as: (1) the global health impact of tobacco, (2) effective anti-tobacco interventions for individuals and populations, and (3) the economic, regulatory and political implications of tobacco control. Table 1 describes when the courses were taught each session along with the number of units per course.

The curriculum was specifically designed to provide trainees with appropriate experiential learning opportunities. The instructors used a variety of teaching methodologies (for example, lectures, laboratory exercises, video presentations, field-based activities and computer-based learning) in the classroom and maintained regular online communication with the trainees before and after the courses via the internet.

All other existing SPH courses in the certificate programme were adapted to incorporate new exercises and reading assignments that would broaden the trainees' exposure to tobacco control issues. As an example of an adapted course, Ethics of Public Health was taught by a member of the LLU Faculty of Religion who was originally from Thailand. His understanding of the Asian culture and beliefs allowed him to modify content, adjust classroom group exercises and

Table 1 Timing of courses in the Global Tobacco Control Methods certificate programme

Autumn 2003	
Tobacco Pandemic: Health Effects	2 units
Principles of Epidemiology	3 units
General Statistics	4 units
Spring 2004	
Epidemiology of Developing Countries	3 units
Principles of Health Behavior Change	3 units
Autumn 2004	
Qualitative Research Methods	3 units
Tobacco Interventions: Individual and Population-based	2 units
Spring 2005	
Tobacco Legislation, Policy and Advocacy	2 units
Grant and Contract Proposal Writing	3 units
Autumn 2005	
Ethics in Tobacco Control	3 units
TOTAL	28 units

substitute his usual textbook with one based on Buddhist Ethics.

The LLU SPH application process required the Asian students to meet US graduate application standards. All course materials and lectures in Asia were given in English for two reasons: to improve communication skills of trainees with international English speaking colleagues, and to reduce the burden of having to translate into two languages simultaneously (Khmer for Cambodians and Lao's national language).

From September 2003 to September 2005, five sessions were taught in person by LLU investigators in Phnom Penh, Cambodia every six months. The Lao trainees flew into Phnom Penh and stayed in a downtown hotel for two weeks. During each teaching block, we included one field trip or community activity to acquaint trainees with tobacco projects in Phnom Penh. Examples include visiting a Buddhist temple that was declared tobacco-free, riding on "smoke free cyclos" (a bicycle-pedalled 1–2 person taxi), conducting medical student focus groups, and attending workshops reviewing local FCTC issues sponsored by the Cambodia's Ministry of Health.

Extra-curricular training experiences

Some of the trainees were also selected to travel to the Society for Research on Nicotine and Tobacco annual scientific sessions (New Orleans 2003, and Prague 2004) and the World Conference on Tobacco or Health in Helsinki, Finland, 2003. This allowed them to network with other peer and senior health researchers and exposed them to a variety of research methods and global tobacco control activities.

The LLU faculty development phase also included attendance at national and international tobacco control conferences, consultation with external tobacco control experts and regular faculty planning meetings. The faculty time devoted to the initial development phase of the tobacco certificate programme was funded by the American Legacy Foundation through a Step-Up grant to the Association of Schools of Public Health, 2002–2005.

Methods of proposed research training

The trainees' research activities completed before 2002 usually followed a pre-designed protocol, such as the Global Youth Tobacco Survey (Cambodia in 2002 (<http://cdc.gov/tobacco/global/gyts/factsheets/pdf/files/Cambodia.pdf>); Lao PDR in 2003 (<http://cdc.gov/tobacco/global/gyts/factsheets/2003/pdf/LaosPrabangProvince2003.pdf>)). Their analysis skills were based on training provided in 3–4 day workshops for the skills needed for proper data collection, methods of informed verbal/written consent, and submission of the raw data to the foreign investigators. They were later provided with a clean dataset and shown the basics of descriptive analysis and determination of significant findings. The frustration associated with such foreign-initiated projects with minimal local involvement was evident in our planning stages. We were advised to let the trainees assume a higher level of ownership and responsibility during the entire process of research planning and design, in addition to teaching more advanced, analytical skills.

Beginning in the first teaching session, the trainees were engaged in increasing involvement in the development of the three certificate-associated research projects that were sequenced to match the trainee's skills as their knowledge base progressed following the didactic sessions. Each subsequent research project required trainees to demonstrate greater understanding, participation and input into the planning and implementation. In a variety of courses they completed assignments that prepared them to understand the basic qualitative and quantitative research methods

required to conduct all three research projects planned for their mentored research experiences. The plan was to observe the emergence of leadership qualities among the two groups (Cambodian and Lao) and assign research responsibilities to smaller groups or individuals appropriate to their interests and abilities.

