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HEALTH FORUM

STUDENT VOICES 3

Advocating for Global Health through **Evidence, Insight and Action**

Student Voices 3: Advocating for Global Health through Evidence, Insight and Action

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Cover photo by UNICEF/Noorani, 2008. A mother with her infant child in Burma.

About the McMaster Health Forum

For concerned citizens and influential thinkers and doers, the McMaster Health Forum strives to be a leading hub for improving health outcomes through collective problem solving. Operating at the regional/provincial level and at national levels, the Forum harnesses information, convenes stakeholders, and prepares action-oriented leaders to meet pressing health issues creatively. The Forum acts as an agent of change by empowering stakeholders to set agendas, take well-considered actions, and communicate the rationale for actions effectively.

Preface

Global health efforts must be informed by the best available evidence and most creative insights. Today's students have an important role to play in this enterprise for both their innovative ideas and future leadership of the global health sphere.

This edited volume offers a student perspective on five pressing global health issues: surgical care; neglected tropical diseases; peak oil and sustainable energy; childhood obesity; and childhood pneumonia. Each chapter explores the global political context in which decisions on the particular health topic of focus are made, identifies prevailing trends in the issue area, and considers advocacy strategies that concerned stakeholders can adopt to catalyze action. Specifically, each chapter examines the:

1. nature of a particular global health challenge;
2. policy options that have been proposed to help address it;
3. global decision-makers with the power and influence to enact the desired policy changes;
3. reasons why global decision-makers may not have implemented the desired policy changes;
4. potential obstacles for policy change and how they can be overcome;
5. natural advocates for the identified policy changes and their strengths and weaknesses;
6. potential advocacy partners with complementary interests;
7. practical advocacy strategies most likely to influence those global decision-makers with the power to effect he desired policy changes; and
8. the resources needed to pursue the identified advocacy strategies; and possible indicators of progress and success.[1]

The authors are all students at McMaster University who prepared these essays for a fourth-year undergraduate course on Global Health Advocacy (HTH SCI 4ZZ3) that was offered from January to April 2011 by the Bachelor of Health Sciences (Honours) Program in collaboration with the McMaster Health Forum.

Through this publication, it is hoped that these students can help shape some of today's leading debates in global health as they prepare themselves to confront tomorrow's greatest challenges.

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December 2011

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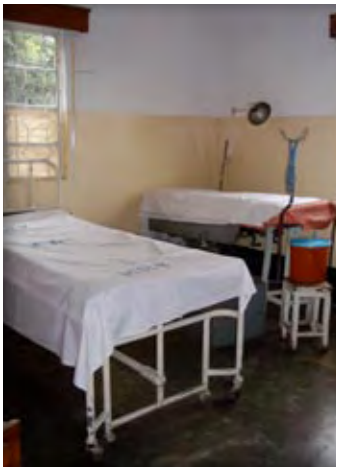
* For more information on this advocacy planning framework, see: PATH. 2009. Advocacy to Improve Global Health: Strategies and Stories from the Field. Seattle, Washington: PATH. http://www.path.org/files/ER_advo_wrkbk_stories_field.pdf.




AIDS HAS NO CURE
PROTECT YOURSELF
USE CONDOMS

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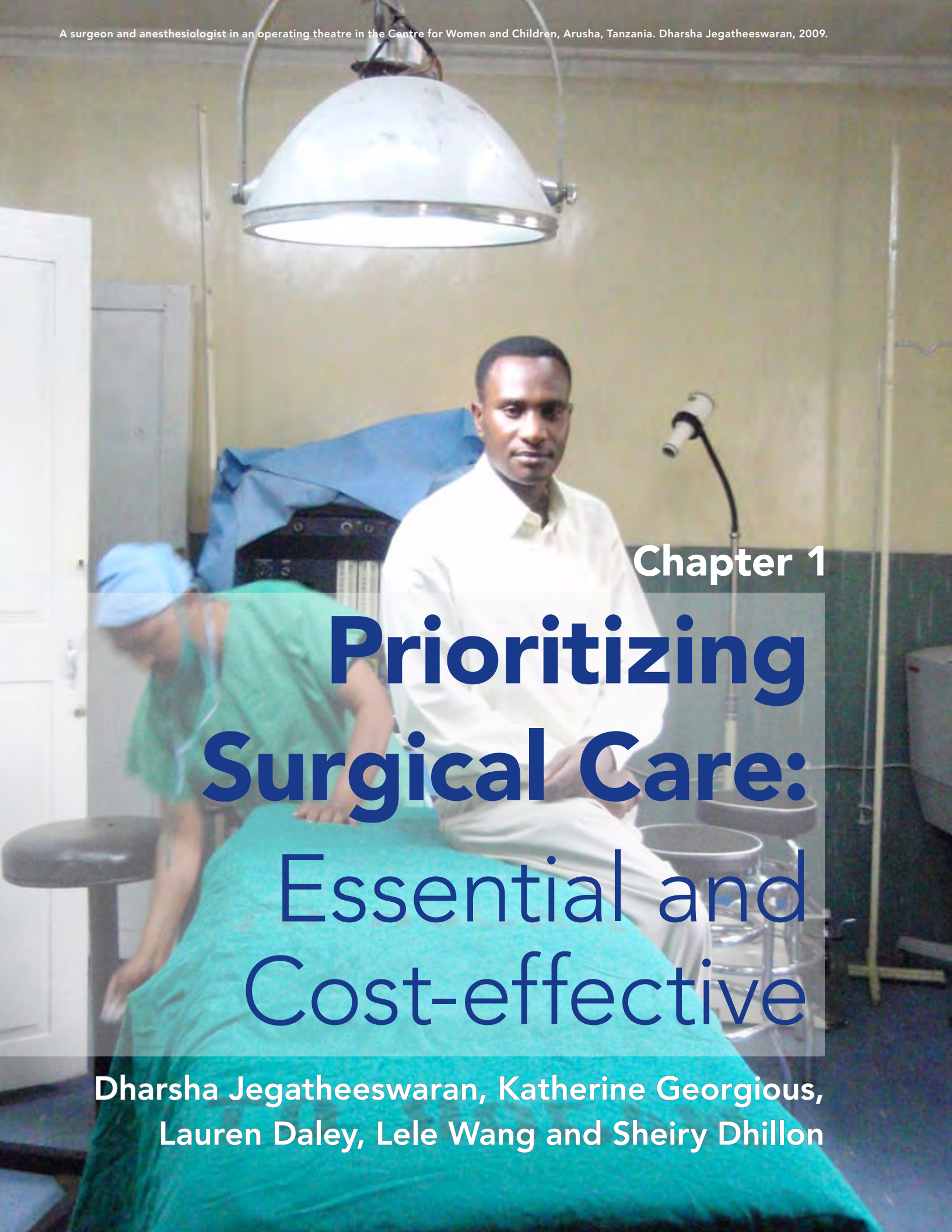


A surgeon and anesthesiologist in an operating theatre in the Centre for Women and Children, Arusha, Tanzania. Dharsha Jegatheeswaran, 2009.

Chapter 1

Prioritizing Surgical Care: Essential and Cost-effective

Dharsha Jegatheeswaran, Katherine Georgious, Lauren Daley, Lele Wang and Sheiry Dhillon

Abstract

Background: Surgery is often misinterpreted as tertiary and non-essential in a developing world context, despite evidence suggesting its high impact and cost-effectiveness. The current global health landscape predominantly focuses on addressing communicable diseases, and there is a need for active prioritization of surgery on the global health agenda. Barriers to achieving this prioritization include a lack of information on access, coverage and indicators of progress, as well as shortages in resources and infrastructure devoted to surgical interventions.

Methods: A literature search was conducted using several databases and organizational websites of vested bodies. Information was synthesized to create a strategic advocacy plan for this issue area.

Plan of Action: The proposed advocacy strategy encompasses five components: 1) a Coalition for Global Surgery; 2) an online forum; 3) a collaborative spotlight series; 4) a summit for global decision-makers; and 5) a dual call to action. The outlined strategy aims to engage several key players including non-governmental organizations, national governments, academic institutions and individual champions, in hopes of placing pressure on global decision-makers to prioritize surgery.

Outcomes: The intention is to unify advocacy efforts by engaging appropriate players in top-down and bottom-up initiatives in hopes of promoting collective action so surgery gains momentum on the global health agenda.

Global Surgery at a Glance: Nature of the Issue

Surgery is an essential component of health systems, yet it is significantly neglected in global public health.[1] Estimates suggest that 11% of the global burden of disease is associated with a lack of surgery; this total is composed of injuries (38%), malignancies (19%), congenital anomalies (9%), complications of pregnancy (6%), cataracts (5%), and perinatal conditions (4%).[2] The regions most significantly impacted include sub-Saharan Africa, Asia and Latin America.[3]

Despite recent data released by the World Health Organization (WHO) and the World Bank documenting the cost-effectiveness of essential surgical care, it is continually seen as a superfluous commodity in the context of resource-poor settings.[2] Additional obstacles in furthering global surgery include the absence of data, a lack of human and infrastructural resources, and the priority placed on other competing diseases, such as HIV/AIDS, tuberculosis and malaria.[1]

Policy Options: How to Address the Issue

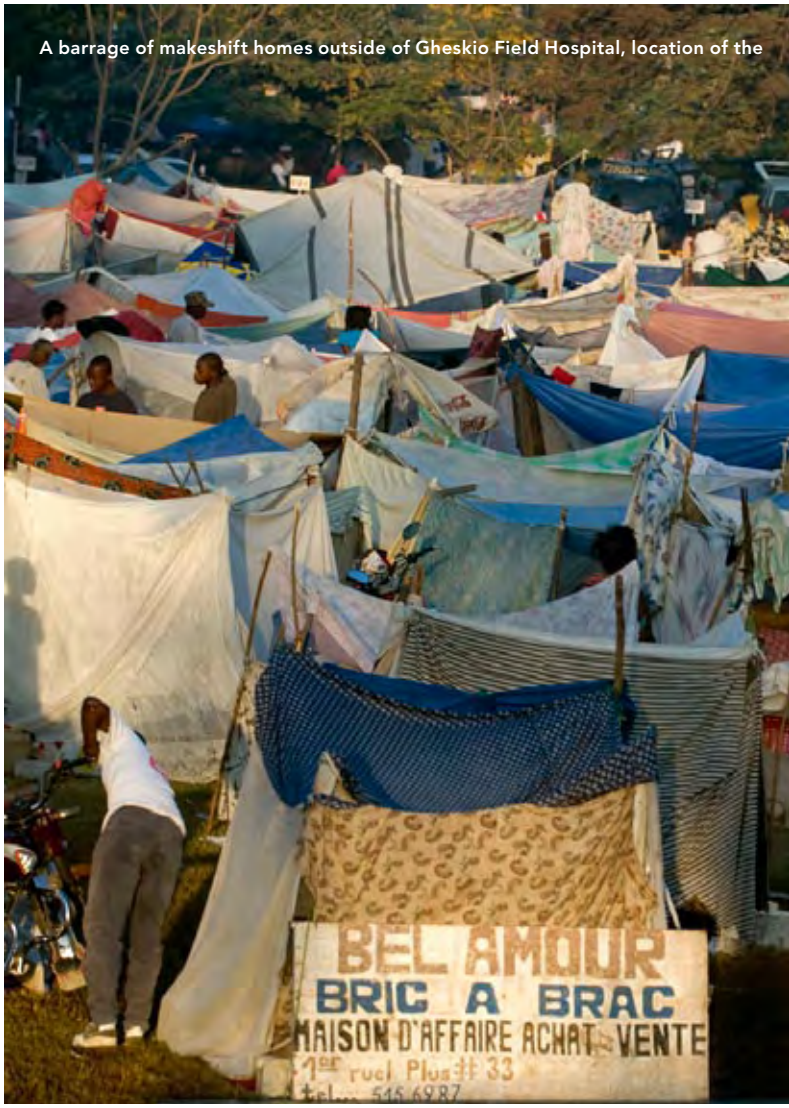
Potential policy options addressing global surgical disease burden range in scope and aim to increase access to information, resources and funding for surgery. Emerging trends in the literature suggest task shifting, external professional contracting, and international academic partnerships are effective strategies for addressing the shortage of skilled professionals able to deliver surgical interventions.[4-6] Strengthening research capacities is also considered integral for understanding the status quo and future directions to improve surgical care.[1] Advocates are also urging public funding of an essential basket of cost-effective surgeries to aid the least-developed countries, as a means of achieving universal access to basic surgical care.[3]

Global Decision-makers: Where the Power and Influence Lies

Advocacy strategies must be targeted towards key global decision-makers with the power to prioritize surgery on the global health agenda. The WHO is one such decision-maker, as it helps set global health priorities which then may be adopted by individual countries.[7] Other key global decision-makers include funding bodies such as the Bill & Melinda Gates Foundation and international development agencies. Funding is an extremely effective way to prioritize an issue, and unlike HIV/AIDS or malaria, there is currently no large-scale funding body that supports surgery as a priority.[3] National governments are also key decision-makers in the global health system, as they are the bodies directly responsible for implementing any policy options that increase access to surgery. It is also important to consider increasing standards of existing surgical care and setting measurable indicators of progress.[8] Therefore, key global-decision makers also include independent research bodies and health professional associations. Each of these bodies can significantly raise the priority of surgery by increasing access to information, standards and guidelines for surgical interventions.

Global Decision-makers: Barriers to Action

Surgery is often a low priority on the global health agenda because it is misconstrued as a "luxury" that is only cost-effective for high-income people.[9] In low- and middle-income countries (LMICs), globally-financed health efforts commonly target communicable diseases because they are seen as urgent public health issues.[3] Since surgical diseases are non-communicable, surgery is often perceived as tertiary in comparison to the "big three" (i.e., HIV/AIDS, tuberculosis and malaria).[3]



A barrage of makeshift homes outside of Gheskio Field Hospital, location of the

High costs and infrastructure requirements for surgery require greater changes in comparison to vaccination and access-to-medicines programs.[9] Global decision-makers are further reluctant to prioritize surgery because it is a broad discipline that touches upon many health sectors: maternal health, trauma, complications from infectious diseases, etc. Thus, it is difficult to achieve consensus on the definition of "essential surgeries" and the global burden of surgical disease.[1] Provision of surgery is further complicated by the shortage of specialized human resources in LMICs.[4]

In addition, data on surgical disease burden is insufficient and the shortcomings are two-fold.


International Medical Surgery Response Team. Joshua Lee Kelsey, 2010.

There is both minimal information on access to and coverage of surgical care, as well as unclear indicators to measure progress of surgical disease burden, leaving decision-makers reluctant to implement policies.[1]

Policy Implementation: Potential Challenges and Solutions

Policy options for increasing access to surgery are often difficult to implement due to ethical concerns, opposition from medical professional organizations, and a lack of health infrastructure.[3-4,10] Allowing low- or mid-level healthcare providers to perform surgery is often viewed as unethical and sub-standard, especially given the comparatively little training these workers receive.[4] This could be overcome by having national governments adopt the standards and guidelines put forward by the WHO initiative for essential surgeries.[11] Medical professional associations present another obstacle to policy change for surgery through their opposition to task-shifting. For example, in Tanzania physician associations view task-shifting as threatening to their professional autonomy.[10] In order to gain their support for policies like task-shifting, medical professional groups should be incorporated into the policy change process and given job security. Challenges to policy change may also arise from the lack of infrastructure in many developing countries, which can be overwhelming for decision-makers.[3] In order to increase access to surgery, it is first necessary to have physical resources for establishing surgical facilities and human resources to staff hospitals and provide care.[3] However, policy options could be implemented in conjunction with current initiatives for health systems strengthening to minimize this challenge.

Natural Advocates for Surgery: Those Invested in the Cause

Natural advocates for raising the political priority of surgical care on the global health agenda may include working groups, academic institutions, non-governmental organizations (NGOs) and specific individuals who are presently invested in surgery.

