

Acknowledgements

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Why Mentorship?

The Canadian Coalition for Global Health Research (the Coalition) is a national and global resource for building capacity in global health research. In the first two modules of this series, the concept of mentoring was introduced and the relational dimensions of mentorship were discussed. This module challenges readers to consider what mentorship is for, what it could be used for, and what potential mentorship offers to building capacity in global health research. Drawing from the content covered in the first two modules, this module explores applied examples of mentorship to stimulate dialogue on how such aspects can contribute to creating a culture of mentorship.

Key Messages

- 1. Building capacity in global health research is an important contribution towards achieving greater equity in health around the world.
- 2. Capacity building is a self-renewing process that focuses on sharing knowledge and skills, creating an environment of continuous learning, and stimulating transformational change both within communities and society as a whole.
- 3. Mentorship can be used for three key types of capacity building in global health research: research capacity, leadership capacity and sustainable capacity.

Learning Objectives

Individuals or groups working through this module will be able to:

- 1. Consider a variety of settings in which mentorship can contribute to enhancing capacity.
- 2. Explore the meaning of capacity building.
- 3. Examine the role of mentoring in leadership development.
- 4. Examine the role of mentoring for developing research capacity in general.
- 5. Understand what is meant by a culture of mentorship and examine the role of mentoring in building sustainable capacity.
- 6. Reflect on the role of mentoring in building capacity for global health research.

What is Mentorship for?

Mentorship can be effective and is used in a wide range of settings, from corporate to community organizations and from government to academic environments. The literature on mentorship stems largely from the disciplines of education and management. More recently, medicine, nursing, and other health related disciplines have contributed to this literature. The most frequently discussed reasons for engaging in mentorship focus on career and leadership development, job satisfaction and retention. There are a number of examples, however, of the use of mentorship to build capacity in specific fields or for specific settings. Of particular interest is the use of mentorship as a resource for building sustainable capacity, fostering research capacity and nurturing leadership development in the context of limited resources.

One such context is that of global health research. Global health research addresses an unacceptable gap in the global distribution of resources for health research. The majority of resources invested in health research focus on health issues and concerns experienced in countries with the greatest access to human and financial resources. Globally, less than 10% of both public and private health research spending is invested in the health

problems that account for 90% of the global burden of disease. In response to this '10-90 gap', organizations and institutions around the world are working to create collaborative partnerships to promote greater equity in global health through research (1). Global health research, then, responds to global inequalities and inequities that affect the health and well being of populations around the world.

Creating equity through global health research requires sustainable human and financial resources. Because of the historical imbalances reflected by the 10/90 gap, building capacity in global health research is an essential component of creating greater equity in health. This means we need individuals, teams and networks equipped with diverse skills, knowledge, and capacities in research, global health, advocacy, and knowledge translation. This module expands the discussion of what capacity building is and how, in and of itself, it creates sustainability. Mentorship plays a role in this cycle of sustainable capacity building by developing the skills, knowledge, experiences and capacities of emerging global health researches through creating environments of continuous learning and sharing.

Building Capacity

These modules identify mentorship as a resource for building capacity in global health research. Before exploring mentorship for leadership development, research capacity and sustainable capacity, it is helpful to first discuss what is meant by 'capacity building'. Audrey Newman reflects on what capacity building is and offers this description:

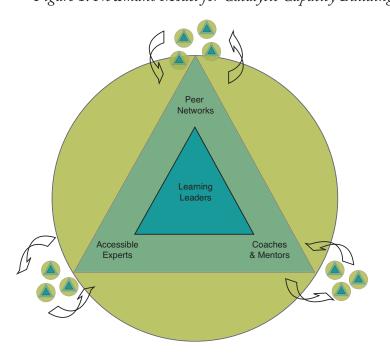
...highly effective capacity-building is about teaching and learning; insights, behaviours, and skills; and more. It is about creating an environment that encourages and supports continuous learning and improvement in individuals, organizations, networks, and eventually, the communities and societies they seek to change. It is about empowering passionate people to learn what they need and share what they know. It is about consciously creating conditions so that each success sparks many others. It is about starting chain reactions for change. (p.2) (2).

