Improving Cancer Outcomes In Low- and Middle-Income Countries

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“The right measure for successful health care isn’t about the maximum possible for a few, but the average for everyone…and the minimum opportunities available to even those with the fewest resources and privileges.”

The common high-income country framework for improving cancer care that is applied globally leads to calls for workforce development (or capacity building), national cancer control plans, medical professional education, well-defined quality care, clinical practice guidelines, multidisciplinary care, certification programs for outpatient care, research (generally, and not specifically implementation research), and registries. The challenges are responded to by technology transfer interventions—most commonly educational activities—with very limited and hardly rigorous evaluations of their impacts. It is hard not to compare these approaches with those of advocates for economic development generally for the past half century that were found by many to have been so wanting. As we have written, “We believe that, in fact, the major issues are broader than these and that, in any event, these current dominant framework foci can hardly be successfully addressed without attention to bigger ecological issues and themes, such as weak, dysfunctional, and underfunded health systems, overall, dominated by operational business/money making models; governance, corruption and transparency; human rights shortcomings; incomplete knowledge about diseases, patient/host factors; and cost-effective interventions” applicable in low- and middle-income country settings.

Current efforts beg questions about goals and the social change models behind them. In the development field broadly, there has been a shift in focus toward local community and small-scale enterprise (eg, social business) solutions to poverty. Applied to medicine, this focus suggests that greater efforts in defining and rigorously evaluating local solutions may provide useful models.

Broadly, it would seem logical that we should start by looking at the big-picture epidemiologic data and consider patient case numbers and countries with high age-specific cancer mortality rates. GLOBOCAN estimates for 2018 include some striking numbers: of all cancer deaths, 57.3% were in Asia; China has the highest age-specific rate of mortality for lung cancer; South Central Asia (ie, India and Pakistan), with 26% of the global population, has the highest global rates for oral cancer in men and has mortality incidence ratios of 63% for cervical cancer and 53% for breast cancer; and Southeast Asia has mortality incidence ratios of 58% for cervical cancer and 37% for breast cancer, compared with ratios of 30% and 15%, respectively, for North America. The take-home messages from these selected data are that, from global perspectives, if we are to meaningfully change global trends in cancer outcomes, there must be a major emphasis on Asian populations, and there are clear data about diseases to focus on.

From experience conducting three phase III clinical trials in 1,700 patients and multiple other clinical studies in cancer in seven Asian countries during the past 27 years, I have developed the forestated perspectives and learned seven broad lessons about the challenges of addressing cancer in low- and middle-income countries, particularly in Asia.

There Are Current World Challenges That Can Never Be Ignored

World challenges are at least three-fold:

- Climate change: In stating This Changes Everything, Naomi Klein has it right. For near-equatorial countries, increasing temperatures are game-changing now. Rainfall and temperature changes affecting mosquito populations, the vector for dengue, have contributed to dengue crises in Bangladesh, Vietnam, and the Philippines in recent months.
- Geopolitics: As Zia Haider Rahman exemplifies in In the Light of What We Know, in the big picture, countries targeted for cancer work are “just another chessboard.”
- Economic development and trade: Chinese-supported development activities are having huge impacts across Asia.

We live in the world that we notice and remember; this is availability bias. As a result, we tend to ignore big-picture issues that are of major importance.

Broad Locoregional Context Is Critical

All health care challenges matter and can swamp long-planned and carefully constructed targeted efforts—as in the current dengue crises mentioned above. More
It Starts With Cultures

Make no assumptions about similarities between one’s own culture and those of the foreign country where assistance is being offered. The multiple, currently used strategies noted above appear to start with assumptions about these as effective approaches, absent any sense that they, in fact, are culturally acceptable and realistic.

We Need to Get a Grass-Roots Education

Often, national experts with privileged backgrounds have no idea what is really going on in their countries. In my field experience, college-educated Bangladeshi interviewing residents of their own villages found levels of squalor that astounded them. Katherine Boo has opened the eyes of many to the circumstances of the urban poor in India, but we seem to ignore such lessons when we talk about intervening for cancer.

Choose Collaborators Carefully

Our colleagues in low- and middle-income countries often have personal agendas in collaborating with international project efforts—agendas that are not at all compatible with those understood by Western leaders. The only rational approach to this conundrum is to go slowly in project development and do homework that addresses grass-roots lessons.

Think Long and Hard About Defining the Really Important Problems and Strategies to Tackle Them

“How you define the problem determines whether you solve it.” The late Jonathan Mann put it similarly, asserting that the way you frame the problem dictates how you approach it and whether you will have any success. As noted above, one always needs an applicable socioecological model in which to operate.

Maintain an Evaluative and Experimental Mindset

As Easterly has documented, the history of development is littered with prescriptions that have been counterproductive. As noted in the opening paragraph here, we pursue educational approaches (particularly conferences), seemingly because this is what we have always done in the West and absent any compelling evidence of their relevance or efficacy in addressing meaningful goals. More broadly, Bryan Stevenson’s comment about Samantha Power’s memoir, The Education of an Idealist, is applicable: “Problem solving in a complex world can challenge idealism.”

As Alfred Sommer has so engagingly described in Ten Lessons in Public Health, we are increasingly concerned with global health without attending as much as is needed to what is involved. And, as Tom Friedman has written, we have increasingly deep capacities, but—as noted in the popular song, Shallow—“we’re far from the shallow now.” We need to think hard, big, and deep about the social change involved in improving cancer outcomes for our fellow planet travelers.

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AUTHOR’S DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

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