Working groups are effective natural advocates because they offer a collaborative voice to a specific cause. For example, the Alliance for Surgery and Anesthesia Presence (ASAP) Today, brings attention to the role of anesthesia and surgery in resource-limited settings, while the Global Surgery Research Alliance emphasizes strengthening research capacities.[12-13] Though each working group has an effective presence in its respective niche, an inherent

Dental surgery being performed in Mazini, Swaziland.
U.S. Army photo, Air Force Staff Sgt. Lesley Walters, 2009.

weakness is the minimal coordination among working groups and other actors.[8] This ultimately dilutes the overall strength of their advocacy efforts.

Academic institutions can also act as natural advocates for this cause. For instance, the Centre for Surgery and Public Health in association with the Brigham and Women's Hospital is acknowledged globally for its innovative initiatives in surgery and strengthening research capacities.[14] However, academic institutions often struggle with procuring funding and ensuring knowledge translation to appropriate decision-makers.[15]

Various non-governmental organizations whose missions include the practice of surgical procedures on the ground may also lend a natural voice to the cause. For example, Unite for Sight is an organization that works in Ghana, Honduras and India to mitigate the barriers faced by patients in need of cataract surgery.[16] Unite for Sight's methodology can be adapted for other surgical needs, and may be advantageous to those implementing surgical task-shifting.[16]

In considering individual advocates, it would be worthwhile to engage actors associated with well-known working groups or NGOs. Individual champions should be credible within the field of global health and support surgery in a developing world context, such as Kelly McQueen and Paul Farmer.[1,3] Unfortunately, without access to an influential medium, such as a high-profile journal or an academic institution, individuals by themselves may be limited in their ability to affect change.[15]

Advocacy Partners: Allies in the Field

Potential advocacy partners include NGOs and other civil society groups where access to surgery serves complementary goals. These can include improving maternal and child health, emergency care for victims of war and violence, access to safe abortions, and management of complications resulting from global diseases such as HIV/AIDS and tuberculosis.

Academic institutions in developed and developing countries, such as the Harvard Global Health Institute or Uganda's Makerere University, are also potential partners with similar interests to increase health data collection and build surgical human resource capacity.[17] Professional associations for surgery, anesthesiology and post-operative care are also potential advocacy partners to improve surgical access.[2, 3]

Partnering with government ministries and intergovernmental bodies, such as ministries of health and WHO, can further help promote surgery as a cost-effective health intervention supporting health systems strengthening[2]

Strategic Advocacy Plan: Prioritizing Surgery on the Global Health Agenda

The proposed advocacy strategy for furthering surgery on the global health agenda is composed of five major components: 1) create a coalition; 2) develop a collaborative online forum; 3) launch a high-profile spotlight series; 4) host a summit; and 5) implement a dual call to action.

A. Coalition for Global Surgery

To heighten political priority for surgery, it is necessary to generate actor power through networks of individuals and organizations invested in the issue.[8] These networks should include prominent leaders of international NGOs, government officials, bilateral donors, academics and members of UN agencies.

Currently there are many dispersed actors in the field of surgery: the Global Surgical Consortium, ASAP Today, Global Partners in Anesthesia and Surgery, United Surgical Partners International, Global Surgery Research Alliance, WHO Global Initiative for Emergency and Essential Surgical Care (GIEESC), etc. Though many of these actors are informally partnered with one another, this plan proposes unifying these individual organizations into a single coalition. The coalition, which could be called the Coalition for Global Surgery, would concentrate the voices of prominent advocates, centralize the top-down advocacy approaches, and increase communication of global advocacy efforts. This would place greater political pressure on global decision-makers to prioritize surgery on the global health agenda.[8]

Previous coalitions leading advocacy efforts, such as the 1992 International Campaign to Ban Landmines, the Measles Initiative, and the World AIDS Campaign, generated global attention to their respective issues and resulted in action by global decision-makers. [18-20] Similarly, the Coalition for Global Surgery can act as a notable presence to champion surgery in global health and coordinate efforts to prioritize surgery on the global health agenda, including the four subsequent initiatives outlined in this strategic advocacy plan. Promoting surgery through collective efforts lends momentum to the issue and can attract potential advocacy partners. Uniting large multilateral organizations, whose advisory boards include prominent public leaders, further lends credibility to global surgery; this in turn can help attract media attention and increase political and financial support.[8]

B. Online Forum for Global Surgery

In addition to coordinating high-profile actors, it is crucial to mobilize less prominent players in the global surgery sphere.[8] The Online Global Surgery Forum is a proposed medium to invite and coordinate the efforts of these groups to place pressure on the international political community. To ensure credibility of the forum and its success, it is advised that the coalition administers the initiative. Members of the forum gain approval from the administrators by demonstrating active involvement in the efforts to reduce global surgical disease burden. To reach potential advocates of surgery, the forum could be launched at a highly publicized event such as the next ASAP Today conference.[12]

Members would be asked to regularly publish updates on their work, thereby maintaining the purpose and utility of the forum. As seen in the case of Alert.net, which mobilizes humanitarian relief grassroots movements, the forum would strengthen advocacy efforts of community-based organizations.[21] One concentrated voice may provide more power than several fragmented voices.

C. Collaborative Spotlight Series

A collaborative spotlight series is a proposed strategy to highlight global surgery among the academic and healthcare communities. This global partnership of scientists would communicate evidence through an influential medium such as a high profile journal. A

Two soldiers from the Democratic Republic of the Congo carrying a patient on a stretcher to a triage tent. U.S. Army taken by Sgt. James D. Sims, 2010

A closed operational theatre in a primary health centre in Himachal Pradesh, India. Sheiry Dhillon, 2010.

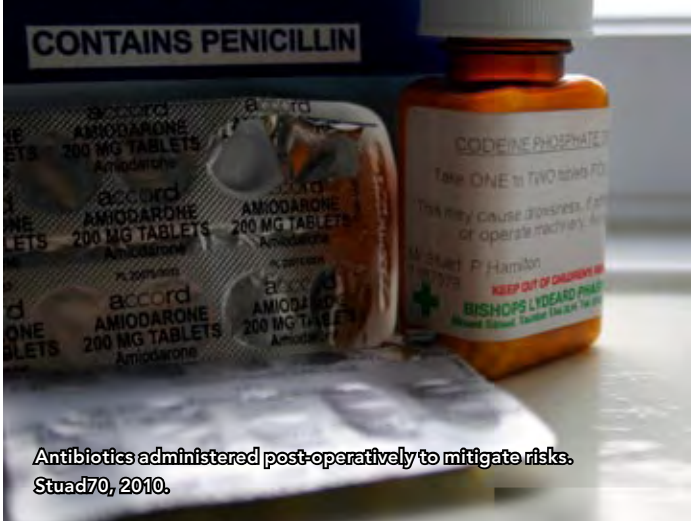
scientific journal series is often seen as an effective "tool to achieve global action" and is a powerful instrument for advocacy.[22] For instance, The Lancet is particularly successful in using spotlight series for global advocacy, as seen in the initiatives surrounding global mental health, universal access to healthcare in India, and health in the occupied Palestinian Territory, among others.[22-24]

The success of a scientific series is highly dependent on several variables including the medium of delivery, authors and content.[22] Partnership with a world-renowned journal is crucial. Possible mediums include The Lancet or the British Medical Journal. In addition to the credibility of the journal, the authors of the series must be vested experts in global surgery.[1,3] The extensive experience and "celebrity" of these leaders can increase the face validity of the initiative. Finally, the content and framing of each article in the series is vital to its success. Ensuring that each article is based on the leading research evidence and has a distinct key message, such as the cost-effectiveness of surgery, ensures that the audience trusts what it reads and receives several frames to view the issue.

D. Summit for Global Surgery

In order to advocate for the necessity of surgery to government leaders, a prominent surgical advocacy body is encouraged to host a summit for the national governments of developing countries and their respective health ministries. The purpose of this summit would be to demystify the many stereotypes surrounding surgery's impracticality and high costs. The agenda of the summit would include case studies that highlight efforts which have successfully increased access to surgery, such as Tanzania, Mozambique and Malawi's efforts to train non-physician clinicians in simple obstetrics procedure.[4] Contributions from notable academics could further emphasize the cost-effectiveness and practicality of many surgical policy options.

The anticipated obstacles of hosting a summit include ensuring adequate attendance of government



Antibiotics administered post-operatively to mitigate risks. Stuad70, 2010.

leaders and high implementation costs. These obstacles can be substantially mitigated if the summit is hosted by the aforementioned coalition. The coalition will carry the necessary credence to illustrate the benefits of attending the summit. Furthermore, if summit invitations are restricted to government leaders and the summit's speakers, the cost of hosting the summit will be low in comparison to other similar endeavors.

E. Dual Call to Action: An Integrative Top-down and Bottom-up Approach

In December 2010, WHO announced that it would discontinue funding for GIEESC, an initiative to improve the delivery of safe and appropriate surgical procedures.[25] Virtually all projects associated with the Emergency and Essential Surgical Care program have effectively been disbanded.[25] Considering the WHO's integral role in shaping global health policy, this lack of support can further diminish surgery on the global health agenda. A critical opportunity is thus presented for civil society and influential organizations vested in the cause to collectively advocate and strengthen global surgical capacity.

A dual call to action directed towards Margaret Chan, director-general of WHO, is recommended to place pressure on WHO to reinstate funding for GIEESC. A partnership should be formed with an organization aimed at raising awareness about pressing global issues while also engaging regular citizens to support these issues. A high profile web-based network, such as Avaaz.org, is a potential partner to mobilize this component of the dual call to action. [26] In the past, Avaaz has successfully

mobilized public support for lower profile causes such as the Canadian Access to Medicine Regime amendment. [26]

The second tier to this approach would be the Coalition's release of a complementary statement illustrating the importance of WHO's support in global surgery. This represents a top-down approach to emphasize GIEESC's role in establishing a position for surgery on the global health agenda.

Strategic Advocacy Plan: Necessary Resources

Intellectual and reputational resources are the primary assets needed to ensure the success of this advocacy strategy. The crux on which this plan rests is the successful formation of the Coalition for Global Surgery. This requires the willing participation of prominent members of academia, NGOs and other leading global health actors in the field of surgery. The coalition's members must in turn provide time, funds and human resources to ensure the coalition's sustainability. The resources that will go into the coalition are similar to those required for the online forum, the dual call to action, and the collaborative spotlight series. The forum requires funds for implementation and maintenance of a website, as well as time commitment from its members. The dual call to action requires a partnership with an online advocacy forum like Avaaz, and support from notable advocates to attract the attention of WHO. The spotlight series will need the support of a prominent health journal, and a commitment from academics to contribute to the series.

With the success of the Coalition, resources must then be put forward to host the summit. Academics, surgery advocates and governments that have successfully implemented surgical policy options must be recruited. Funds must be procured to host the summit, provide accommodations, transport all necessary guests, and provide security for the participants. Media must be attracted to the summit so that government pledges are well publicized, and leaders are held accountable for any promises they make.

Tracking Change: Indicators of Progress

Documenting progress in the proposed advocacy initiatives will stimulate continued efforts to promote global surgery and increase momentum towards its prioritization. Increased awareness for surgery can be measured by the number of organizations registered on the online forum, the number of articles published in peer-reviewed journals, and how often the media reports on the issue in news outlets accessed by the general public.[27] Similarly, public statements or references to an issue made by global decision-makers can serve to evaluate political interest for global surgery.[27] Finally, the reinstatement of funds for GIEESC, adoption and development of guidelines to improve surgical access at both national and international levels, and increased funding for surgery by national governments, can demonstrate political support for global surgery.

Actionable Key Messages

✏ Unifying dispersed natural advocates in surgery enables concentration of advocacy efforts and recognition on a global scale by means of an online forum and a coalition.

✏ The integration of top-down and bottom-up advocacy strategies can be effective in placing political pressure on global decision-makers to prioritize surgery.

✏ Misconceptions regarding surgery's cost-effectiveness and high disease burden can be mitigated through the dissemination of information using credible mediums such as high profile journals and a summit.

In-patient beds at a primary health centre in Himachal Pradesh, India. Sheiry Dhillon, 2010.

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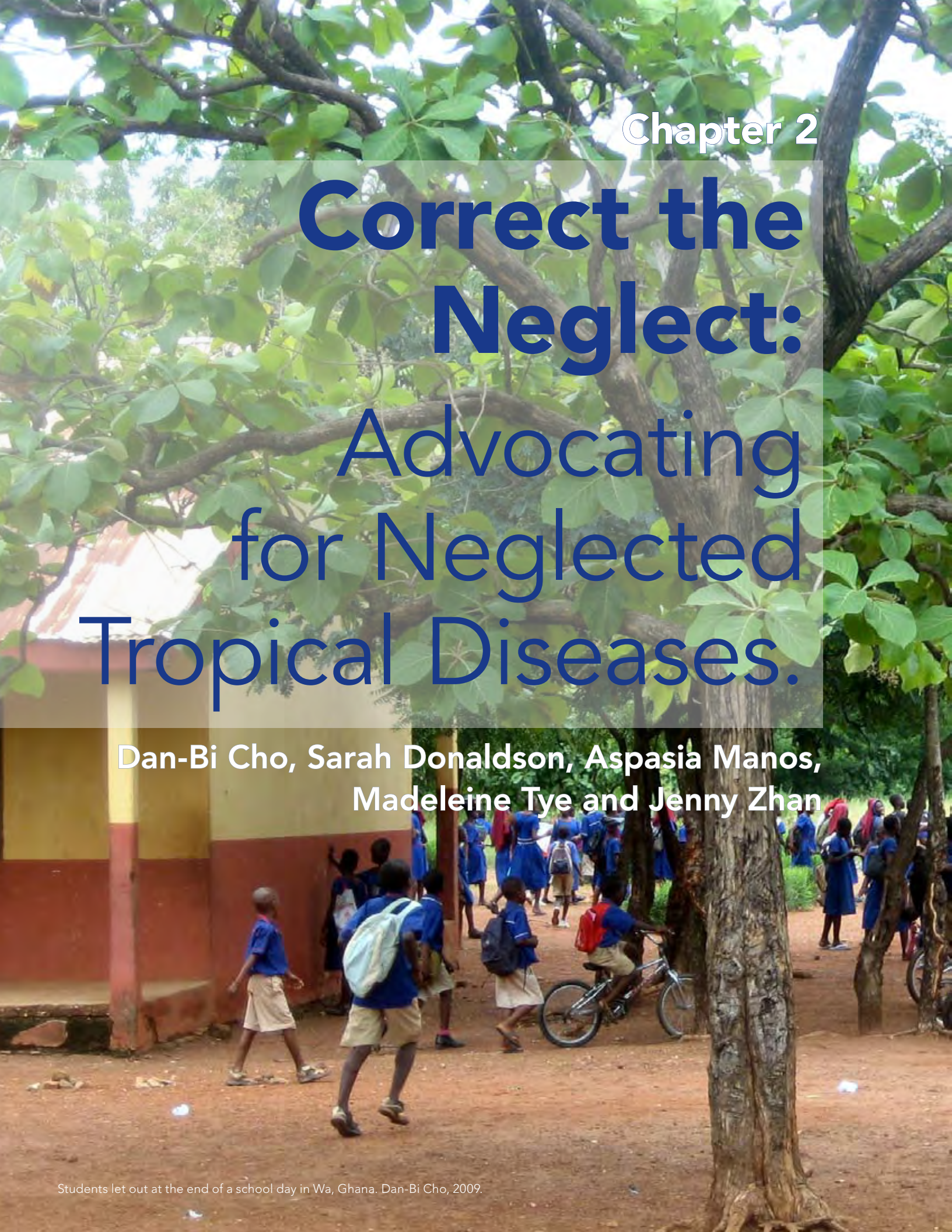
An anesthesiologist prepares twin brothers from the Dominican Republic for eye surgery. Gina Wollman, 2008.