The Phase 1 project involved adapting a research protocol that surveyed health practices of US medical students to local cultural and population norms. The Phase 2 project involved the process of designing a questionnaire appropriate to the needs of each country to assess tobacco use prevalence, beliefs and practices. Phase 3 projects were proposed in 2005–6 by the trainees after the grant writing course and explored the findings from the Phase 2 Cambodian tobacco prevalence study.

Background for adapted project in Phase 1

Seventeen US medical schools, including LLU, participated in the "Healthy Doc Healthy Patient" (HDHP) project from 1998 to 2002.⁷ Each school administered a questionnaire to an entire class of medical students early in their first year (total $n = 1907$), at the end of their second year, and sometime during the fourth year before graduation. This repeated measure design used the same questions to monitor changes in a variety of healthy lifestyle practices, including tobacco use, and preventive counselling attitudes among the medical students over their four years of medical school training, from basic sciences to the clinical training.

Three levels of trainees' involvement in research

Phase 1: adapting existing protocols

Trainees pre-tested and edited the US English version of the HDHP questionnaire to adapt the items to their cultural context. A focus group of 20 Cambodian medical students was held in September 2004 to assess students' beliefs about tobacco use. The 93 item, final questionnaire was pilot tested to confirm comprehension levels and item validity in both countries. The decision was made to administer the survey to all students in the final four classes in medical school training (years 3, 4, 5, and 6) in the first sampling in March 2005. This variation from the US study protocol allows the cross-sectional comparison of the four classes in addition to monitoring changes in the year 3 class students who will be re-surveyed two years and four years later. A second variation from the US study protocol involved the use of exhaled carbon monoxide testing (Bedfont Micro III) of each student when they turned in their questionnaire to verify their self-reported tobacco use. Approval was obtained from the local medical school administration and ethics committee to administer the revised Asian HDHP version in their official languages (Khmer in Cambodia and Lao in Lao PDR). Approval for the Asian HDHP protocol was obtained from the LLU Office of Sponsored Research once the translated and back-translated versions were completed.

Phase 2: development of new survey instruments

The trainees were mentored in the design and planning of a representative population-based questionnaire to determine the prevalence of tobacco use and beliefs among adults over age 18 years in each country, especially those young adults (21–39 years) who have recently become regular tobacco users. The questionnaire was pilot tested and the tobacco use items were validated using salivary cotinine measures in 2005. We contracted with the Cambodian National Institute of Statistics to oversee the field manual preparation, interviewer training and data collection in all 22 provinces. The trainees were involved in the initial interviewer training sessions and made some trips to the field supervised by LLU, ADRA, or WHO staff to assure the quality of the data

collection. The data was collected using a multi-stage cluster sample method from June–August 2005.

While the parent grant only provided funds to conduct a national prevalence survey in Cambodia, the Lao trainees participated in preparing an NIH proposal for supplemental funding to adapt the Cambodian tobacco prevalence questionnaire for the Lao PDR population. The proposal was submitted in 2004 with the aim to use qualitative and quantitative methods to validate the findings from the Cambodian tobacco prevalence questionnaire and translate it into the five major language and ethnic groups of Lao PDR (2006–2009).

Phase 3: trainee initiated projects

Beginning in 2005, we encouraged the trainees to prepare their own tobacco policy or intervention research projects in their country. They submitted the proposals as a final course requirement in the Grants and Contract Proposal Writing course taught in March 2005. Once the findings of the Cambodian Phase 2 prevalence study are analysed (March 2006), the trainees will identify and prioritise the most useful projects and be assigned research responsibilities for the remaining two years of the grant. The results of the Phase 3 projects are expected to provide pilot data to generate proposals for additional external funding after the termination of this NIH project.

RESULTS

Trainee participation

The evaluations by the trainees indicated that they had never been trained to this level of sophistication in the courses we provided, especially in the ethics of medical research. They stated that they were able to use the skills immediately in their work situations and that it enhanced their career performance. Many were challenged by their limited English skills initially, but developed progressive proficiency with each intensive teaching session.

After the second teaching session, three of the Cambodian trainees discontinued the programme. One trainee declined because she received a full scholarship to complete an MPH in Australia. The other two discontinued because of lack of support from the employee's supervisors to release them to attend the sessions. Three other candidates were recruited to fill these positions and they remained until the completion of the certificate programme.