Newman's reflections on the process of effective capacity building stemmed from a sabbatical experience in the Asia Pacific region. Through her work with a mentor and numerous communitybased organizations and learning institutions, she developed a model for understanding how capacity building is stimulated, rapidly expanded, and sustained. She identifies four kinds of 'catalytic people' who stimulate capacity building: capable leaders committed to learning and change; networks of colleagues and peers discovering and sharing their knowledge; experienced mentors and coaches investing in individual confidence and growth; and talented experts available to provide guidance, assurance, and objective insights during critical transforming events (2).

Newman also offers a number of strategies and tools that are useful for spreading new ideas quickly, such as:

- Targeting specific strategic partners with broad reach or unusual influence.
- Documenting learning tools and best practices to make them easy to share.
- Using electronic and multimedia technology to communicate and connect with people.
- Measuring successes and impacts continuously to learn and adapt to new contexts

Figure 1: Newman's Model for Catalytic Capacity Building)



Newman's model for catalytic capacity building offers a conceptual framework for understanding how capacity building works. In this model, every participant learns and grows from their interaction with one another and a 'chain reaction for change' can occur when the leaders, peers, mentors, and experts bring these lessons back to their organizations, networks, and other associates to recreate all or part of capacity building (2).

Mentoring to Build Research Capacity

Research mentoring is a unique way to transfer knowledge and is appropriate in educational or research programs and in research partnerships. Given the diversity in readiness for research productivity (including resources for research) across regions and countries, research capacity is a global concern and mentoring is one strategy to enhance the quantity and quality of research in a variety of settings (1, 3).

Building research capacity is an ongoing process of empowering individuals, institutions, organizations and nations to:

- Define and prioritize problems systematically.
- Develop and scientifically evaluate appropriate solutions.
- Share and apply the knowledge generated through research.

Mentoring students as they develop capacity in research is perhaps the most common at (but not exclusive to) graduate levels of education. Developing knowledge and skill in the practice and process of research is an explicit goal of most doctoral programs. Research conducted as part of a graduate program can be a significant contributor to global health research, especially when appropriate support is available to students choosing to pursue this field (4). Mentorship can be part of this support in a number of different ways:

- Mentoring has been successfully built into curriculum at the graduate and undergraduate level. For example, research methodology courses as a resource for extending students' learning from theoretical to experiential (5).
- Mentorship can be built into supervisory relationships when mutually beneficial partnerships are established

through the careful selection of a thesis supervisor and the explicit acknowledgement of mentoring as a goal of the relationship (3). Although not all supervisory or advisory relationships in such settings are mentoring relationships, they present consistent opportunities for mentorship.

Mentorship can be offered through special training programs or fellowships, both short and long-term. For example, the Community and Population Health Research Training Program is a CIHR-sponsored fellowship program for masters and doctoral students that incorporates mentoring into specialized training in population health for two or four years respectively (See: www.cphr.ca). An example of short-term mentorship built into a specialized training program is the Coalition's Summer Institutes

(See: www..ccghr.ca/default.cfm?content=si&lang=&sub nav=summer_institute)

The summer institutes bring dyads of new global health researchers together to develop skills, share experiences and work with mentors around the challenges and logistics of translating their research into action.

Mentoring is also key for new faculty or faculty new to a particular field and has been shown to positively affect scholarly productivity (6, 7). In faculties with strong infrastructure and demonstrated research experience, an internal mentoring program may be an effective strategy for introducing new faculty to the department and strengthening their experience and capacity in research. In settings experiencing a lack of resources, including experienced senior faculty, external mentors can serve a critical role in building the research capacity and portfolios of new faculty (8).

Mentoring to Build Leadership Capacity

Leadership is critical to the sustainability of any discipline. Leadership development can play an important role in strengthening the capacity of individuals, groups and organizations to engage in high quality, rigorous research and translate or apply their research in meaningful ways. Leaders in global health research come from a variety of settings and are producers and users of research who advocate for research translation in ways that contribute to greater health equity.

Leadership qualities that are important for building capacity include (2):

- Passion for the vision or mission of the group.
- Possessing integrity.
- Ability to build relationships.
- Capacity to empower others and be empowered by others.
- Commitment to life-long learning.