Chapter 2

Correct the Neglect: Advocating for Neglected Tropical Diseases.

Dan-Bi Cho, Sarah Donaldson, Aspasia Manos, Madeleine Tye and Jenny Zhan



Students let out at the end of a school day in Wa, Ghana. Dan-Bi Cho, 2009.

Abstract

Background: Neglected tropical diseases (NTDs) affect more than one billion people in the poorest populations worldwide, and result in chronic disability. Efforts to address NTDs are generally eclipsed by initiatives for the "Big Three" (i.e., HIV/AIDS, tuberculosis and malaria). As such, little political attention and action have been generated to reduce the global burden of NTDs.

Methods: A review of the scholarly and grey literature was conducted, with particular emphasis on relevant policy changes and partnerships that address NTDs

Plan of Action: The World Health Organization Global Plan to Combat NTDs (2008-2015) outlines comprehensive policy options to achieve control, elimination and/or eradication of NTDs. These strategies include national government health systems strengthening, integration of vertical treatment and prevention efforts, and expanding access to NTD medicines.

Outcomes: To gather support and resources for the strategies in the Global Plan, there is a need for coordinated global efforts, innovative pharmaceutical research and development, and strong commitments from governments in both developed and developing nations. An international conference can generate collaboration among stakeholders and mobilize political commitments. The conference can also serve as a platform to launch additional advocacy efforts. Promoting the Access to Medicine Index ratings at the conference, and through the use of social media outlets, can create incentives for pharmaceutical companies to direct resources toward NTD-related efforts. A call to action can be initiated at the conference to demand accountability from the G8 in meeting its declared commitments to control or eliminate NTDs.

Keywords: Neglected tropical diseases, neglected diseases, tropical infections, conference diplomacy, Access to Medicines Index, G8.

Nature of the Global Health Challenge

Neglected tropical diseases (NTDs), as implied by the term "neglected," have received little attention and action from the global community.[1] NTDs cause a global disease burden estimated at 57 million disability-adjusted life years (DALYs), which is greater than that of malaria and tuberculosis (TB) combined.[2] However, NTDs received only 0.6% of total annual health official development assistance between 2003 and 2007 as compared to HIV/AIDS (36.3%), malaria (3.6%) and TB (2.2%).[2]

NTDs affect more than one billion people in the poorest populations worldwide.[3] They result from various parasitic, bacterial and viral infections, and lead to chronic disability.[3] NTDs reduce quality of education, human productivity and child survival to exacerbate the cycle of poverty.[4] It is clear that the complex nature of NTDs requires a multi-faceted approach to facilitate prioritization on the global health agenda.

Policy Options to Address NTDs

Currently, actors in the field of global health working to reduce the burden of NTDs are pursing different policies to achieve their diverging agendas and objectives.[5] The World Health Organization (WHO) Global Plan to Combat NTDs (2008-2015) (herein referred to as the Global Plan) has the potential to unite all stakeholders with a common understanding of the measures necessary to reduce the burden of NTDs. The Global Plan outlines innovative strategies that ensure cost-effective and sustainable control for 20 NTDs.[6] Collaboration among global decision-makers, national governments, and academics is necessary to mobilize support and resources for the following policy options identified in the Global Plan:[5]

1. **Engaging national health systems** to promote health systems strengthening as well as establishing support for sustainable, effective NTD control programs;

2. **Integration of vertical disease treatment and prevention efforts** to ensure cost-effectiveness, and to target populations suffering from multiple, overlapping NTDs;
3. **Intersectoral approach to NTD control** involving education and employment sectors to alleviate poverty, and environmental sectors for vector control;
4. **Expansion of affordable medicine coverage** through public-private partnerships (PPPs) for seven treatable NTDs;
5. **Research and development of cost-effective diagnostic tools and medicines** for NTDs that remain untreatable;
6. **Intensified surveillance efforts** to identify and quantify the burden of NTDs for effective mass drug administration and efficient resource distribution.

The comprehensive nature of the Global Plan provides a firm foundation to direct advocacy efforts for NTDs.

Global Decision-makers with Power to Enact Policy Options

The success of advocacy efforts is highly dependent on decision-makers with the power and influence to enact the policies outlined in the Global Plan.

WHO has taken a visible and proactive role in directing efforts to reduce the burden of NTDs through the Global Plan. Although it lacks the capacity to enforce policy, WHO provides the institutional resources to coordinate and monitor the actions of global stakeholders.[7] Therefore, it will be imperative to engage WHO as a leader in the proposed advocacy strategies.

Since resource mobilization is a necessary step towards achieving the policy options in the Global Plan, it is important to include developed countries as decision-makers.[6] The G8 has emerged as a prominent force shaping the global health agenda, and is one of the largest funding bodies for global health efforts.[8]

Central market in Kumasi, Ghana. Dan-Bi Cho, 2009.

The political clout of the G8 is necessary to direct resources and monetary support for the Global Plan policy options.

The realization of policies outlined in the Global Plan also depends on the efforts of developing countries. The leaders of nations with the highest burdens of NTDs must commit to efforts for health system strengthening, as emphasized in the Global Plan. Enacting policies for treatment, prevention and diagnosis of NTDs in the context of each national government's health system ensures sustainability.[4, 6]

Reasons for Lack of Policy Implementation

The international community has failed to take action to address the burden of NTDs for a number of reasons. NTDs overwhelmingly afflict impoverished, rural populations where there is less

medical and media attention.[4] Thus, NTD-impacted populations are often invisible.[4]

Efforts for NTDs are generally eclipsed by the "Big Three" diseases: HIV/AIDS, TB and malaria. Unlike the Big Three, the burden of NTDs cannot be accurately represented using a death toll. Rather, NTDs are commonly measured in DALYs.[9] NTD infection results in chronic disabilities such as blindness, limb deformities and impaired cognitive development.[1] Given the chronic nature of NTDs and the relative invisibility of afflicted populations, the diseases are not viewed as requiring an urgent response from policymakers when compared to the Big Three.

There is a lack of sufficient evidence to inform policy changes pertaining to NTDs. Further research is required to gather epidemiological data such as number of individuals afflicted with NTDs, disease patterns and prevalence rates.[9]

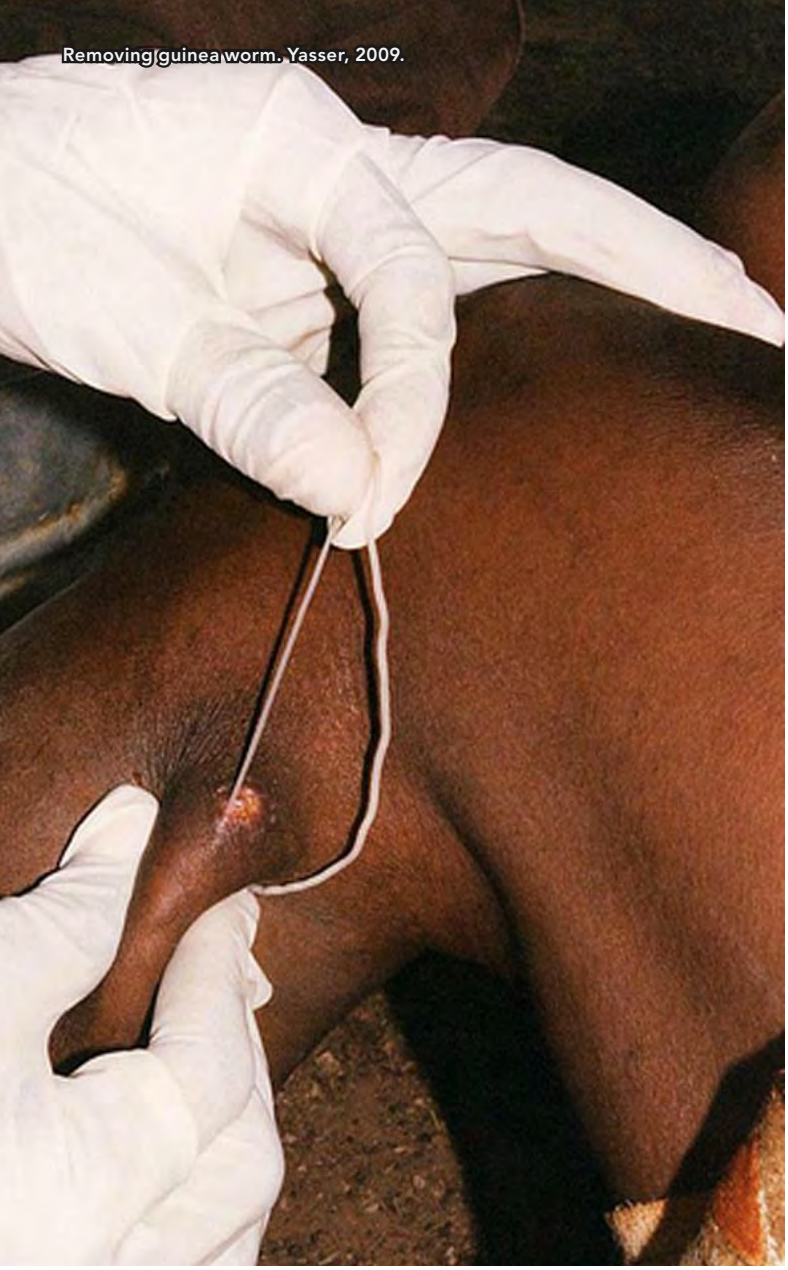
Finally, a lack of international consensus on what diseases are classified as NTDs has hindered the progress and integration of NTD efforts.[9] The 2010 WHO First Report on Neglected Tropical Diseases classifies 17 diseases as NTDs.[1] Other sources list as few as five or as many as 37.[2]

Potential Obstacles for Identified Policy Changes

A significant obstacle in advocating for the policy options presented in the Global Plan is the aforementioned lack of perceived urgency for NTDs. Leaders of countries where high NTD burdens exist may be apprehensive about committing financial resources due to other more visible, pressing health priorities.[2] To overcome this obstacle, it is essential to emphasize the long-term negative impact of NTDs on national development.[2] Moreover, evidence demonstrating how NTD infection can raise the risk of contracting one of the Big Three should be disseminated.[3]

There is a lack of innovative drug research, development and funding mechanisms to support the development and delivery of NTD medicines.[10-11] This deficit is largely due to the current patent system which promotes pharmaceutical research tailored towards commercial interests. Since most individuals afflicted with NTDs cannot afford appropriate medications, there are insufficient market incentives for pharmaceutical companies to invest in NTD research.[12] This obstacle could be overcome by creating incentives for pharmaceutical companies in partnership with entities such as the Health Impact Fund (HIF). HIF provides yearly financial rewards to pharmaceutical companies based on the measurable health impact of the medicines they choose to register. In exchange, these companies offer their medicines globally at the lowest cost of production and distribution.[13]

A final challenge is the coordination of efforts among various stakeholders to carry out the policy changes detailed in the Global Plan. Regular


Removing guinea worm. Yasser, 2009.

conferences will provide an opportunity for the global NTD community to harmonize activities and foster mutually acceptable goals and strategies.[5]

Natural Advocates for Identified Policy Changes

Natural advocates include academic and technical experts, pharmaceutical companies, non-governmental organizations (NGOs), vertical programs, and indices that have already declared their intentions to direct efforts to combat NTDs

The Access to Medicines Index (AMI) is a public index that expands on the individual corporate social responsibility initiatives of pharmaceutical companies through inter-company competition.[14] Participating companies are ranked by indicators of provision of medicines in 88 developing countries, including drugs for 33 NTDs. Although the tool is relatively new and non-binding, it has already engaged multinational corporations such as GlaxoSmithKline PLC and Merck & Co.[15]

Vertical programs for control and elimination such as those occurring in Ghana, Mali and Uganda have achieved significant progress in top-down NTD management.[16] However, more work is required to minimize costs and redundancies by integrating disparate programs,[17] and to create sustainable linkages with bottom-up interventions.[18]

Non-governmental organizations with advocacy objectives can galvanize the general public, provide networking opportunities for stakeholders, and raise donations. Examples include the Global Network for Neglected Tropical Diseases and the Drugs for Neglected Diseases initiative (DNDi).

Academia and technical experts such as researchers Peter Hotez and David Molyneux can generate studies that will improve the ability of global decision-makers to act on NTD-related issues. However, there is a lack of research expertise in many countries where NTDs are endemic, and limited funding for NTD research in general.[19] One major aim of the upcoming International Society for Infectious Diseases (ISID) International Meeting on NTDs will be to help resolve these shortages by raising the profile of NTD research.[20]

Pharmaceutical companies such as Pfizer, Merck & Co., and Novartis AG have extensive technical expertise and are already making significant contributions to NTD drug development and coverage.[21] However, drug development is time consuming, expensive and high risk, particularly for diseases with limited market appeal in developed countries.[22] The formation of public-private partnerships (PPPs) has somewhat helped to mitigate this weakness by providing increased incentives for pharmaceutical companies to invest in NTD research.[23]

Potential Advocacy Partners with Complementary Interests

Potential advocates for NTDs include prominent individuals or groups whose current work in global health promotes policies and activities that can contribute to NTD advocacy efforts, but who have yet to declare formal interest in NTDs.

Advocates for the Big Three may have a particular interest in NTD reduction as NTDs share the same vectors, and increases susceptibility to HIV/AIDS, TB and malaria.[16] Since the policy solutions necessary to address the Big Three and NTDs coincide, advocates for the Big Three would be natural partners in NTD-related advocacy efforts. One major potential partner is the Global Fund for HIV/AIDS, Tuberculosis and Malaria (GFATM).

Partners in water and sanitation can promote public awareness of NTDs in affected communities concurrent with vector control initiatives. Organizations such as PATH and the United Nations Development Programme can explicitly highlight NTD infection as a disabling consequence of poor sanitation.

Celebrity advocates with ties to global health advocacy initiatives, such as K'Naan and Youssou N'Dour, may help to improve media coverage and political prioritization of NTDs.[24-25, 39]

Practical Advocacy Strategies

Advocacy efforts for NTDs should mobilize the support and resources necessary to promote policy options described in the Global Plan. An international conference can instigate advocacy efforts for NTDs and can further serve as a platform to launch at least two additional advocacy strategies: the promotion of the AMI ratings and a call to action for the G8.

A. WHO-ISID Conference

Rationale: NTDs have received little media and political attention.[1] Furthermore, efforts to reduce the burden of NTDs have been largely unsuccessful because they are fragmented and lack global leadership.[18] An international conference provides an opportunity to foster leadership, increase collaboration and attract media attention.[26]

A biennial NTD international meeting is hosted by ISID.[20] If the WHO were to be a co-host, it would increase mobilization of high profile actors and in turn, attract more media attention to advocate for progress in dealing with NTDs. However, the term 'meeting' implies exclusivity. Changing 'meeting' to 'conference' eliminates any connotation of exclusivity and has the potential to appeal to a wider variety of stakeholders.

Keynote speakers could include Dr. Peter Hotez, a prominent academic and advocate for NTDs. He can frame NTDs as an economic issue that has a negative impact on human productivity and national development. This approach could be a more effective way of engaging political leaders, rather than framing NTDs as a human rights issue.[4, 27]

This WHO-ISID conference can also be used as a platform to assemble a concerted, collaborative approach for policy options outlined in the Global Plan. It is necessary to establish a consensus on the definition of NTDs.[5] Establishing what diseases are included under the term "neglected tropical diseases" is an essential step to propel global collaboration among stakeholders. Invited actors include national governments, donors, international agencies, academic institutions, pharmaceutical companies and non-governmental organizations.[28]

One desired outcome of the conference is a consensus statement on the definition of NTDs, as mentioned above. Another outcome could be a declaration statement to be signed by national leaders. This statement will formalize a commitment to policy changes that reduce the burden of NTDs, as established in the Global Plan.

