Today, it is estimated that a majority of the world’s new cases of cancer are in low- and middle-income countries (LMIC), where the shortage of health care workers remains severe and where the shortage of clinicians trained in oncology is especially acute. To begin to address this gap between need and human resources, it is imperative not only to support existing specialists in LMIC, but also to grow capacity: in the near-term by extending oncology training as appropriate to other members of the medical team; and over the longer-term by supporting expanded specialist training opportunities in LMIC. To be successful, these efforts need to be made in a systematic, sustained way, and in the context of the LMIC clinical setting, where needs can be best understood and training put into practice.

As a global organization with members in over 100 countries, the American Society of Clinical Oncology (ASCO) takes very seriously its responsibility to help address these issues. Through the support of its philanthropic affiliate, the Conquer Cancer Foundation, ASCO is implementing international programmes focused on supporting oncologic skills training, developing clinical capacity at key hospitals in LMIC, and supporting the next generation of oncology leaders in LMIC.

Supporting health care workers through skills training
ASCO works with national and regional medical organizations in the Americas, Asia, Africa, Europe, and the Middle East to train doctors, nurses, and other clinicians on topics deemed by its partners to be critical to improving cancer outcomes in their countries. These programmes include ASCO courses in multidisciplinary cancer management, palliative care, and international clinical trials.

ASCO’s Multidisciplinary Cancer Management Course (MCMC) trains physicians and other health workers in LMIC on the care of the cancer patient with a multidisciplinary emphasis. Each course focuses on the management of cancers most prevalent in the particular region, covering the roles of each member of the care team through an interactive combination of lectures, discussions, and case presentations. The in-country collaborating organization serves a key role in defining training goals, adapting training content to the particular practice environment, and providing local faculties, who partner with ASCO to deliver each course.

Since 2004, MCMC courses have been held in 16 countries, training about 2,500 clinicians. The course is assessed using a post-course evaluation and an online survey distributed to attendees at least six months after the course. Past attendees...
have reported changes to their practice as a result of the course, with 70% of respondents reporting changes in their patient care, such as creating a local tumour board to discuss cancer cases with colleagues from other medical departments. A recent “Train the Trainer” add-on to the MCMC curriculum aims to increase the quantity and quality of MCMC trainers around the world by teaching a select group of trainers concepts in adult learning and best practices in course implementation.

International clinical trials workshop
In economically emerging countries such as China and India, the amount of clinical cancer research as measured by numbers of trials, numbers of patients enrolled in trials, and research funding, has increased dramatically over the past decade. A 2007 ASCO member survey and discussions with ASCO society partners indicated that the level of research training provided to investigators in emerging countries has not kept pace with the growth of research and corresponding research capacity requirements.

To help address this need for clinical research skills and standards, ASCO collaborates with national or regional medical organizations around the world to hold a two-day intensive workshop. The workshop includes topics such as: roles and responsibilities of the research team; patient accrual strategies; ethical considerations; marketing clinical trials; and regulatory issues (the latter presented by national regulatory authorities). Overall, the goal of the workshop is to deliver best practices in clinical cancer research in a way that is relevant to the needs and interests of the local audience.

Palliative care
Palliative care has been defined by ASCO as simply “the relief of suffering, in all of its dimensions, throughout the course of a patient’s illness”. Yet, despite a growing cancer patient population whose cancers are often diagnosed at advanced stages and for whom palliation could offer significant patient benefits, access to palliative care in LMIC remains very limited. For example, opioid use in LMIC constitutes only 6% of world consumption, according to the Global Access to Pain Relief Initiative.

ASCO’s Palliative Care Workshop seeks to educate health care professionals in palliative care and the integration of palliative care into cancer care. ASCO collaborates with international and in-country partner organizations to hold these workshops. Faculty members consist of international and local experts that, together, create a programme that teaches palliative care principles and skills, adapted to the local environment. Attendees include doctors, nurses, pharmacists, medical students, and social workers. In an evaluation of the course’s presentation in Ghana, 91% of attendees reported making specific clinical practice changes as a result of the workshop, with the most common changes being improved communications with patients about palliative care options and use of new pain assessment and pain management methods.

Developing capacity at the hospital level
In 2008, ASCO partnered with Health Volunteers Overseas (HVO), an international medical education organization, to create a programme to pair ASCO’s member oncologists with colleagues at medical centres in LMIC that serve as their nations’ major cancer referral hospitals. The aim of the “International Cancer Corps” (ICC) is to exchange medical expertise, develop training programmes, and build long-term, supportive relationships between ASCO, these vital medical institutions, and the clinicians who practice there.

For the past two decades, HVO has worked to increase health care access in LMIC through clinical training and education programmes in child health, primary care, trauma and rehabilitation, essential surgical care, oral health, infectious disease, nursing education, and burn management. Active in more than 40 hospitals in 25 countries, HVO-affiliated medical volunteers train, mentor, and provide critical professional support to health care providers.

ASCO and HVO select International Cancer Corps sites from among those hospitals where HVO has experience implementing programmes in other specialties and which express a strong interest in oncologic development. Size of the cancer patient population, the nature of the overall need, and potential for ASCO impact are other considerations in the selection.