In the context of global health research, leadership is also needed for strengthening national and international health research systems. As national health research systems are strengthened, countries develop the capacity to create and sustain human resources for health research (9). Competent leaders energize and mobilize the system so that health and health research become a priority for national and international policy makers. This requires specific leadership skills and competencies that are not always addressed in graduate programs focusing on health research, such as (9):

- Strategic planning
- Research priority setting
- Knowledge management
- Advocacy and demand creation
- Consensus building and negotiation
- Partnership building
- Communication and networking
- Financial management
- Systems performance assessment
- Resource generation

Both formal and informal mentoring is an important resource for developing these kinds of leadership skills in both health care and policy settings. In a cross-country survey of hospital and health-system chief executive officers, 73% of the 844

respondents reported that they'd had an informal mentoring relationship. The survey also revealed a direct, positive relationship between past experience with mentoring and executives' prioritization of leadership development practices. The authors suggest partnership between health care organizations and universities to "...foster collaborative creation, development, and delivery of research-based leadership development initiatives within those health care organizations striving to develop both new and existing leaders..." (p. 506) (10). Mentorship is recommended as a strategy for this leadership development and as a tool for addressing homogeneity in gender and race among leaders in the health field (10).

An example of the use of mentorship in health policy settings is the Health Policy Fellowship program offered by the North Carolina Center for Nursing (11). The program offers fellows a practicum focused on the major aspects of state-level health policy with emphasis on the role of the nurse leader. Novice nurses in the field of health policy are exposed to experienced mentors with diverse backgrounds as a method of developing leaders in health policy. For one fellow in the program, the mentorship contributed to professional growth and deepened understanding of the policy context, including who the key players were and how they were able to influence policy. This is a practical, applied example of a formal mentoring program that contributes to building leadership capacity in the context of health policy.

Exercise 1: Consider Newman's description of capacity building.

- 1. Do you think Newman's description captures what you understand capacity building to be? How so?
- 2. How does Newman's model for Catalytic Capacity Building apply to the context of global health research generally?
- 3. How does the model apply within your own work or learning environment?
- 4. How are the different players of the model (learning leaders, peer networks, accessible experts, coaches and mentors) reflected in your own work or learning environment? Is there a group that is under or over-represented?

Mentoring to Build Sustainable Capacity

These modules explore mentorship as a resource for building capacity in global health research. Creating a supportive community of learning and a culture of mentorship is an investment that requires sustainability. In the context of global health research, sustainability means that the development and enhancement of infrastructure and resources for research are continuously fostered. For the purposes of these modules, a 'culture of mentorship' involves the presence of a number of different elements drawn from the mentorship literature.

A culture of mentorship exists when:

- Mentoring is present in multiple forms, including indirect mentorship.
- Mentorship is easy to engage in (as either a mentor or mentee).
- Mentorship is evaluated and reflected upon, both within individual mentoring relationships and more generally as a group.
- Mentorship is incorporated into the goals and objectives of the group.
- Mentorship is engaged in with a specific intent.
- Mentorship is part of the systemic and social infrastructure of the group.

Perhaps the simplest argument for how sustainability is built through mentorship is the evidence demonstrating the resonance that tends to be created through engaging in mentoring. Numerous studies show that individuals who are mentored at an early point in their career are more likely to become mentors themselves (12, 13).

Mentoring relationships can also evolve into long-term collegial relationships and research partnerships that demonstrate sustainability. Kochan and Trimble reflect on the evolution of their mentoring relationship, from mentor-mentee to collaborative co-mentoring as a form of continuous learning and personal and professional growth (14). Short-term mentoring can engage individuals from across a spectrum of experience and skill development to strengthen capacity at multiple levels within a profession. For example, mentoring has been used

incorporated into clinical settings as a resource for building leadership, enhancing student experiences, and fostering collaboration (15).

A number of global institutions, including the World Health Organization and the Global Forum on Health Research, acknowledge the need for sustainable health research systems supported by the creation and continuous improvement of human and physical resources (1, 9, 16, 17). In many countries, particularly lower-middle income countries (LMIC), "the process of embedding research into...health systems requires competent indigenous scientists and a strongly supportive and enabling environment that will allow research communities to grow and deliver research goods that contribute to the health of the public" (p. 764) (9). In most LMIC, the investment in health research is small. The settings in which capacity for health research is most needed are therefore faced with the challenges of producing and sustaining a base of both human and physical resources with very few resources. Efforts to build sustainable capacity need to occur at multiple levels and through both short and long-term strategies. Graduate education, fellowships, and other training programs are important resources for building the capacity among individuals and mentorship has a key role to play in each (9).