All part of a day's work – women carrying firewood in Wa, Ghana. Dan-Bi Cho, 2009.

Evidence has identified the limitations of conference diplomacy.[29] International conferences have been accused of increasing hype without generating sustained attention. Hosting a biennial conference may prevent the issue from falling off the agenda of stakeholders. Moreover, the conference can serve as a launching platform for the following advocacy strategies to increase the visibility of NTDs on the global health agenda.

B. Promoting the AMI Ratings

Rationale: Pharmaceutical companies lack accountability to NTD-afflicted populations as demonstrated by the need for more research, development and dissemination of NTD drugs.[11] The AMI is a corporate social responsibility tool that is used to rank pharmaceutical companies for their participation in research and development, philanthropy, and pricing of NTD medicines.[15] Awareness of its findings must be increased within the general public, who are the consumers and shareholders of pharmaceutical corporations.

Public awareness of index findings can be promoted using social media outlets such as Facebook and Twitter. Proponents of NTD research and action, such as Bill Gates and Barack Obama, are already registered Twitter users with large numbers of followers.[30] A series of updates from these advocates concerning the index can create global awareness through accumulating re-tweets.[31] Traditional media advocacy tools such as newspapers and television can also be beneficial. Celebrities such as K'Naan and Margaret Atwood, who supported recent reforms to improve Canada's Access to Medicines Regime, can extend their endorsements to the index through publicly broadcast interviews and performances.[24]

A large well for drawing water to wash clothes in rural India. Jenny Zhan, 2009


Dengue mosquito. o5com, 2010.

A workshop on the AMI at the proposed WHO-ISID conference can build initial interest for the media campaign among the technical experts, celebrities and potential investors who attend the conference. Annual updates of the AMI ratings can be promoted at each biennial conference.

With greater awareness of AMI findings, drug consumers will be inclined to place pressure on specific corporations to contribute to the research, development and delivery of NTD medicines. In addition, technical experts and policymakers will be able to use the degree of media coverage as a tangible indicator of the public visibility of NTDs.

One potential limitation of this strategy is that there are no direct consequences for a drop in AMI rankings. However, by promoting the ratings of the AMI at the WHO-ISID conference, pharmaceutical companies will be pressured by the media and public to focus efforts on NTD medicines at regular intervals.

C. Call to Action for the G8

Rationale: The G8 has consistently reaffirmed its commitment to 'control and eliminate NTDs,' and has also established support for the strategies outlined in the Global Plan.[32-33] However, a significant number of G8 members have failed to comply with the group's commitments.[34] A Call to Action targeted at the G8 is necessary to mobilize sufficient resources to implement the Global Plan, and to set a precedent for other nations by prioritizing NTDs. This Call to Action can be achieved through two complementary strategies: (i) an international campaign designed to shame the G8 for its failure to meet its NTD-related commitments, and (ii) academic research to support the prioritization of NTDs.

The WHO-ISID conference provides an opportunity to initiate the shaming campaign. Academic NTD expert Dr. David Molyneux could deliver a keynote speech calling for increased G8 compliance for NTD-related commitments. An open letter addressed to all members of the G8 repeating Molyneux's message could be disseminated to the international press, global health bodies, and the general public. This message can serve to undermine the reputation of the G8 and generate international pressure for the group to fulfil its NTD-related commitments.

Engaging academia would establish greater credibility for the Call to Action. Advocating for the G8 to scale up actions and resources to target NTDs requires solid academic evidence. Research is necessary to demonstrate that the magnitude of NTD burden exceeds that of other global health issues. There is significant academic discourse to suggest that existing methods for evaluating disease burden result in an under-evaluation of NTDs.[9, 35-36] While the NTD global burden is often measured using DALYs, evidence suggests that DALYs do not adequately reflect the intimate association between poverty and chronic disability.[9, 35, 36] Developing new tools to evaluate disease burden and commissioning a study to accurately assess the global disease burden of NTDs would provide compelling evidence to present to the G8. Current predictions suggest that the global disease burden of NTDs, if calculated appropriately, can surpass that of many other global health issues.[9] The results of this study could be published in a high profile journal, such as The Lancet, and disseminated to the G8 and global health community. This research evidence could serve to persuade the G8 to dedicate more resources towards the strategies outlined in the Global Plan.

The success of this strategy depends on significant support from a variety of actors in the global health

Actionable Key Messages

✏ Directing advocacy efforts for policy options outlined in the WHO Global Plan to Combat NTDs (2008-2015) unites stakeholders with a common understanding of measures necessary to reduce the burden of NTDs.

✏ Hosting an international NTD conference can serve as a platform for stakeholder collaboration and launching of additional advocacy strategies.

✏ Publicizing the existing Access to Medicines Index can persuade pharmaceutical companies to adopt more socially accountable practices, leading to the investment of much needed financial and intellectual resources towards NTD-related activities.

✏ Demanding greater accountability from the G8 can generate pressure to fulfil its commitments for NTDs, and set a global precedent through the prioritization of NTDs.

community. That said, those affiliated with the G8 in other capacities may be hesitant to establish this negative discourse, so as not to compromise G8 funding and support for other initiatives.

Resources Needed to Pursue Identified Advocacy Strategies

The success of all three advocacy strategies depends on significant investments of both human and financial resources. The WHO-ISID conference requires substantial and reliable funding to ensure that it can be hosted on a biennial basis. Pharmaceutical companies have often sponsored health-related conferences.[37] Sponsorship can provide pharmaceutical companies with the opportunity to demonstrate their support for NTD-related efforts, thereby enhancing their public image. The host country can also absorb some of the conference costs, due to the economic returns that will result from business revenue.[26] Moreover, collaboration and coordination activities required to plan and execute the conference will require the commitment of time and human resources, particularly from the WHO and ISID.

Promoting the AMI rating is a cost-effective advocacy tool. No start-up funds are required, as the AMI and social networking tools upon which this strategy depends already exist. However, advocacy efforts needed to monitor the social media outlets will require commitments of time and human resources.

The funding required to commission the NTD global disease burden study poses a challenge. It may be necessary to seek funding from philanthropist organizations that have already given significant grants to NTDs (e.g. Bill & Melinda Gates Foundation).[38]

Indicators of Progress and Success

To evaluate progress, indicators of success for the WHO-ISID Conference could include: the number of signatory countries on the declaration statement; new policies to control or eliminate NTDs in affected countries; level of media coverage (reflected in the number of media articles, e.g., newsprint, television, interviews); and survey results of attendees concerning the effectiveness of the conference at achieving stated goals. For efforts to promote the AMI ratings, indicators of success could include: efforts undertaken to improve AMI ratings by pharmaceutical companies; the number of Twitter "tweets" and "re-tweets" regarding NTDs; and the number of public interviews, media attention (via newscast, newspaper) featuring NTD advocates and AMI endorsement. To evaluate progress achieved by the call to action for the G8, indicators could include: monetary resources from the G8 members directed towards NTD control and elimination; and the number of times the NTD global disease burden study is cited in other research papers.

Domestic cattle in rural India. Jenny Zhan, 2009.

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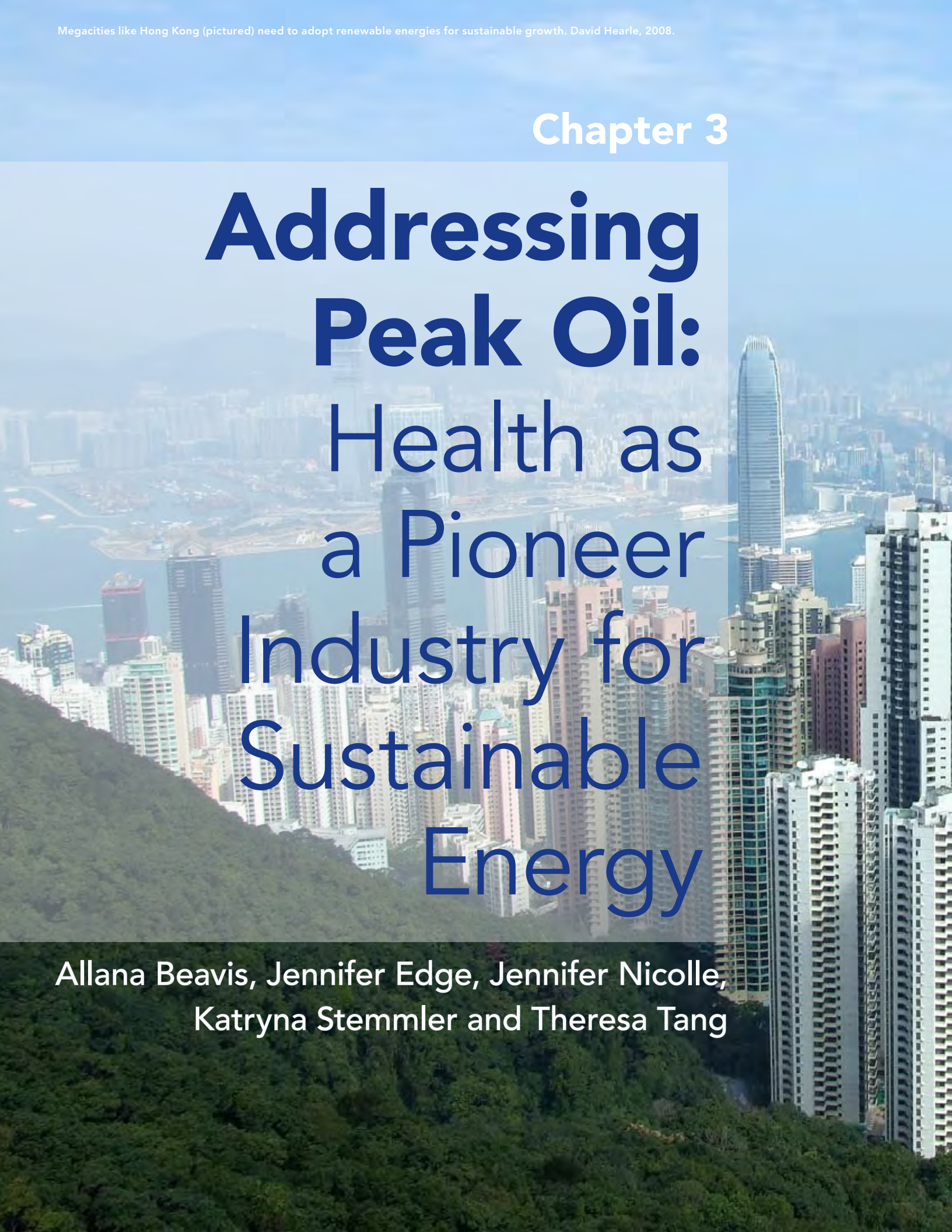
Small shop selling nuts and spices in Wa, Ghana. Dan-Bi Cho, 2009.



Megacities like Hong Kong (pictured) need to adopt renewable energies for sustainable growth. David Hearle, 2008.

Chapter 3

Addressing Peak Oil: Health as a Pioneer Industry for Sustainable Energy

Allana Beavis, Jennifer Edge, Jennifer Nicolle, Katryna Stemmler and Theresa Tang

Abstract

Increasing awareness of the threat of peak oil to global health could contribute to the political prioritization of a global reduction in petroleum dependency. Declining supplies and escalating prices of petroleum will have severe consequences for sectors such as transportation and agriculture that contribute to the social determinants of health. Although it is essential that all sectors reduce petroleum dependency to offset the effects of peak oil, health could serve as a pioneer industry for this goal. These issues could be addressed using a four-part advocacy plan aimed at reducing petroleum dependency and promoting the adoption of renewable energies for health. Firstly, a conference could raise awareness about peak oil's effects on health, and have governments commit to a declaration reducing their reliance on petroleum. Subsequently, a working group could facilitate collaboration between different actors, coordinate research efforts and monitor the overall progress of policy adoption. Furthermore, a Peak Oil Compact and Green Health Systems Challenge could be established to pressure corporations and health systems, respectively, to adopt policies reducing their dependency on oil. Using these strategies, the reduced consumption of petroleum fuels and increased implementation of renewable energies in the health sector may motivate widespread industry adoption of the proposed policies in preparation for peak oil.

Nature of the Challenge

The health industry is almost completely reliant on the availability of cheap oil to function and could be drastically affected by the looming peak oil crisis.[1-2] Petroleum-based inputs are integral to many aspects of health including pharmaceutical production, processing of plastics for medical supplies, regulating heating and cooling systems, and supplying electricity to medical facilities. Rising transportation costs will also impede ambulance and helicopter services and shipping of supplies, and raise commuting costs for health personnel.[2] Thus, peak oil threatens basic health systems functioning as escalating petroleum costs jeopardize several essential components of health services.[1-3]

Health is not the only sector threatened by the onset of peak oil, nor is it the only sector capable of determining health outcomes. The transportation industry is expected to be most affected by peak oil, impacting operations for international trade. Global food production will be impacted as mechanization processes involved in agriculture, such as irrigation systems and agrochemical manufacturing, all require petroleum. Thus, petroleum scarcity will result in more expensive and limited food supplies, threatening the health of those with irregular access to food.[1] Reduced access to essential resources will drive the migration of people from areas that are oil-deprived to more prosperous regions, potentially threatening national borders and security.[4] Furthermore, peak oil threatens economic stability, one of the most important factors in determining health outcomes. In sum, the peak oil crisis could exacerbate existing inequalities, potentially triggering mass poverty, civil unrest and economic instability, all of which carry negative implications for health.[5]

Policy Options

Global reductions in petroleum dependency across all sectors need to take place in order to overcome the challenges posed by peak oil. Two primary policy options exist to achieve this goal: 1) reduce petroleum consumption on an international level; and 2)

allocate resources toward implementing alternative renewable energies.[6] Countries in various regions have already started converting to renewable energies to reduce their dependency on petroleum-based fuels. In Brazil, Denmark, Germany, India, Nicaragua, Philippines, Spain and the United Kingdom, strategies to reduce petroleum dependency have included wind-powered communities, the adoption of diesel microgrids, biomass fuels, hydroelectricity and solar panels in rural areas, and proposed energy regulation through the use of electrical meters and fixed tariffs.[7-13] These efforts demonstrate that governments can feasibly implement petroleum reduction strategies in various global settings.

An effective advocacy strategy for peak oil must call for the multi-sectoral adoption of policies to reduce petroleum dependency. However, initially advocating for comprehensive policy changes in the health sector may provide a precedent for other sectors. This approach could be very effective given that several countries' health systems are preparing for the onset of petroleum shortages, health's interdependence on other industries (e.g. transportation and finance), and its role in sustaining human development.[3]

Cuba's health system rivals those of many developed countries despite reducing its petroleum imports by nearly 50% in the 1990s, and uses solar photovoltaic energy to power its rural health clinics and five hospitals.[3,14] Additionally, the Healthcare Renewable Energy Initiative (HREI) aims to implement cost-effective renewable energies in hospitals across the United States to lower financial costs and reduce petroleum consumption.[15] Thus, a third policy option for peak oil could aim to reduce health systems' dependence on products and services requiring petroleum-based fuels.

Global Decision-makers with the Power to Enact Change

Heads of state, diplomats and national ministries, particularly those of health, energy, agriculture, finance and transportation, have the power to enact change and could be targeted, specifically within the largest oil-consuming countries, including the United States, China and member states of the European Union.[16-17]

While some government policies and initiatives have been successful in mitigating environmental problems, corporations need to play an active role in addressing environmental concerns.[18] Decisions made in the private sector have an influence on the social determinants of health.[19] Therefore, leaders in the corporate sector should be sought to affect policy change. In particular, private actors in the transportation industry have been identified as the greatest global consumers of oil, and should be targeted.[20]

As oil becomes increasingly scarce, it will become more expensive and difficult to extract from remaining reserves. Marcusroos, 2005.

