TEACHING ARTICLE

PREPARING A POLICY BRIEF: REVIEW OF THE BASICS IN THE ETHIOPIAN CONTEXT

Yayehyirad Kitaw (MD, MPH)¹*, Abraham Aseffa (MD, PhD)²

ABSTRACT

Evidence-based decision is crucial to maximize benefit from the limited resources available for health care. Quality evidence costs money. If research results are not translated into impactful practice, the resources, time and effort spent on investigations will be wasted. Implementation is only possible if decision makers are informed of the evidence. Evidence is however not the only input that policy makers consider in their decisions. It is therefore critical to develop skills in effective communication to influence policy. One means of dissemination of research results to decision makers is writing well-crafted policy briefs. The article provides background and guidance on how to write good policy briefs in the Ethiopian context. Useful references are included for further reading.

INTRODUCTION

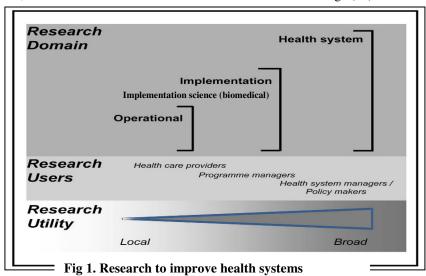
"...it is what is done with the good policy brief that matters" (1). "Globally, the science and technology revolution is the most important factor behind the disruptions - the historical divide... the world is passing through. It is the linchpin of deeply embedded and multifaceted issues. Unlike previous revolutions (such as agricultural and industrial) which extended the physical capacity of man, the present revolution (with computers and the whole range of information and communication technology, ICT) expands man's mental capacity. There is also the quasi-merging of sciences and production unprecedented in history and the explosion of knowledge and the capacity to store, process and transmit it – the information revolution – necessitates a thorough review (a revolution) in how we envision and prepare for the future as no stock of knowledge, skill and attitude could serve a person for long. No one can predict the 21st century counterparts of quantum theory, the double helix and the internet. But there is little doubt that the advances in science and technology will continue to transform the way we live, create new industries and jobs and enable us to tackle seemingly intractable social and environmental problems" (2). As Craig Venter puts it, our knowledge on "Life (is growing) at the Speed of Light" (the title of one of his books); "A hundred years ago people had no idea what genetic material was" but, in a life time, mankind has moved from the double helix to synthetic biology (3). Thus, there is growing recognition that "Research based Science and Technology ... hold the key to development in the Third World" (4) but the capacity for policy affecting research in low-income countries is limited (5). However, even the limited evidence generated is seldom used, as evidence-based policy making is new, dating only to the early 1970s (6), and still faces many challenges (6-11). Therefore, "improving the capacity of decision-makers to recognize the benefits, and identify and use research information to strengthen health policies and practices" is critical (12). Policy briefs could greatly contribute to this (13).

1. Bridging the 'know-do' gap:

There is growing global concern on use of evidence base. "Increasingly there is recognition that individual projects or programmes building evidence synthesis skills, may be limited in their effect without a broader consideration of the systems in place which 'embed' or 'institutionalize' evidence informed policy making practices" (12, 14, 15). As pointed out by Brownson et al. (16) "Our biomedical models often seek to reduce causes into neat and clean pathways, yet as relevant policies take shape, it becomes clear that the world is complex with numerous policy options."

¹Independent Consultant in Health Development ²Armauer Hansen Research Institute *Corresponding author email: yayehyiradk@yahoo.com

Thus, many proven cheap and cost effective interventions remain inaccessible, are hardly used at all and do not reach those who need them most. In some cases, widespread implementation may take years or decades and mechanisms for rapid responses for policy request are being tested (17). This is because research competes with many other factors in the policymaking process and might not be valued as information input. It could also be that the research evidence is not relevant or is not easy to use (Translation). "A growing body of literature demonstrates stakeholders' limited use of health information for decision-making partly due to a communication gap (available, accessible, relevant, and useful)...When information is not presented using a method or format appropriate for a particular audience, it is deemed inaccessible and not used for decision-making" (18).



One contributing factor could be that what constitutes research and policy could differ and be context specific (19). While most will agree that 'basic' research is rarely policy oriented (at least in the immediate/short term), there are various interpretations of domains of applied research and their (level of) applicability to policy decision (Fig 1 Source: adapted from Reference).(14)

"... what 'policy' is, is all but unambiguous. 'Policy' can refer to a range of concepts from projects and programmes, to sector-specific plans, to broad statements of intent (20). Policy is also not the responsibility of a single body; rather, policy decisions affecting health take place across a range of governmental levels and authorities including Public Health and Health Promotion, Health Service Priority Setting and Management, Program planning, and Service provider decision making" (15). The policy decision process is quite complex and often murky. As Bismarck reportedly remarked, "Laws are like sausages: it's better not to see them being made" (21). Thus, "a carefully crafted policy proposal can be so easily subverted, or a dubious policy can triumph with little real evidence or analysis to commend it ... This is because policies are not made in vacuum. Rather, they emerge from different sides involving different interest groups with different vested interests and lobbying strategies and power" (21). Thus, "evidence is only one of the many inputs that policymakers consider. Policymaking is complex and context dependent, influenced by ethical values, interest group and party politics, as well as social and economic fac-

Consequently, the link between research and policy decision is often very complex. Thus, for example, the outcome of a biomedical research could have implications for, among others, public health at various levels (operational /service delivery-programming, resource allocation); strategy, planning and financing; education (in-service training, inclusion in pre-service curricula, health education/awareness creation for the public); the economy and commerce (Fig 2). Both, scientific and political decision making, go through several stages including various stakeholders with differing agendas, competing information/data, etc. (Fig 3). Without going into details, these processes could interact at different levels but there is, often, a divide between the two; what has been called the 'know-do gap'. Dissemination of research findings attempts to bridge this gap.

tors" (19, 22).