One example of how mentoring programs are being used as a tool for building capacity is Thailand's International Health Policy Program—a collaborative program of the Thai Ministry of Public Health and the Health Systems Research Institute. The program includes health policy and health systems fellowships and apprenticeships with senior researchers and policy analysts (18). Another example offered by Lansang and Dennis comes from India, where a series of action-research workshops with community-based organizations is part of a co-learning process between these organizations and civil society groups (9). Both examples demonstrate how mentorship is contributing to strengthening the capacity of individuals working in resource-constrained settings to meaningfully engage in applied research in a sustainable way.

Exercise 2: Consider the qualities and skills needed for learning leaders in global health research.

- What other qualities or skills are important for emerging leaders to develop in the context of global health research?
- 2. How can these skills be fostered?
- 3. What learning environments contribute to developing these skills or qualities for new researchers in global health?
- 4. What resources are available or lacking in your work or learning environment for people whishing to developing these qualities or skills?

Exercise 3: Consider the role mentorship plays in contributing to leadership development, research capacity, and sustainable capacity.

- 1. What personal examples have you had experience with that demonstrate an application of mentorship to building capacity, fostering leadership development or contributing to sustainability?
- 2. Why are these three 'mentorship-for-what' (leadership development, building research capacity, and building sustainable capacity) important for global health research?
- 3. Do you have access to mentorship or participate in mentorship that you feel strengthens research capacity, builds sustainability or fosters leadership development?
- 4. Using Newman's model, examples of key 'catalytic people', and strategies for spreading new ideas to discuss how these examples of mentorship for capacity building could be enhanced in your work or learning environment (Note: It may be helpful to access Newman's full report for a more in-depth discussion of the model and the process of catalytic capacity building).

Variation for groups: As a group, discuss the questions provided in exercise two.

- 1. In groups of 3-5 and using a copy of Newman's model, map out how leadership development, building research capacity, and building sustainable capacity for global health research are currently working in your work or learning environment by identifying strategies, programs, individuals or groups that facilitate each.
- 2. Ask the group: Does mentorship appear? If not, where could it be incorporated? On a new copy of the model, identify players who could contribute to the roles of learning leaders, peer networks, accessible experts, coaches and mentors. What strategies, programs, individuals or groups (internal or external) could facilitate each? What resources are needed to start the process of catalytic capacity building?

Recommended Reading

A complete list of references used to create this module is provided below. These three resources were particularly useful, however, and may be helpful to groups who wish to do further reading and reflection on mentorship in their institution or organization.

- 1. Deconstructing the mantra of mentorship: In conversation with Phyllis Noerager Stern Janice Morse (2006). Janice Morse sits down with Phyllis Noerager Stern, a recognized and well-respected mentor in nursing, to discuss what mentorship means, what makes a good mentor and what kinds of mentorship have been influential in Phyllis' career. This is a refreshing and informal article that offers excellent, concrete examples of direct, collegial and indirect mentoring. The conversation between these two prominent women explores mentorship across the lifespan of a career, offering an insightful and valuable foundation for applying some of the concepts discussed in these modules.
- 2. Building capacity in health research in the developing world Mary Ann Lansang & Rodolfo Dennis (2004). Though this article does not focus directly on mentorship, its discussion of why and how capacity for health research should be developed in LMICs is thorough and practical. The authors incorporate examples throughout, including two visual models exemplifying efforts to build research capacity from local to global levels. The article touches

on a number of important ethical concerns in building sustainable research capacity among LMICs, particularly the potential for brain drain. Also of interest in this article is the exploration of national research systems. The article is useful for individuals or groups working to address the challenges of building sustainable capacity in resource-limited settings.

Built to change: Catalytic capacity-building in 3. nonprofit organizations Audrey Newman (2001). This sabbatical report is an intriguing, thought-provoking and practical resource for individuals and groups interested in building capacity to consider. It is somewhat informal and incorporates many personal reflections of her time spent exploring how capacity building for conservation in the Asia-Pacific region could be stimulated and sustained. The document integrates the experience of a number of non-governmental organizations and activist groups with reflections on literature, interviews and other creative research approaches to offer readers a conceptual model of catalytic capacity building immersed in a review of best practices. This is a highly recommended resource, particularly as groups attempt to establish mentoring programs and create an environment of continuous learning.

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