Why Global Decision-makers Have Not Implemented the Desired Policy Changes

Insufficient awareness about peak oil among decision-makers has resulted in its low-priority status on the global agenda.[21] Governments do not allocate necessary resources towards securing sustainable energy, and instead prioritize issues of economic development.[5] With insufficient funds for research, there are no alternative energy sources available to fully substitute the cost-effectiveness and efficiency of petroleum. Thus, a lack of alternatives to petroleum-based fuels makes it challenging for governments to implement policies promoting reductions in petroleum consumption.[22]

Potential Obstacles for Policy Change and How They Can Be Overcome

Limited understanding about the detrimental health implications of peak oil has minimized progressive action on this issue.[21,23] To overcome this challenge, partnerships with the World Health Organization (WHO) and International Energy Agency (IEA) could fund alternative energy research, utilize technical expertise and raise awareness about the health impacts of peak oil.

In developing countries with limited infrastructure and resources, adopting renewable energies places a tremendous burden on already resource-poor governments. Thus, framing the advocacy strategies to align with national goals for economic development may incentivize state participation in adopting renewable energies.[24]

Persuading oil-producing countries and corporations to adopt renewable energies is in direct conflict with their interests in profiting from petroleum exports in the long-term.[25]

Natural Advocates

Many non-governmental organizations (NGOs) are concerned with peak oil, such as the Post-Carbon Institute (PCI), Oil Depletion Analysis Centre (ODAC) and Association for the Study of Peak Oil and Gas (ASPO).[27-29] Health professionals may also be natural advocates and have historically led and contributed to social change.[22] Politicians such as Nicholas Sarkozy and Gordon Brown,[30] the president of France and former prime minister of the U.K., respectively, have advocated for the reduced volatility of escalating oil prices. Finally, natural advocates may include intergovernmental organizations (IGOs) such as the WHO, UNDP and IEA, and smaller environmental and developmental NGOs.

The increasing scarcity of oil reserves will force transportation fuel prices to escalate. Lightblb, 2008..

Potential Advocacy Partners

IEA, WHO, UNDP and PCI could provide the best opportunities for partnership as they participate in global governance, wield considerable resources, and have interests that support the policy options. IEA is central to the global dialogue on energy and is the authoritative source of energy analysis and projections.[31] WHO recognizes the link between public health and other sectors, suggesting that they could take an interest in peak oil as a threat to global health, and could raise awareness for peak oil among health actors.[32] UNDP acknowledges that clean energy, health and environment are fundamental to sustainable development, suggesting that their departmental mandate could align well with the proposed policy options.[33] PCI conducts research on urgent issues concerning economics, energy, environment and equity and has a global media presence that could be a considerable asset. Also, Richard Heinberg is among the institute's fellows and is regarded as one of the world's leading peak oil educators.[27]

Potential Advocacy Strategies

These advocacy strategies aim to raise awareness of the relationship between peak oil and global health, and strive to garner support for the ongoing adoption of policy options. After the first strategy is implemented, the latter three are intended to run concurrently, promoting collaboration between actors. The final strategy focuses on creating a precedent of effective energy conversion in the health sector for others to follow.

A. Conference on Peak Oil and Global Health

A Peak Oil and Global Health Conference could advance the issue of peak oil and its multi-sector consequences for global health on the international agenda.[34] To promote ongoing awareness of the

issue, the proposed conference should not be a self-contained event, but could be the first in a three-part conference series.[35] Conference participants could include actors from government, civil society and private sectors. This inaugural conference could be held in Paris, France, the location of the IEA headquarters.[31] Additionally, perhaps President Sarkozy could promote and direct national resources towards the conference.

Conferences are capable of mobilizing national and local governments to take action on new proposals by initiating a process whereby governments make commitments.[36] The conference could aim to have governments sign onto a Declaration on Peak Oil and Global Health containing guidelines for implementing strategies aimed at reducing oil consumption and adopting renewable energies. By signing the Declaration, national governments could commit themselves to two initiatives: 1) a Working Group on Peak Oil, Health, and Alternative Energy (WGPOH); and 2) a Green Health Systems Challenge (GHSC) (which are both described in more detail below).

Although commitments made to the Declaration are non-binding, it has been shown that declarations can act as a stimulus for subsequent, rapid developments in international law. The non-binding declaration made at the 1972 UN Conference on the Human Environment resulted in the establishment of international environmental law.[37] Therefore, while conferences may not have direct causal effects on member states' behaviour, their outputs, such as declarations, may contribute to improved global governance mechanisms.[34]

Conferences extend participation to stakeholders that have not been traditionally involved in diplomatic relations.[35] Non-state actors such as NGOs, multinational corporations and academics can impact global governance through conference diplomacy. Conferences can also reframe issues to reinforce the adoption of policymaking that supports sustainable development. For instance, the Founex preparations for the UNEP helped to reframe the relationship between environment and development, presenting new considerations for decision-making.[34]

Participation in the proposed declaration could be very desirable for oil-importing countries.[38-39] Conversely, the conference could rouse negative attention from influential OPEC countries who may oppose the adoption of renewable energies as it threatens the profits generated from oil exports.[40] A lack of commitment to the declaration could negatively affect the WGPOH and GHSC which are dependent on signatories' compliance, and could be compromised without adequate support.

B. Working Group on Peak Oil, Health, and Alternative Energy (WGPOH)

A WGPOH could be an effective advocacy tool to direct the implementation of national-level strategies to decrease oil consumption and adopt alternative energy sources. This WGPOH could build on existing systems and would be comprised of researchers, representatives from the IEA, UNDP, PCI, and WHO, as well as ministers of health, transportation, agriculture, finance and energy from key countries. Regional working groups could also be established to help ensure continued progress in individual regions. In 2000, a study done by five national American laboratories determined that if governments were to lead energy efficiency programs stressing the need for incentives and further research into new options, there could be significant reductions in energy usage.[39] Thus, if the WGPOH were to develop national policies to address peak oil, it is likely that they could successfully reduce domestic petroleum dependency.

The WGPOH could be an effective mechanism to support progress on the issue of peak oil by promoting ongoing collaboration between researchers and stakeholders. Examples of working groups that take a collaborative approach to monitoring progress and assisting with policy evaluation and development include those within the Intergovernmental Panel on Climate Change (IPCC), United Nations

Heavy industry presently relies on petroleum-based fuels for manufacturing. Ann Baekken, 2009.

Environment Programme Finance Initiative, and Economic Policy Committee Working Group on Ageing Populations and Sustainability.[41,42,43] The WGPOH could contribute to accountability for implementing declaration guidelines, serve as a monitoring tool by producing assessment reports, and facilitate coordination among different actors.

The IPCC working groups could be chosen as a model for the WGPOH because they focus on a topic related to peak oil, and have been critically acclaimed internationally. The 2007 Nobel Peace Prize was awarded to the IPCC for its efforts in raising awareness about climate change and for laying out the groundwork needed to counter the effects of climate change.[44]

Modelling after the IPCC working groups, focus areas of the WGPOH could assess social, political, environmental and economic impacts of peak oil.[45] A secretariat for the WGPOH could be established to oversee administrative tasks and functions of the WGPOH. The WGPOH could meet on an annual basis to facilitate continuity, allow for the transfer of knowledge among different actors, and assist with policy development and implementation.
The interdisciplinary composition of the WGPOH could pool resources from different spheres of society, giving it the capacity to influence many different sectors and governments.

Risks potentially jeopardizing the success of the WGPOH could include a lack of coordination and collaboration among members, challenges in implementing new policies, and a lack of visibility.

C. Peak Oil Compact

Despite progress achieved by heads of state, global dependency on oil will not be drastically reduced unless powerful corporate leaders of the private sector are targeted.[46] The WGPOH could put state pressure on corporations to reduce their reliance on petroleum-based fuels through the adoption of a Peak Oil Compact (POC). By signing onto the POC, private companies would commit to reducing industrial consumption of petroleum and allocate resources toward the adoption of renewable energies.

A precedent-setting instrument that strives to influence corporate behaviour is the UN Global Compact.[47] This Compact creates voluntary, ethical corporate principles to support labour, anti-corruption, environmental and human rights standards.[48] Among the thousands of companies signed onto the compact are some of the world's largest transnational corporations including Bayer, British Petroleum, Rio Tinto and Pfizer.[49]

Additionally, Global Union Federations were able to use the compact as a basis for generating binding International Framework Agreements between professional labour unions and signatory corporations to implement compact recommendations.[50,51] Thus, the adoption of a POC could advance the interests of civil society groups and reduce corporate oil-consuming behaviours.

To monitor and evaluate POC compliance, a global online registry could be maintained by the WGPOH listing private companies that act in accordance with POC guidelines. The system could be modeled on the United Kingdom's National Health Service (NHS) Employers agency list of companies that adhere to their Code of Practice for the International Recruitment of Healthcare Professionals. Companies that operate in compliance with the code remain in good standing and are able to supply health workers to the NHS. Private recruitment agencies found violating the code are

Mechanized agricultural production will be impacted by peak oil, potentially triggering food shortages. Joost J. Bakker Ijmuiden, 2010.

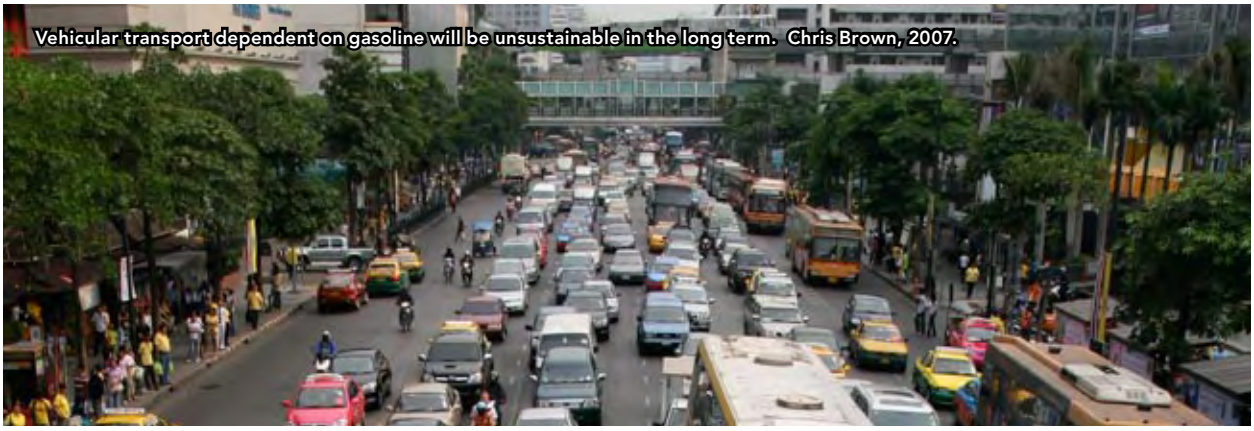
banned from supplying human resources to the NHS.[52] Creating a similar registry for the POC could benefit monitoring efforts and incentivize compliance among corporate industries, promoting their adoption of the proposed policies. Converting to renewable energies for means of production could promote the long-term economic vitality of corporate growth, thereby encouraging corporations to participate.[53] Additionally, private actors may find adopting the POC appealing, as signing on demonstrates their commitment to corporate social responsibility (CSR) initiatives, improves public relations and heightens collaboration with civil society groups. Lessons learned from the UN Global Compact suggest that corporations are quick to adopt high-profile CSR codes if it means potential gains in market share and reputation.[54] Thus, to advance their reputation as defenders of public health, sustainable development and the environment, corporations could likely sign onto a POC, effectively raising awareness about the issue and reducing mass industry's reliance on petroleum fuels.

D. Green Health Systems Challenge (GHSC)

The GHSC could urge the health sector to provide leadership in addressing peak oil. It challenges governments and national health ministries to reduce petroleum consumption in health systems by a minimum of five per cent every two years while simultaneously implementing renewable alternatives. Building upon the 'contraction and convergence' goals of the UN Framework Convention on Climate Change, governments in the GHSC would focus on the basic human right to health, resource conservation and sustainability across multiple sectors to ensure stability in health systems internationally.[55] Some developing countries lack the capacity to fully adopt renewable energies on their own. Thus, the GHSC should include credits, similar to the Kyoto Protocol carbon credits, to incentivize developed nations' investments in petroleum reduction, and the adoption of alternative energies in low-income regions.[56] The WGPOH could be responsible for setting guidelines, overseeing progress and monitoring the development of the GHSC.

The GHSC would target healthcare systems and facilities to initiate immediate and direct action in the health sector. The GHSC could encourage these facilities to only do business with private sector suppliers that meet the requirements of the POC, thereby providing economic incentives to corporations to sign onto the compact. By encouraging health ministries to take part in this challenge, other health systems and industries could feel pressured to commit to achieving similar goals.[53] The GHSC could foster competition between nations to develop innovative and efficient solutions for peak oil and global health.[57]

WGPOH could provide the necessary resources to advocate for the implementation of the GHSC across national health systems. Substantial human, financial, technical and intellectual resources to



Vehicular transport dependent on gasoline will be unsustainable in the long term. Chris Brown, 2007.

Peak oil will force global communities to reduce their dependence on petroleum fuels. Tripletrouble, 2008.

design and monitor progress could be required. WGPOH could establish country-specific targets for the GHSC based on developmental capacity. Additionally, ranking nations based on countries' progress in meeting GHSC targets could pressure low-ranking governments to increase their efforts in meeting GHSC targets.[57]

The GHSC could fail if corporate actors do not comply with their government's policy changes, ministries are slow to adopt strategies, there is a lack of participation in the GHSC, or if no viable energy alternatives are introduced to replace petroleum. A major limitation could be insufficient tangible incentives associated with the GHSC. If countries do not believe that the GHSC could provide significant benefits, they may not follow through with commitments.[58]

Resources Required

The costs of this strategic advocacy plan could be similar to those of other international advocacy campaigns. The cost of hosting an inaugural conference could equate to other UN conferences, ranging from $1.7 to $3.4 million.[36] The conference could be funded by sponsoring UN agencies (e.g. WHO, UNDP) and the proposed host country, France. Through partnerships with the IEA, PCI and other environmental and sustainability groups, additional funds could be added to subsidize this effort.

The GHSC and POC would require heads of state to allocate increased funds into petroleum reduction strategies and renewable energy research. The WGPOH Secretariat could draft country-specific plans for resource allocation to help coordinate these efforts. Research institutes must possess adequate human resources and capacity to maintain ongoing research in renewable energies for mass industry, and POC signatories would require adequate monitoring and evaluation mechanisms for reporting progress to the WGPOH.

Increased adoption of alternative energy sources, such as wind-powered energy, is essential for addressing peak oil. Lisa Gilbert, 2010.

Actionable Key Messages

✏ Peak oil threatens global health as oil scarcity and escalating petroleum prices are detrimental to all sectors of society.

✏ The health sector could act as an exemplar by adopting policies for petroleum fuel reduction and the implementation of renewable energies. osting an international NTD conference can serve as a platform for stakeholder collaboration and launching of additional advocacy strategies.

✏ In the short-term, a conference and declaration could raise awareness about peak oil as a health issue and motivate ongoing implementation of petroleum reduction plans. ublicizing the existing Access to Medicines Index can persuade pharmaceutical companies to adopt more socially accountable practices, leading to the investment of much needed financial and intellectual resources towards NTD-related activities.

✏ Over the long-term, a proposed working group could oversee the implementation and monitoring of the Green Health Systems Challenge and Peak Oil Compact to advance progress.