Three of our Cambodian trainees work in the office of tobacco control in the National Center for Health Promotion.

Table 2 Overview of trainees' professional training and current employment

Cambodia (10 trainees)	Lao PDR (6 trainees)
<i>Background training:</i> 9 physicians and 1 dentist	<i>Background training:</i> 5 physicians and 1 college professor
<i>Current employment</i>	<i>Current Employment</i>
6—National Center for Health Promotion, (3 from Tobacco Control Office) MOH	3—Center for Information and Education for Health, MOH
1—National Institute of Public Health, MOH	1—College Health Technology
1—University of Cambodia, School of Medicine	1—Department of Hygiene and Prevention, MOH
1—University of Cambodia, School of Dentistry	1—Coordinator Tobacco Control projects, NGO (ADRA Laos)
1—Director, NGO (Cambodia Health Community, has a tuberculosis focus)	

ADRA, Adventist Development and Relief Agency; MOH, Ministry of Health; NGO, non-governmental organisation.

There is no centralised equivalent of the Office of Smoking or Health in Lao PDR, but two of our trainees are responsible for policy and anti-tobacco mass communication topics.

Table 2 lists the professional background and employment in the final cohort of 16 trainees by country.

Trainee achievements and participation in tobacco control activities

As of September 2005, eight trainees from Cambodia and six trainees from Lao PD had completed the GTCM certificate course work and are planning to participate in the final, mentored research phase (2005–2007). Two of the original 10 trainees from Cambodia permanently emigrated to Canada or the USA between the fourth and fifth sessions and have not yet chosen to complete the final course via online format.

The Cambodia and Lao PDR trainees have shown increasing involvement in tobacco control activities in the last three years in their career tracks. The national coordinators of the Global Youth Tobacco Survey and Global Health Professional Survey in both countries are trainees in our programme. Trainees who presented oral reports and posters at national and international tobacco control meetings returned with a broader understanding of the possibilities for improving the health and economics in their country. Four trainees were chosen for scholarships to present research findings at the World Conference on Tobacco or Health, Washington DC, USA, July 2006. Trainees have also participated in other tobacco control activities in the last three years in addition to our certificate programme, such as forming local tobacco taskforces committees, FCTC document preparation, training health professionals about clean indoor air policies, advocacy training, and small tobacco control research projects. Table 3 provides a summary of tobacco control activities of the 16 trainees during the grant period.

Research findings in progress

Trainees will learn how to analyse both HDHP and Cambodian tobacco prevalence databases during an analysis workshop session in Asia held in March 2006. Phase 1: The HDHP medical student study sampled the last four classes (years 3, 4, 5 and 6) from February to October 2005 in both Cambodia (n = 330/464, 71.1%) and Lao PDR (n = 386/442, 87.3%). Phase 2: The Prevalence Survey of Tobacco Use Among Adults in Cambodia was completed in 2005 in all 22 provinces as planned with 13 988 interviewees. Trainees will contribute their perspective on the cultural context of the findings in the publication workshops with the LLU investigators in 2006.

Table 3 Summary of number of trainees involved in tobacco control activities (2002–2005)

	2002*	2003*	2004*	2005*
<i>Trainee activities</i>				
Local/regional tobacco workshop participation	1	4	6	7
Attendance/presentations at international tobacco conferences	0	2	5	5
Local tobacco control projects (e.g. FCTC)	0	7	9	10
Initiated/conducted tobacco research projects	1	2	2	6
Submit publication of research projects	0	0	0	1
Peer-reviewed papers published	0	0	0	0

*Reported as number of trainees engaged in each activity per year. Some trainees participated one or more research projects, workshops or conferences per year. Total number of trainees is 16. FCTC, Framework Convention on Tobacco Control.

Challenges and limitations

Our initial pioneering partnership of government, non-government agencies and academic institutions required frequent communication and negotiation to establish effective working relationships. Clearly each entity had to balance the differences in their agendas, but the results have demonstrated how working together for a common goal can create synergy. The expertise, support and authority required to produce quality tobacco control research leadership is a shared responsibility.

Few of the candidates scored above the minimum required English language proficiency scores at the onset of the training. This constraint was minimised in the classroom by ready access to dictionaries, and frequent clarification of idioms or western concepts.