Once a site is selected, ASCO and HVO appoint an ASCO member volunteer with prior experience in the country or region to conduct a two-week site assessment at the hospital.
The assessment covers personnel, access to medications, facilities and equipment, policies and systems, registries, and epidemiological data. Beyond these data elements, the emphasis of the site assessment is to listen to the local partners and learn about their needs and priorities. On the basis of this assessment, and working hand-in-hand with these partners, the International Cancer Corps establishes a set of programme objectives. Care is taken to set objectives that fall within the scope of clinical training, are achievable within several years, and lead to sustainable change.

The objectives also serve a central role in the screening of volunteers (so far more than 70 ASCO members have served) to ensure that they have the right expertise. ASCO and HVO aim to place at least five volunteers at each site each year, with on-site visits lasting between one and four weeks. Upon their return, each volunteer is expected to report on trip outcomes and to continue to support the programme by sharing resources and collaborating on projects related to, or resulting from, their visit.

Development objectives for Honduras were defined in the areas of pathology, palliative care, gynecological cancers, pediatric hematology-oncology, and oncology training curricula. Working closely with senior Honduran oncologists, volunteers have advanced these objectives through lectures, surgical demonstrations, rounds, and ad hoc clinical consultation. Other volunteers are helping with the development of a training curriculum, among other projects and activities. Similarly, in Vietnam, volunteers are working with host clinicians to address surgical training needs, improve palliative care services, and provide training in multidisciplinary management of common tumor types. A particular emphasis in Ethiopia is on the development of a residency programme in clinical oncology, which volunteers have assisted Ethiopian colleagues in developing.

Supporting the next generation of oncology leaders in LMIC

Leadership has been cited as a critical success factor for improving access to cancer care in LMIC Trey Effective clinical leaders in LMIC can be transformative by supporting the development of cancer treatments to meet the needs of patients in LMIC, by advocating for national and international anti-cancer policies, and by developing and leading national and regional organizations that can advance cancer control in a localized, sustainable way.

The Conquer Cancer Foundation of ASCO International Development and Education Award (IDEA) aims to support the development of oncology practice in LMIC by promoting the professional development of young oncologists from these countries. The emphasis of the IDEA programme is on person-to-person exchange of ideas and support, through the creation of ASCO member-mentor-mentee pairs.

Once selected through a highly competitive application process, each recipient of the IDEA award is carefully matched with a senior ASCO member mentor on the basis of shared clinical and research interests. Recipients of the IDEA award attend ASCO’s Annual Meeting and participate in a post-meeting visit to their mentor’s institution in the USA or Canada. They also receive three years of complimentary ASCO membership, including a subscription to the Journal of Clinical Oncology. The true emphasis, however, is on the ongoing mentoring relationship after the mentee returns to their country.

There are currently 205 IDEA alumni from over 40 countries. IDEA alumni have assumed leadership positions on ASCO committees, have received fellowships and other research opportunities, and have pursued longer-term collaborations with their mentors. Past IDEA recipients are also serving as communication channels and catalysts in their communities of practice. On average, each IDEA alumnus shares the information and new skills they learned with 50 colleagues in his/her country. IDEA alumni have helped organize ASCO trainings and other activities in their countries, have assumed leadership positions in their local societies, and have in some instances created oncology societies where none existed before.

The success of the IDEA programme led ASCO and Conquer Cancer Foundation to create the International Development and Education Award in Palliative Care (IDEA-PC), which is designed to provide support to oncologists who are interested in palliative medicine, and the Long-term International Fellowship (LiFe), which provides early-career oncologists in LMIC the support and resources needed to advance their training by deepening their relationship with a mentor in the USA or Canada. LiFe provides funding to support a one-year Fellowship, where recipients receive valuable training and experience, which they will use to effect change in cancer care in their home country.

Conclusion

From the society’s founding, membership in ASCO has been available to cancer clinicians around the world, with the same status, privileges, and benefits as American members. In fact, ASCO’s first members included physicians from Canada, Spain and Japan. Today, a third of ASCO’s members practice outside the USA, as do a majority of the attendees to the ASCO Annual Meeting. With a pace that grows by day, ASCO is working to use what makes it unique – its members, and the knowledge
that each of them possesses – to make important and impactful contributions to the global fight against cancer.

ASCO’s philanthropic affiliate, the Conquer Cancer Foundation, was founded to support the programmes that ASCO’s members and Board of Directors deemed vital to the oncology community, but which could not be funded through ASCO member dues. The Foundation works to realize its vision of a world free from the fear of cancer by seeking individual and organizational support to bring programmes such as the IDEA and IDEA-PC to fruition. The Foundation’s esteemed Grants and Awards Program has launched the careers of more than 800 physician-scientists, with more than US$77 million in research grant funding awarded since its inception in 1984. To learn more about the Conquer Cancer Foundation, visit ConquerCancerFoundation.org.

Doug Pyle, MBA is responsible for directing the international programmes of the American Society of Clinical Oncology, an organization representing more than 30,000 health care professionals treating people with cancer in over 100 countries around the world. He joined ASCO in 2007 with a background in global health in the public, nonprofit, and corporate sectors. Previous to ASCO, Mr Pyle was the Director of Business Solutions for the International Services department of the American Red Cross, where he led strategic process improvements to the organization’s global humanitarian operations.

Nancy R Daly, MS, MPH is the Executive Director of the Conquer Cancer Foundation. She launched her clinical nursing career at Johns Hopkins Oncology Center. Nancy joined ASCO as Director of Cancer Research Policy in 2004, later becoming Director of Grants for The ASCO Cancer Foundation, the precursor to the Conquer Cancer Foundation. She has served as Executive Director of the Foundation since 2009.

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