Possible Indicators of Progress and Success

Improved cooperation between WGPOH members and increased participation at annual meetings could indicate success of the WGPOH. An indicator of progress for the proposed conference could be the number of countries that sign and ratify the proposed declaration. Increased compliance of the private sector with the POC could indicate success and be measured through the proposed international registry. The number of countries that participate in the GHSC and subsequent changes in national policies could show the commitment of national governments to reducing energy consumption and converting to renewable energy alternatives. This could be monitored using a web-based system similar to the Millennium Development Goals Monitor, which tracks progress by country.[59] WGPOH Annual Assessment Reports could monitor international participation and adoption of proposed policies, providing an overview of progress and success.

Heightened overall awareness concerning peak oil and its health implications, particularly among national governments, IGOs, industries, civil society and the private sector, could indicate success. Furthermore, media coverage of the issue, policy changes, and public statements addressing peak oil could help measure awareness for the challenges this issue poses.[60]

The reliability of emergency transportation services for health will be impeded by peak oil. Darren Kirby, 2009.

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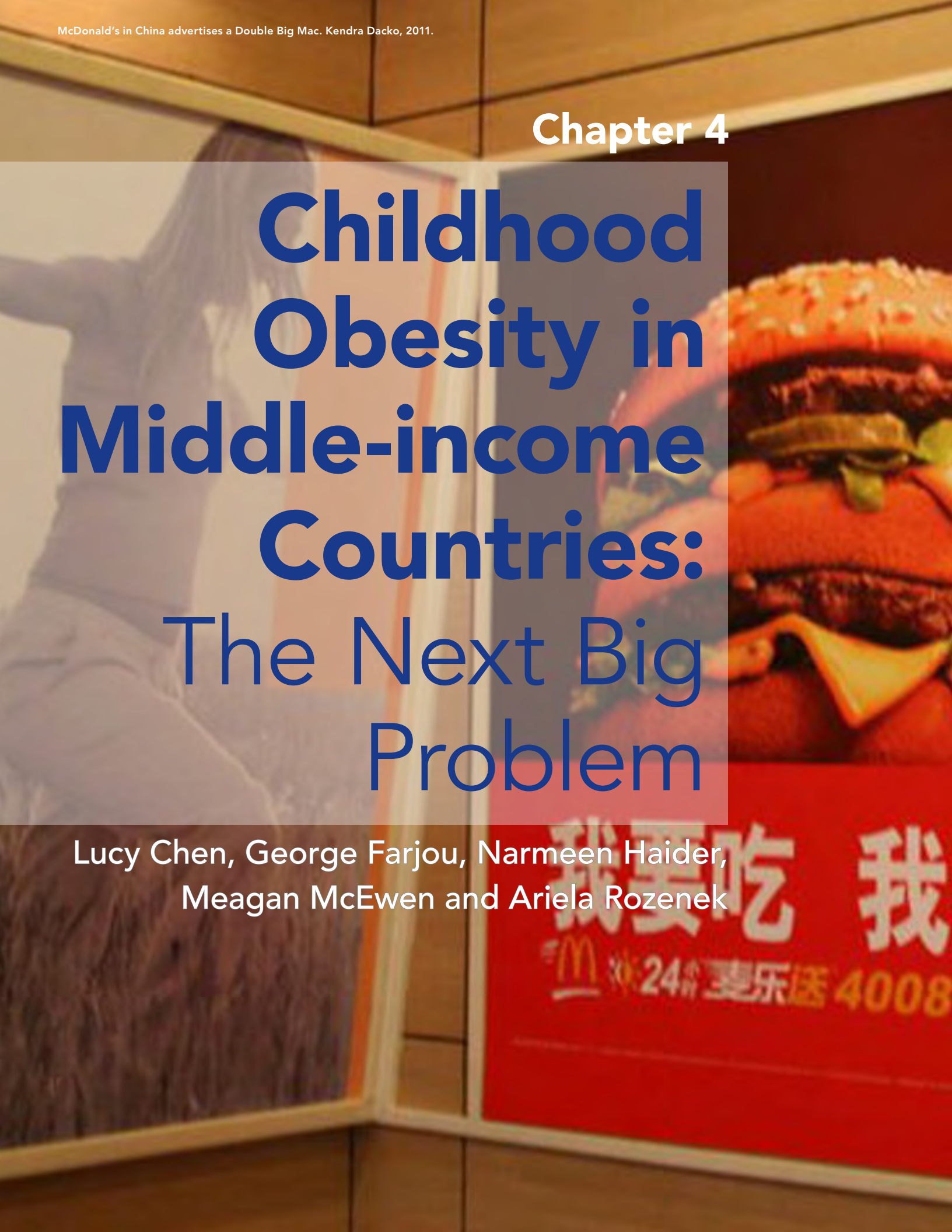
Some low-income countries have already begun adopting renewable energies for sustainable development. Kerry, 2010.



McDonald's in China advertises a Double Big Mac. Kendra Dacko, 2011.

Chapter 4

Childhood Obesity in Middle-income Countries: The Next Big Problem

Lucy Chen, George Farjou, Narmeen Haider, Meagan McEwen and Ariela Rozenek

Abstract

Obesity affects more than 42 million children globally and is associated with several non-communicable diseases, which cause more than 35 million deaths annually. Obesity must be tackled at an early age in order to prevent unhealthy behaviour patterns that will persist into adulthood. Existing international recommendations for nutrition, exercise and marketing must be implemented at national levels. In order for policies to be implemented, childhood obesity must become a priority on the global health agenda. This advocacy plan suggests ways to push childhood obesity higher on the global health agenda, focusing on urban settings in middle-income countries (MICs). MICs have the greatest incidence of childhood obesity due to rapid modernization, which has led to a reduction in physical activity and an increase in consumption of unhealthy foods. Advocacy tools include the framing of obesity as an economic issue, implementation of an international web-based forum, health professional-led advocacy, and counter-marketing initiatives.

Nature of the Issue: Childhood Obesity in MICs

Overweight and obesity are conditions characterized by excessive fat accumulation that can lead to chronic non-communicable diseases (NCDs) such as cardiovascular disease, diabetes and cancer. Overweight and obese children are more likely to develop NCDs earlier in life and remain obese into adulthood. Since lifelong dietary and physical activity habits develop in childhood, it is imperative that childhood obesity is prioritized on the global health agenda. Globally in 2010, 42 million children under the age of five were overweight, 35 million of which were living in developing nations.[1]

Middle-income countries (MICs) such as India and China face the largest health burden of obesity and its related diseases.[2] In China, indirect costs of obesity associated with lowered productivity at the workplace resulted in the loss of more than $4.3 billion USD in 2000; this is predicted to rise to $10.6 billion USD by 2025. NCDs represent a threat to human health and present a great economic burden.[3]

The rapid income growth of the urban middle class in MICs has created a new spending force for luxury goods such as processed foods, which has contributed significantly to the rise in obesity. Modernization has also led to reductions in physical activity and labour intensity in urban areas. By 2020 the prevalence of obesity in China is projected to be greater than that of the United States.[3] Similarly, India bears the highest burden of Type 2 diabetes globally, indicating the impact of the obesity epidemic.[4] This advocacy plan will focus on urban areas of MICs due to the rapid growth of childhood obesity. Contextual reference will be provided from China and India, whose profiles exemplify MICs, where appropriate.

Policy Options: Addressing the Global Health Challenge

The World Health Organization recently proposed several policies to combat childhood obesity. The policies state that responsibility for preventing obesity need to shift from individuals to governments.[5] WHO advises that physical activity, nutrition and marketing be addressed to prevent chronic NCDs associated with obesity.

With respect to physical activity, national policies encouraging physical activity should be implemented at the local level by developing universally accessible fitness areas, parks and community-based programs.[6]

For nutrition, national dietary guidelines that address healthy eating early in life should be created with the goal of reducing unhealthy habits.[5-6] Furthermore, the consumption of energy-dense, nutrient-poor foods that are high in sugar, salt and saturated and trans fats should be decreased. The WHO framework specifically aims to increase awareness of and reduce risk factors for chronic NCDs.[5-6]

Finally, marketing and advertising influences children's eating habits as children are three times as likely to be influenced by advertising compared to adults.[7] Children's marketing can be attenuated by reducing exposure (i.e., frequency at which an advertisement is played) and power (i.e., strength of the advertisement). Areas frequented by children, including schools and recreational facilities, should be free of advertisement.[7] Governments should cooperate in order to reduce cross-border marketing - advertisements of one country impacting another. All foods should have accurate labels that are not misleading in order to ensure that consumers can make informed decisions.[5]

KFC promoting its fried chicken near a central market in India. Dilip Koshy, 2009.

Global Decision-makers: Actors of Policy Change

National governments are the key global health decision-makers in this area and have primary responsibility for implementing childhood obesity strategies. Governments can promote the effectiveness of policies through monitoring, evaluating and funding such efforts.[6] These actions may be more effective when local communities are informed and aware of the issue.[5]

WHO as an international technical agency cannot enforce polices, but can influence decision-making through recommendations for national governments to implement domestically.[6] After a program's launch, WHO monitoring and evaluation can act as a quality or progress check.[6] The agency communicates with other relevant organizations such as the World Trade Organization, Food and Agriculture Organization, International Labour Organization, and United Nations Children's Fund, lending credibility to WHO recommendations.[5]

Non-governmental organizations (NGOs) can institute locally advantageous programs. An example is the International Obesity Task Force (IOTF), which aims to research and recommend policies to governments. Other NGOs can lead

grassroots mobilization, form awareness campaigns, and hold governments accountable for program implementation.[5]

The private sector is responsible for promoting healthy diets and physical activity in accordance with national guidelines and international standards. Corporations can follow recommendations to reduce serving size along with fat, sugar and salt content of processed foods. Additionally, corporations can provide consumers with nutritional information through food labels.[5]

Inaction by Global Decision-makers: Barriers to Policy Change

A. Perceived Urgency of the Issue

MICs bear the burden of the double-edged sword: malnutrition and obesity. International efforts largely focus on providing aid for the former.[5] Section 1.C of the Millennium Development Goals (MDGs) calls for an end to malnutrition and hunger.[8] This goal does not take into account that obese children may also be malnourished, as eating unhealthy foods may not provide them with all essential nutrients. There is a lack of resources directed towards childhood obesity as global donors and policymakers primarily focus on the "Big Three": HIV/AIDS, tuberculosis and malaria.[9-10]

B. Food is Difficult to Stigmatize

Anti-smoking initiatives were successful in reducing tobacco consumption by demonizing the product and stigmatizing its users. However, food is essential for life and cannot be regulated with the same stringent control.[11] For example, the public readily attributes mortality to smoking rather than eating. And yet, death rates due to obesity are approaching those of smoking.[12] Furthermore, obesity itself is a highly stigmatized condition and is seen as a disease that is the fault of the individual rather than the responsibility of society.[13] Due to this perception and lack of political will to prioritize preventative treatment, efforts to encourage healthy lifestyles have seen little success.[14]

C. Consumer Preferences

Consumer preferences are difficult to alter, especially with added pressures in MICs, where processed foods represent success of Western countries.[15] Attempts to change eating and lifestyle practices have failed because of a penchant for high-energy and fat-rich foods.[14] For example, in China, where children hold a purchasing power of $67 billion USD,[16] marketing

A Kentucky Fried Chicken in the heart of China's urban center. Kendra Dacko, 2011.

is seen to encourage consumer loyalty; as children age it is likely that they will continue to seek out the same brands they enjoyed when young.[17] Continued consumption poses a significant challenge to policymakers aiming to reverse an ingrained affinity for unhealthy foods.

Obstacles to Policy Change: How They Can Be Overcome

Policy options to combat childhood obesity are often challenging to implement due to conflict between the social goals of the public and profit-maximizing goals of the private sector. It can be difficult to encourage the private sector to align its behaviour with public policy. For example, fast-food corporations have a vested interest in providing a product to consumers that they enjoy. It is difficult to limit availability of processed foods when there is considerable consumer demand and significant profit earned.

Cultural priorities in MICs often place higher importance on academic success, which they view as essential to an affluent lifestyle.[18] For this reason, many teachers do not enforce mandatory physical activity periods during school.[18] To increase the priority of physical activity for children, parents and teachers' groups could be advised about the academic benefits of exercise, such as increased concentration. Furthermore, with increasing urbanization, there is a lack of space for people to engage in physical activity. Many parks in China are pay-per-use, which also discourages people from spending time engaging in physical activity.[19] In these situations, incorporating physical activity in daily life, such as taking the stairs rather than the elevator, may be more feasible.

Corporations and the food industry have an interest in maintaining the consumption of their products, and may not implement policies that would lead to sales reduction. The Yum! Corporation is an international conglomerate of many of the largest fast-food chains, such as KFC and Pizza

Hut.[20] In the U.S., Yum! voluntarily removed marketing campaigns during television programs aimed at children under 12 years old in an effort to limit exposure to advertising that encourages unhealthy eating.[20-21] In their U.S. stores, Yum! has posted nutritional information on the menu next to the products.[20] They also sponsor a children's camp in China that encourages healthy eating and physical activity.[20] These are examples of steps that can be taken at the corporate level, which could be mandated by national governments.

Natural Advocates: Champions for the Cause

When it comes to effecting change,individual champions, research institutes, and intergovernmental and nongovernmental organizations would naturally align with the objectives of this proposal.

Individual champions such as First Lady Michelle Obama who has recently launched America's first federal childhood obesity task force, could be a driving force for the cause.[22-23] Research institutes including the International Association for the Study of Obesity (IASO), an umbrella organization for national obesity groups,[24] disseminate information to key stakeholders. The International Obesity Task Force (IOTF), an IASO think-tank, implements research into policy. The IOTF can work with IASO members, such as the All India Association for Advancing Research in Obesity,[25] to draft national strategies.

Intergovernmental organizations, such as WHO and the UN, have already taken a stance against childhood obesity by hosting forums and summits,[5-7,26] indicating their commitment to this cause. These groups are instrumental in supporting nations with large health burdens, as they have governmental contacts and the knowledge to establish effective strategies. Nongovernmental organizations with a vested interest in healthy lifestyles for children, such as Right to Play,[27] International Diabetes Federation,[28] and the International Cardiovascular Health Association,[29] would also be natural allies for the cause.

Advocacy Partners: Potential Supporters of the Cause

Athletes, celebrities, research institutes and civil society groups could advance the priority of childhood obesity on the global agenda, but might not naturally gravitate towards the cause; rather, they are potential partners that could be recruited.

Athletes acting as national heroes or celebrities as champions have already established their marketability by promoting a program or product successfully, and are important individuals to target. Celebrity chef Jamie Oliver can advocate for nutritional change, as previously seen in Britain's "Feed Me Better" campaign.[30] Recruiting athletes that already successfully promote products, such as Indian cricket star Tendulkar[31] or Chinese basketball player Yao Ming,[32] can be used to encourage healthy lifestyles.

Research institutes, such as the Chinese Center for Disease Control and Prevention (CCDCP) have recognized the importance of the issue. The center's Nutritional Health Survey[33] is an example of a research group that is not currently affiliated with the IASO, but could be included.

Groups with complementary interests include the following: farmers' associations, to promote the consumption of healthier food options; parent organizations, to protect the wellbeing of their children; and physician groups, to advocate for their patients' care. China's Farmer Professionals Association,[34] Chinese Parents Association,[33] and Chinese Medical Doctor Association,[35] as well as India's Indianfarmers,[36] Non Resident Indian Parents Associations[37] and Association of Physicians of India,[38] are all organizations that can assist in this issue in their respective countries.

Michelle Obama's healthy eating campaign. Defense Commissary Agency, 2010.

Advocacy Strategies: Promoting Childhood Obesity on the Global Health Agenda

In order to advocate for the promotion of childhood obesity on the global health agenda, a practical advocacy strategy that resonates with potential allies should be selected.[22] The following top-down approaches are proposed: engaging key stakeholders by framing obesity as an economic issue, and launching an international web-based forum. For sustainable change to occur, both governing institutions and individual citizens must participate.[39] Therefore, a grassroots approach to advocating for childhood obesity should not be ignored, and the following bottom-up strategies can be employed: health professional-led advocacy campaigns, and counter-marketing initiatives.