Computer knowledge, typing skills and internet skills among trainees was not uniform. None of the trainees had reliable electronic mail access, except at work, where often it was shared with several other employees. We purchased internet accounts for the trainees in some cases so they would be able to submit assignments by email to the course instructors, and stay in touch with the ADRA course coordinator.

Our partnership with ADRA allowed us to work through a local presence to handle logistical problems as they arose, maintain regular contact with trainees, and to help the LLU investigators understand cross-cultural communication issues. ADRA's support was critical to the project's success in establishing excellent rapport with government officials, contracting for services, and eliciting local cooperation for research projects. The formal organisation of local ethics committees for research approval was just starting when our proposal was written in 2001. Understanding delays in their approval process and unexpected fees were some of the barriers that ADRA was very helpful in solving with us.

Obtaining funding from international sources for foreign travel to tobacco meetings and training of health professionals to gain expertise in tobacco control research methods is a major limiting factor in moving tobacco control forward in developing countries. Other sporadic, research training opportunities have not achieved the level of competence and skill that is only possible with this type of long-term mentoring relationship. Among the 14 trainees who have now completed 28 units of graduate credit, many would like to complete a Master in Public Health degree.

Government support and financial commitment to tobacco control is vying with other pressing health and economic concerns in developing countries like Cambodia and Lao PDR. Our discussions with the officials from the MOH clarified the tensions that are a part of daily conflicts in legislative decision-making regarding tobacco policy development and enforcement. Without reliable leaders to conduct appropriate tobacco control research, ineffective policies and recommendations may be created.

Rapid turnover of trained staff is another key dilemma in the stability of tobacco control personnel for government agencies. The upward mobility of young and mid-career public health professionals created more of a problem in Cambodia than in Lao PDR. In fact, all five of the trainees who left our training programme before completion were from Cambodia.

DISCUSSION

The quality of tobacco control research in the Western Pacific Rim region is a result of the level of skill and training of public health leaders and the amount of external tobacco funding available. Our innovative mentoring and tobacco control training programme in Cambodia and Lao PDR has successfully implemented the didactic and skill building portion of the research preparation in two years through a graduate level certificate programme. We have demonstrated

What this paper adds

Our project is the first to demonstrate a successful partnership with a Ministry of Health, a local humanitarian NGO and a US academic institution in two low income, developing countries (Kingdom of Cambodia and Lao PDR) to provide research and leadership skills for a cohort of 16 selected, mid-level health professionals in an intensive tobacco control mentoring programme over 25 months. Some of the trainees held Cambodian and Lao PDR government positions where they were responsible for tobacco control policy and interventions, yet had not received advanced training in tobacco control, epidemiology/statistics, qualitative or quantitative research methods, behaviour change, grant writing or research ethics.

This report highlights recent achievements in the capacity building phase of the project (2003–2005) using a combination of techniques of face-to-face classroom teaching (in Phnom Penh, Cambodia), skill-building group research activities and modified distance learning techniques while overcoming cultural and language barriers, limited internet access and the obstacles of a long-distance mentoring relationship. Our challenge was to provide the desired research and interventional skills using an intermittent, adult-learning approach with a variety of mentors without disrupting their work settings, yet maintaining high expectations for their development of improved research skills in tobacco-related research activities during the grant period. We document the coursework and educational methods used to acquire advanced research skills that were linked with increasingly demanding research projects matching their enhanced skill and understanding through classroom and distance learning experiences. The expansion in the trainees' tobacco related activities is documented during the 25 month capacity building phase of our project. This successful capacity building experience may offer a model for other developing countries that need to enhance the tobacco control research skills of health professionals in leadership positions.

one model of training in a developing country that only minimally disrupted the trainees' work schedule and allowed them to use their skills immediately in their job settings. The LLU SPH has now converted the GTCM certificate and MPH courses to an online format. Challenges for classroom and online training included the trainees' limited English language and computer proficiency skills, both of which have shown improvement during the two years.

The completion of data collection for the first two research projects is another milestone in our research mentoring plan. Trainees will be working in small writing groups with LLU investigators to prepare posters for the 13th World Conference on Tobacco or Health in July 2006 and manuscripts over the next year.

The Phase 3 proposals (2006–8) will be based on the trainees' initiative to determine, with the assistance of their government and WHO advisors, what are the most relevant research questions raised by their current political situation and how best to achieve their national tobacco control agenda using reliable, local research findings.

The final two years of the grant will demonstrate whether this intensive mentoring project has prepared the trainees to serve effectively in positions of tobacco control leadership within the Ministry of Health, WHO and other NGOs.

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