A. Political Prioritization: Engaging Public Figures

In order to engage public figures and achieve political prioritization, the relevant set of ideas must be presented in a compelling frame.[22] The frame can be communicated by empowering individual champions to lobby national governments or through a statement released by a guiding institution.[22] An appealing set of ideas to frame childhood obesity should highlight the economic burden of the disease, as seen in successful advocacy strategies for Human Papilloma Virus vaccinations.[40]

The strength of individual actors determines the political prioritization of an issue.[22] Powerful childhood obesity activist Michelle Obama can lobby national governments to focus attention on this issue by employing the economics frame.[23] This frame can additionally be applied in a collaborative statement released by WHO and IOTF, highlighting childhood obesity as an NCD and appealing for policy change at national levels. However, choosing an economic frame could undermine the credibility of the advocating body among some left-wing activists and organizations, as it may detract from the humanitarian aspect of health issues in MICs.

B. Collaboration and Awareness: An International Web-based Forum

In addition to engaging high-profile political actors, it is imperative to involve other relevant stakeholders in the childhood obesity domain.[22] An international web-based forum on childhood obesity in MICs could foster collaboration among policymakers, individual champions, research institutes and NGOs. The collaborative, web-based response to the H1N1 outbreak in 2009 engaged all levels of stakeholders and led to the most comprehensive outbreak response ever.[41-42] In order to attract relevant participants, the forum can be introduced at the next annual International Conference on Obesity (ICO).

Through the forum, policymakers can access current relevant research and utilize it to draft effective recommendations. In turn, decision-makers can implement these recommendations in their respective regions. Individual champions can make themselves available for advocacy campaigns, while NGOs can offer their resources and expertise in regions where they have a strong presence, while providing insight on grassroots efforts.[39]

To ensure credibility, the IOTF should monitor requests for access. Usernames and passwords would have to be granted to promote accountability and professionalism. Members will be required to submit periodic updates on their involvement in combatting childhood obesity. Stakeholders demonstrating progress will be positively acknowledged and commended in the forum, encouraging continued efforts.

Another advantage is the low-cost for high output in promoting this issue on national and global agendas, in comparison to hosting an international conference.[43] To consistently uphold the issue on the global agenda, the IOTF can generate a yearly report with recommendations to be presented at the ICO. These collaborative reports would lend further

Dazzling nights in China's ever expansive cities. Hugh Guan, 2010.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Limited green spaces in China. Kendra Dacko, 2011.

credibility to childhood obesity and ensure public awareness.[22]

C. Reaching Public and Civil Society: Physician-led Advocacy

In selecting advocacy strategies, "the messenger is as important as the message."[44] Physicians are uniquely positioned to function as advocates for health. They understand the medical aspects of issues and are able to delineate the links between social factors and health.[45] Public trust of physicians is significant: they are considered credible sources of information.[46] Given their social standing, physicians generally have greater access to political leaders and policymakers and possess substantial clout in public processes and priority-setting.[45] For example, in China, physicians in administrative positions working in urban centres are considered to be more politically influential than civil servants in the Ministry of Health.[47]

Physicians can be used as vehicles to advocate both upwards to government decision-makers to catalyze policy change, as well as downwards to encourage prevention programs with their patients.[48] Patients who receive information from physicians on lifestyle changes are primed to be more receptive to these recommendations.[46] This approach has proven to be successful in the U.S., where pediatricians were offered incentives to participate in advocacy efforts; 87% of surveyed American pediatricians indicated willingness to participate in policy change.[48] To implement and fund this program, partnerships can be formed with national governments and medical associations such as the Chinese Medical Doctor Association and the Association of Physicians of India.[35,38] Physicians can take part in advocacy training workshops featuring education and skill-building sessions led by local experts such as public health officials.[44]

D. Prevention and Public Positioning: Counter-marketing Strategies

Media advocacy promotes public health goals by using the media to strategically apply pressure for policy change, shifting the focus from the behaviour of individuals to the efforts of policymakers.[49] Advertisement of obesogenic foods encourages unhealthy diets.[21] Counter-marketing is an effective

Preparation of street food in China. Eric Coomes, 2010.

media tool to achieve obesity prevention through promoting healthy lifestyle choices, while garnering public support for this issue.[50] Counter-marketing involves paid advertising, media advocacy and press releases.[51] Celebrities associated with healthy living influence public opinion and can be used as vehicles to effectively disseminate counter-marketing messages.[52]

Counter-marketing can be used to discourage the consumption of unhealthy foods or inactive lifestyles through pro-health messages.[51-52] The similarities between smoking and obesity in terms of lifestyle choices and environmental factors imply that the success of anti-tobacco campaigns could be mirrored in obesity counter-marketing initiatives.[51]

Civil society groups, such as farmers or parents associations, can use counter-marketing to disseminate their message to the masses. Reframing the issue as a public health concern will attract the attention of the target audience and garner support of organizations in MICs such as the CCDCP or Obesity Foundation India.[22] For example, in the U.S., the Center for Disease Control is promoting a mass media and community-based campaign encouraging healthy activity in order to curb the obesity epidemic.[53] The partnership with an arms-length government department and the success of counter-marketing can then urge the creation of policy; the public positioning of an issue convinces political leaders to act.[22]

Resources Needed: Pursuing Advocacy Strategies

To effectively manage the scope of advocacy strategies, available resources must be identified and considered. In order to implement these strategies, human resources and funds will be needed. Necessary human resources include: a technical expert to synthesize relevant research on childhood obesity in order to assist with engaging public figures; a web designer to create a secure and accessible site for the international forum; and public health officials to train health care providers to advocate to civil servants. Funding also needs to be secured from national governments to implement the web-based forum and show commitment, and from professional associations to provide incentives for health care professional advocacy.

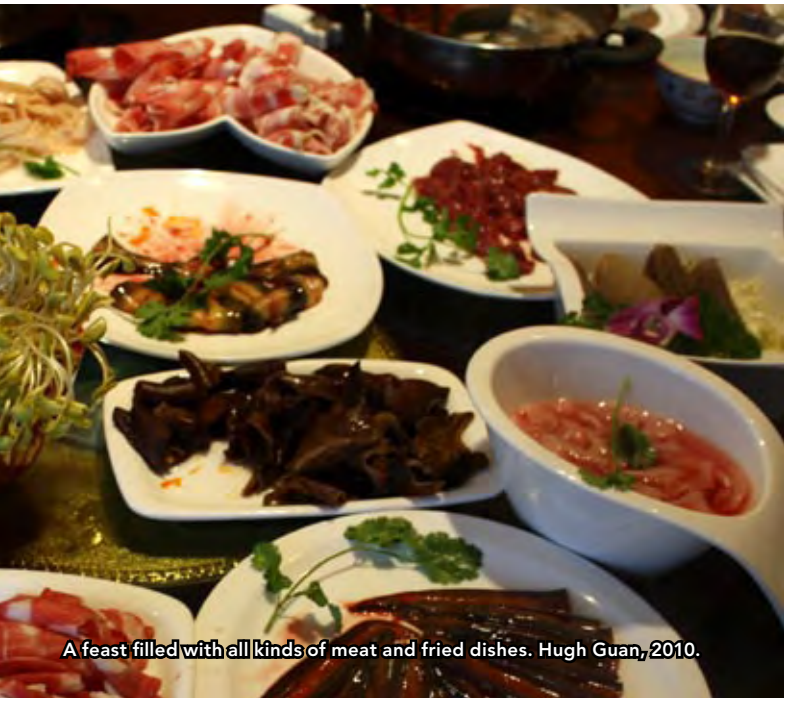
Actionable Key Messages

✏ Childhood obesity must be prioritized on the global health agenda in order to reduce the burden of the disease in urban settings of middle-income countries.

✏ Modernization has led to reductions in physical activity and an increase in consumption of unhealthy foods in urban areas; this is directly related to the rise of obesity in MICs.

✏ Various policy options involving nutrition, physical activity and marketing can be implemented by national governments as part of their efforts to tackle this growing challenge.

✏ Greater political priority for childhood obesity is needed and can be achieved by framing obesity as an economic issue, creating an international web-based forum, supporting health professional-led advocacy campaigns, and undertaking counter-marketing initiatives.



A feast filled with all kinds of meat and fried dishes. Hugh Guan, 2010.

Indicators:
Tracking Success

Government investments, policy changes, research efforts and awareness campaigns can all serve as indicators for whether the issue of childhood obesity has risen on the global health agenda.

Funding and Policy Changes

Government funding of initiatives that require large monetary investments, such as the development of fitness areas and parks, is a good indication that the proposed global strategy is moving forward at the national level. Major policy reforms, such as changing national dietary guidelines, also indicate strong government support and commitment.

Research

Formation of partnerships between national research institutions and IASO is an indication of support. Efforts to clearly define the issue, gather scientific evidence, and monitor and evaluate implemented programs show commitment on the part of the government.[22] For instance, the conducting of nationwide surveys to determine the disease burden of obesity is an indication of government priority.

Awareness

National efforts to garner public awareness through partnership formations with celebrities are also good indicators of commitment. Portraying the issue in ways that resonate with the people requires government investment.[22]

McDonald's in a bustling city in China. Eric Coomes, 2010..

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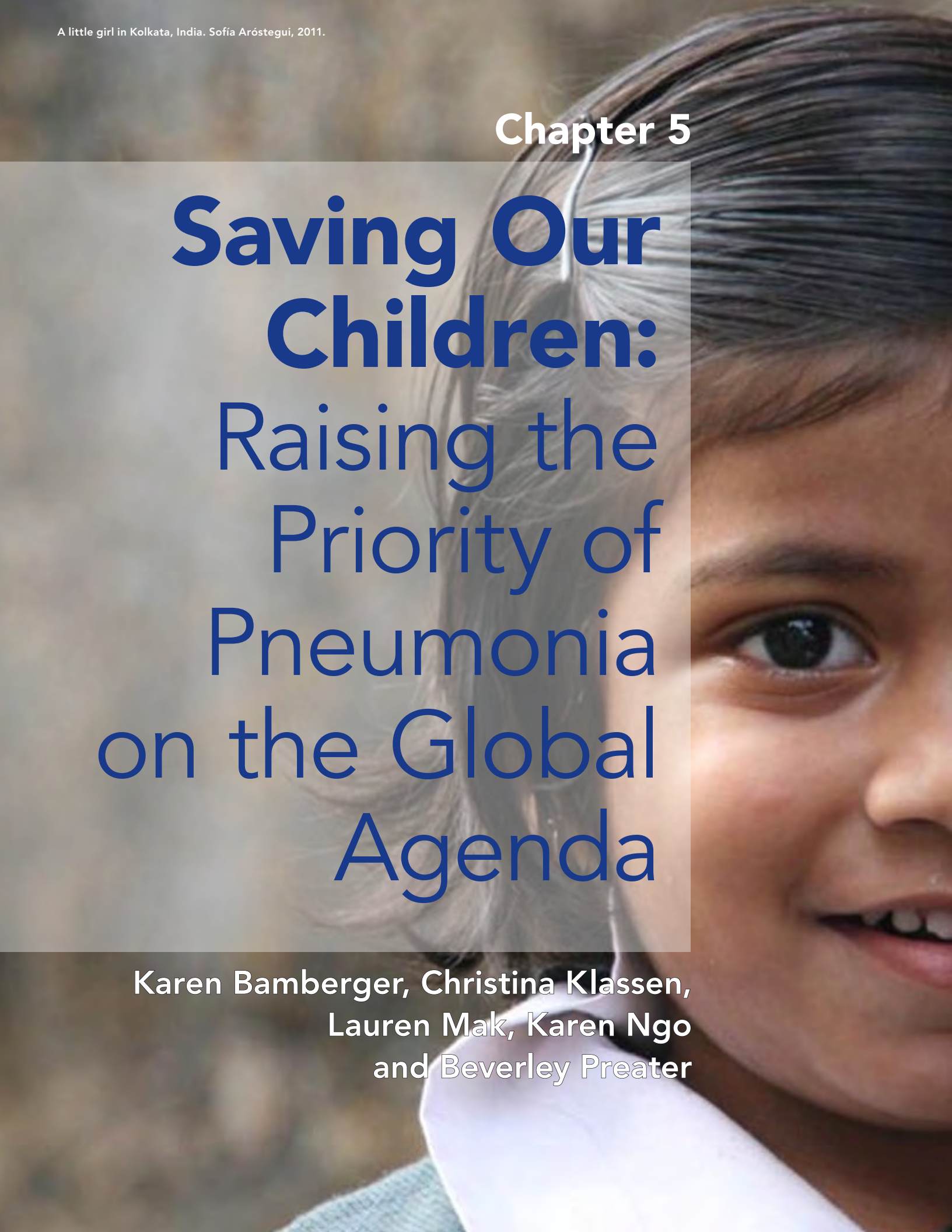

A little girl in Kolkata, India. Sofía Aróstegui, 2011.

Chapter 5

Saving Our Children: Raising the Priority of Pneumonia on the Global Agenda

Karen Bamberger, Christina Klassen, Lauren Mak, Karen Ngo and Beverley Preater

Nature of Pneumonia

Pneumonia is an acute respiratory infection that manifests as a cough with fast or laboured breathing.[1] In vulnerable children, pneumonia causes mucous and fluid to fill the lungs making it difficult to breathe. Due to a lack of knowledge, pneumonia is often mistaken for a common cold. It can result in severe complications if not properly managed.[2]

Global Burden of Disease

More than two million children die from pneumonia each year, accounting for almost 20% of child deaths worldwide. Globally, little attention has been paid to pneumonia and it has been termed the "forgotten killer of children."[2] More than 98% of the deaths from pneumonia occur in only 68 countries.[1]

History of the Challenge

Inadequate funding, poor access to health services, lack of political will, and poor recognition of disease burden have significantly inhibited efforts to tackle pneumonia in low-resourced settings.[1,3] Only one in five caregivers can recognize the signs of pneumonia. As a result, 50% of children are never brought to a qualified healthcare provider, and less than 20% of children with pneumonia receive antibiotic treatment.[2]

Millennium Development Goal 4

Reducing child mortality is one of eight Millennium Development Goals (MDG) set to combat global poverty.[4] MDG 4 aims to reduce under-five mortality by two-thirds by 2015. Achieving this goal can only be accomplished through immediate action and commitment to reduce childhood pneumonia deaths. Without a collaborative effort to tackle pneumonia, more than 13.2 million excess deaths will occur by 2015.[1]

Abstract

Background: Pneumonia kills more children under the age of five than any other illness worldwide.

Obstacles: Despite availability of cost-effective interventions, a lack of political will and limited awareness remain barriers to addressing the global burden of pneumonia.

Current Efforts: The Global Action Plan for Prevention and Treatment of Pneumonia (GAPP) was developed in 2008 by the World Health Organization and UNICEF, outlining solutions to improve understanding of the disease and propel action to address the problem.

Purpose: This report details a three-stage advocacy strategy to promote GAPP in its efforts to increase awareness and raise political prioritization of pneumonia.

Advocacy Strategies: **Stage 1** - Conference diplomacy facilitates global networking, raises awareness and enables knowledge transfer of advocacy tools to NGOs. An online forum will act to keep individuals accountable to their conference commitments. **Stage 2** – Using ground-level advocacy tools, such as radio broadcasting, cellphonecampaigns, and mother-to-mother communication, lay people will be empowered as credible messengers to disseminate knowledge about pneumonia. **Stage 3** – Creating partnerships between NGOs and prominent global health actors will provide ground-level advocates with the necessary resources and networking capacity to pressure national governments to raise pneumonia as a priority, with proven ground-level successes.

Key Words: pneumonia, under-five child mortality, MDG4, conference diplomacy, ground-level advocacy

Policy Options to Address Pneumonia

Existing Policies

In 2008, the WHO and UNICEF initiated the Global Action Plan for Prevention and Treatment of Pneumonia (GAPP) with the goal to improve understanding of pneumonia and propel action to address the problem. This report suggests prevention, protection and treatment strategies that are practical and cost-effective.[1,5]

On May 21, 2010, the World Health Assembly (WHA) passed a resolution calling for collective action by policymakers, donor agencies and civil society to implement GAPP recommended strategies, reflecting the growing momentum and commitment of WHA member states to address pneumonia.[6] WHO's standardized guidelines to diagnose and treat pneumonia with appropriate antibiotics have shown substantial reduction in child deaths.[2]

Vaccines

Safe and cost-effective pneumonia vaccines, PCV and Hib, were developed several years ago, but they have not reached those most at risk.[1,5,7] Universal provision of these vaccines would result in a 35% reduction in the incidence of pneumonia.[1] The Advanced Market Commitment (AMC) is an innovative financing mechanism to accelerate the manufacturing of pneumonia vaccines at inexpensive prices for developing countries.[8-9] Although these policies and vaccine options have potential, there remains a lack of awareness.[10]

Global Decision-makers with Power and Influence to Enact Policy Change

Leaders of national governments, such as U.S. President Barack Obama and Canadian Prime Minister Stephen Harper, are global decision-makers with the power to influence policy change in this issue area. They successfully pushed child and maternal health onto the G8 agenda.[11] Two countries that have successfully prioritized pneumonia are The Gambia and Kenya. The Gambian government sponsored the first major randomized controlled vaccine trial in 20 years. Kenya's President Mwai Kibaki implemented universal pneumococcal vaccines for children.[12-13]

A mother and her baby boy in Kolkata, India. Sofía Aróstegui, 2011.

Intergovernmental organizations such as the WHO and the UN can establish policies, guidelines and incentives for health and economic development of member states. In the past, advisories from WHO and the UN have been central to influencing the positions taken by national governments on health issues (e.g. HIV/AIDS and H1N1).[14]

Various private public partnerships and philanthropic organizations, such as the Bill & Melinda Gates Foundation, have the monetary and reputational status to influence decision-makers to enact policy change.[15] GAVI Alliance is also a central actor in this field: the organization creates

agreements with pharmaceutical companies such as the AMC to ensure availability of cost-effective vaccinations, which will provide incentives for decision-makers to implement policy options regarding treatment.[16]

Reasons Why Global Decision-makers Have Not Implemented the Desired Policy Changes

Awareness and Data

There is a general lack of awareness among both leaders and lay people about pneumonia and the impact it has on families and communities.[16] Pneumonia does not receive sufficient advocacy or media attention and thus faces a shortage of financial investment.[2,17] Developing regions lack population-based data on the epidemiology of pneumonia, meaning they have few ways to assess context-specific prevention and treatment strategies.[18]

Political Will

Since there is a limited history of policy implementation and misperception of disease burden, politicians lack the desired evidence to justify prioritizing pneumonia on their national agenda.[9] Such political indifference interferes with the ability to garner funding and implement the required policy changes.[19]

Potential Obstacles for Policy Changes and How They Can Be Overcome

Funding Barriers

Most spending to reduce child mortality is channelled through broad child health initiatives, resulting in a lack of designated funding to address pneumonia.[20] Furthermore, GAVI states that an additional $3.7 billion is necessary to continue pneumonia vaccine distribution.[21] Financial assistance has been provided through the AMC since 2000, but recent economic recession means several countries are no longer eligible for funding.[21] Increased pneumonia awareness will illuminate the need for subsidizing costs of vaccination distribution and collection of population-based data on disease burden.

Research

Prevention, protection and treatment efforts are not likely to be effective unless supported by strong research. Therefore, efforts to build research capacity in countries most affected are important.[1] The WHO Department of Child and Adolescent Health has recognized the need to shift global research priorities to increase attention on health systems research as a means to address current implementation challenges.[2]

A woman uses a cellphone in a community bakery, Nairobi, Kenya. George Onyango, Courtesy of Photoshare, © 2005.

Cultural Barriers

In places where traditional medicine is the mainstay, vaccines and Western medicine are viewed with mistrust, and health concerns are taken to the traditional spiritual healer.[22] Cultural sensitivity is essential when bringing new healthcare concepts to a region because advocacy is only effective if the audience is receptive.[2]

Implementation and Access to Healthcare

Limited access to healthcare services and trained health personnel serves as a major barrier to implementation of GAPP strategies.[2,19] Training community health workers and increasing the provision of antibiotics can bridge the gap between households and healthcare centres in regions with weak health systems infrastructure. As a result there would be improved access to appropriate pneumonia case management.[2,17]

Natural Advocates for Policy Change

Joint efforts by WHO and UNICEF have been effective in urging national governments to implement policy interventions expressed by GAPP.[1] People like Dr. Thomas Cherian, a pneumonia expert and coordinator of the Expanded Programme on Immunization at the WHO, have the potential to influence the global health research agenda. Dr. Cherian also participated in the development of GAPP during informal consultations and conferences, and therefore is an ideal champion for audiences such as the Global Forum for Health Research.[19,24-25]

Advocacy efforts by the Pneumococcal Awareness Council of Experts (PACE), a Sabin Vaccine Institute initiative, have focused on implementing policy change by hosting national discussions and networking with national advocates who have the ability to influence decision-makers. Since its establishment, PACE has influenced 28 countries to include pneumococcal vaccines in their national immunization strategies.[25]

The Global Coalition Against Child Pneumonia (GCAP), established in 2009, is comprised of a network of international governments, nongovernmental and community based organizations, and research and academic institutions that have united to raise awareness of pneumonia worldwide. Since its formation, GCAP has organized two annual World Pneumonia Days, and has engaged in several corporate fundraising events and social media campaigns to support GAVI alliance pneumococcal vaccine programs.[26]

The Pneumococcal Accelerated Development and Introduction Plan (PneumoADIP) at Johns Hopkins

Bloomberg School of Public Health was established to improve child survival and health through improving evaluation and access to pneumococcal vaccines.[1,9] Through partnerships with countries, donors, academia, international organizations and industry, PneumoADIP possesses the resources and access to networks to communicate effectively with key decision-makers.[18]

Both the Measles Initiative and Hib Initiative (both UNICEF and WHO joint partnerships) have partnered with several NGOs and governments, including the Red Cross, Center for Disease Control, and the UN Foundation, to provide resources and tools to advocates for raising funds and awareness. They also provide a forum to connect advocates such as NGOs and faith-based organizations by rewarding successful advocacy efforts and providing advocacy strategies.[27-28]

Potential Advocacy Partners with Complementary Interests

National governments have become advocacy champions in the fight against pneumonia. For example, Rwanda's Minister of Health was awarded the PACE Leadership Award in 2008, and Costa Rica was the first nation in Latin America to include PCV in their national vaccine strategy.[25] Such successes can influence decision-making in other countries.[25]

There are several NGOs such as World Vision, Save the Children, and PATH with the resources to advocate for policy change and funding for pneumonia through international child-health campaigns.[29-30] Save the Children has been active in advocating to funders, such as USAID and CIDA, to assist health ministries' community case management services.[31]

Ground level advocacy propagates pneumonia awareness and elicits a new advocacy movement from the grassroots. Mothers are credible messengers, with local community connections, to disseminate information and become the passionate voice for their at-risk children.[32]

Practical Advocacy Strategies Most Likely to Influence Global Decision-makers

The following strategies can be followed to raise the priority of pneumonia on the global agenda. These include conference diplomacy, inception of a new ground-level advocacy group, and directly pressuring national governments to implement policy change.

Stage 1: Conference Diplomacy

A conference could be held on World Pneumonia Day in November, hosted by GCAP which has actively participated in pneumonia advocacy.[26] The purpose is to bring together global actors to raise awareness about disease burden and to facilitate knowledge transfer to delegates. The conference would be held in Kenya due to their government's already successful efforts in pneumonia control.[13] Kenya's successes will be used to inspire delegates to address pneumonia in their own countries. Invitees will include natural advocates, lobbying groups, NGOs, ministers of health or influential government representatives, consulting firms, researchers and academic institutions.

A Global Pneumonia Declaration could be developed at the conference and signed by national governments as a vehicle to demonstrate commitment to prioritize the reduction of child mortality in their countries. This declaration will further represent international acknowledgement of pneumonia as a global issue and make other delegates aware of the lack of disease burden data at the ground level.

An online forum hosted by PACE could then be created to facilitate networking between advocates for pneumonia following the conference. This forum could be used as a means to propagate the success achieved at the conference and act to keep individuals


Wahu

A health worker vaccinates a toddler against measles in Indonesia. UNICEF/Josh Estey, 2010.

Women perform a traditional dance during a village community meeting in Eramo, Northern Ghana. Christina Klassen, 2009.

accountable to their commitments. The forum could be a platform to organize civil lobby groups and facilitate the exchange of successful advocacy practices. The Canadian Diabetes Association, for example, has demonstrated the successful use of an online forum.[35]

Workshops at the conference could facilitate the sharing of advocacy tools with delegates. These could include mother-to-mother communication, a cellphone texting campaign, and effective use of social media. Such workshops could enable delegates to empower their local communities to participate in ground-level advocacy.

Stage 2:
Creation of a New Advocacy Group for Mothers

The second stage could see to the creation of a new group of advocates from ground-level populations in developing countries. This could be done by educating mothers, family members and village leaders about disease recognition, prevention, protection and treatment.[1] Empowered to deal with pneumonia, this further equips lay people to increase government awareness and push for anti-pneumonia policies. Supporting NGOs should document the success occurring at this level. Subsequently the success can be used to lobby governments. Emphasis could be placed on the ease of the solutions and the commitment of this group to act on the issue.

National radio broadcasts about pneumonia could reach out to and inform otherwise inaccessible populations. This could mobilize lay people to push forward prevention efforts.[36] A group like the Johns Hopkins Center for Communications Program could perhaps facilitate this endeavour, since they already run an existing radio-based Hib vaccine initiative.[36-37] USAID-sponsored anti-malaria and HIV initiatives in Tanzania are examples of past successful radio campaigns.

A cellphone texting campaign could then use health quizzes, awareness messages and information for patient families about treatment and prevention.[38] Partnerships could be formed with cellphone networks such as MTN and Vodafone to send free network-wide messages.[36] Success has been seen with similar WHO and UN mobile health initiatives to raise awareness for HIV/AIDS in Africa.[39]

A mother-to-mother initiative could then target ordinary women affected by pneumonia. Equipped with simple maternal solutions such as breastfeeding and vaccination, mothers could create their own

culturally-relevant and community-led advocacy initiatives through song, drama or social meetings.[1,32] NGO-led workshops to teach mothers how to write letters to governments, sign petitions and garner media attention could facilitate sharing the real-life stories of those affected by the disease, and appeal to government policy.

A social media project could then advertise events and ongoing pneumonia promotion with Facebook and Twitter. This would allow advocacy groups to publicize their efforts and elicit international collaboration. Celebrity advocates could further promote pneumonia prevention through writing.[40] Examples include Nicholas Kristof, a New York Times columnist and advocate to combat pneumonia, and Lance Laifer, a successful advocate in the fight against malaria. Music artist K'Naan, popular in the developing world, could increase pneumonia awareness through concerts and social events.[41,43]

Stage 3: Raising Global Priority

Following ground-level advocacy initiatives, the message would have to return to the government level to effect policy change. Newly trained advocates of NGOs could partner with public-private partnerships and aid funding agencies such as the Gates Foundation and CIDA.[32] With these newly created partnerships, civil advocates like mothers, would have the resources and networking capacity to pressure governments to support current efforts. They could use a variety of tools to disseminate their message of success stories, including opinion editorials, letters to health ministers, press releases, and rallies.[44] These efforts could encourage governments and IGOs to place greater priority on pneumonia control. An example of a successful advocacy partnership is The Gambia and the Gates Foundation in their effort to promote pneumonia vaccination.[32]

Current ground-level initiatives and NGOs can collaborate on a global call to action to the WHO requesting they host a summit on pneumonia control. This would allow politically engaged NGOs to be involved in decision-making, as demonstrated during the 2003 and 2007 World Summits on Information Society.[45] Advocates could call the WHO to put greater pressure on member states to adopt GAPP and GAVI policies and raise the profile of pneumonia on the global health agenda. This could be accomplished using success stories from the ground and the argument that pneumonia control is essential to meet MDG4.[1]

A trained community health worker counts the breaths of a baby using a respiratory timer in a village in Kirehe district, Rwanda. Rose Luz, Courtesy of Photoshare, ©2008.

Limitations

Limitations to conference diplomacy (i.e., stage 1 of the proposed advocacy strategy) include dependence on significant monetary resources and successful partnerships with PACE and GCAP.[46] The success of conference networking also depends on the expertise and prominence of delegates in attendance. New ground-level advocacy efforts (i.e., stage 2 of the proposed advocacy strategy) face additional challenges in countries without free press. Efforts to directly raise the global priority of pneumonia (i.e., stage 3 of the proposed advocacy strategy) may reduce efficiency in decision-making by involving NGOs in policy development.[46-47]

Resources Needed to Pursue Advocacy Strategies

Financial support will be needed to fund the conference. This can be achieved through approaching corporate sponsors. For example, Vicks, a cough medicine manufacturer, is a natural advocate due to its membership with GCAP.[26] The online

forum would require a server and human resources to manage the site, which would be financed through advertisements from relevant corporations.

Radio promotion will require a broadcasting station and radio announcers. Cellphone texting will require partnership with cellphone providers, which could be achieved using prizes from texting campaigns as incentives to increase provider business. Mother-to-mother communication would require investment in human resources to initiate the dissemination of advocacy tools. Social media and any online forum will require financing for web-hosting and advertisement.

NGO-public private partnerships require communications technology such as an online forum, advertising media and video conferencing. The proposed summit for pneumonia control would require financial support which could be attained from corporate sponsors. Pharmaceutical companies, for example, could benefit from involvement with a summit as they seek to gain from any new drug policies that are recommended.[33]

Actionable Key Messages

✏ Conference diplomacy is an effective means to facilitate global networking, allow collaboration among pneumonia control advocates, and enable knowledge transfer of advocacy tools.

✏ Mothers are credible messengers to disseminate information about disease burden when given advocacy tools.

✏ Partnership between ground-level advocates and prominent global health actors can raise the priority of pneumonia on the global agenda.

✏ Policy change to support ground-level success will allow sustainability of current efforts.

Possible Indicators of Progress and Success

Initial success of ground-level communication could be indicated by an increased number of radio broadcasts and cellphone text messages promoting pneumonia control. Furthermore, NGOs could report increased community awareness, and healthcare providers could report more mothers recognizing the signs of pneumonia.[2]

Increased media coverage of pneumonia indicates growing public interest. Numbers of publications, articles and news broadcasts could be quantified using LexisNexis. This implies that pneumonia is becoming a 'sexy' global health issue.[48] Increased support could be observed in social media via Twitter and Facebook. Indicators could be measured by the number of Twitter followers and 'likes' on Facebook for pneumonia awareness causes. Increased participation in the online forum indicates collaboration of global pneumonia advocates. Participation could be measured by the number of members and discussion posts.[35]

Changes in government policy indicate advocacy efforts are successful.[1] These include adoption of GAPP strategies, introduction of pneumonia vaccines to national vaccination programs, government public health campaigns, and implementation of policies to support ground-level pneumonia control efforts.

Ultimately, in a few years multi-country surveys of affected populations could be used to reveal an increased ability to recognize the signs of pneumonia and successful implementation of GAPP strategies.[1]

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