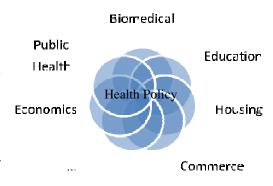
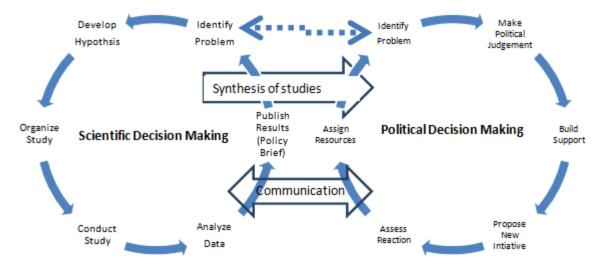


Fig 2. The Health Policy Decision complex: Competing Info/Data



Source: Adapted from 18

Fig 3. The Science and Policy Decision Link (simplified)

Research might not be used, i.e. evidence fails to reach policy, for a number of reasons, (19, 23) including:

- Divide between researchers and policy makers
- Research results not presented in user friendly form (comprehensible and credible) for potential users; a well -crafted policy brief for example
- Results not available in timely manner.
- Failure or inadequate dissemination (to whom and through which channels?)
- Criteria used to adopt new intervention (resulting from research) not clearly enunciated.
- How the intervention should be evaluated during implementation not clearly indicated

Research-policy linkages could also be affected by "Factors such as the non-participatory nature of the government, absence/lack of proper linkage between researchers and policymakers, ineffective communication and dissemination strategies, and lack of relevance to local context of the research produced" (24).

Currently, there are calls to strengthen health research capacity in low and middle income countries (25) (26) and a number of Efforts to Bridge the Know-Do-Gap. These include Evidence-informed Policy Networks (EVIPNet), support tools for evidence-informed health policy making, The translating Research into Action (TRAction), Knowledge Translation Network (KTNet), Health Policy and Research Organization (HPRO) (23).

Means of disseminating research findings:

Policy brief is only one means of disseminating research findings. This could go from detailed reports to those directly involved in the

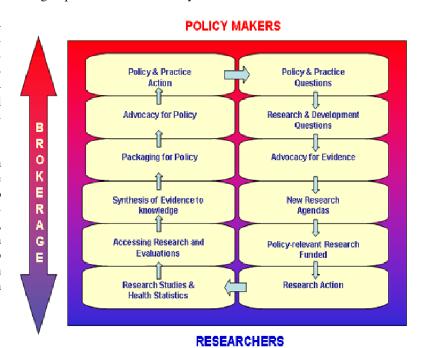


Fig 4. Bridging the Gap- Closing the Loop (Source:22)

research project, to article(s) in peer reviewed scientific/professional journals to presentation in conferences and workshops (Box 1).(7) Some, such as report, article and policy brief are standalone documents intended to convey the full message to the target audience. Others, abstract, executive summary etc., could be part of the longer report or article/paper. A research dissemination plan should be part of the original research project proposal. Our focus being on policy brief, we will not describe others in detail but only briefly describe 'Executive Summary' to illustrate major differences.

An *Executive Summary* gives a preview of a long report, usually for non-technical people (for example, the Executive Director of the institution in which the research was undertaken), who need not go through details, do not have time to read the whole report but require enough information to understand the contents of the long report exactly. All key points included in the main report should be included in the same order as in the long report, i.e. tries to cover all main ideas of the whole document succinctly.

Box 1. Forms/means of disseminating research findings

(Preliminary) Report Article Abstract Executive summary Briefing Notes Policy Brief Press release

Brochures/pamphlets Workshops/Conferences

2. What a policy brief is and what it is not:

Broadly stated, a policy brief is a concise summary of a particular issue, the policy options to deal with it, and some recommendations on the best option to a predefined, time-pressed (policy) audience. As we will see in subsequent sections, policy briefs should be highly context specific and, therefore, it is hard to give hard and fast rules about them. However, some major characteristics could be delineated. A policy brief is:

- A vehicle for providing *policy advice*; therefore, targets policy makers at various levels
- An engaging document which presents findings and recommendations to a non-specialized audience
- Policy relevant and focused: medium for exploring an issue and distilling lessons learned from the research
- A *stand-alone document* i.e. the reader need not refer to another document to clearly understand the message and take appropriate measures/steps. Therefore, it should:
 - Provide enough *background* for the reader to understand the problem.
 - Convince the reader that the problem must be addressed *urgently*.
 - Provide information about *alternatives* (in an *objective* brief).
 - Provide *evidence* to support one alternative (in an *advocacy* brief).
 - Stimulate the reader to make a *decision*
- *Brief:* No more than 2-4 pages (1,500 words). The aim is to "turn complex ideas into succinct and powerful arguments that will capture the attention of the busy reader" (27). In the final analysis, "... it is what is done with the good policy brief that matters" (1).
- *Not technical/academic* but adapted to the need of a non-expert (policy level) audience and be able to attract and hold attention of the targeted reader (avoid jargons) and convey clear message (s) persuasively.

A policy brief is not an Executive Summary with which it is sometimes confused. While both are means of disseminating research findings (Box 1.1) they have different missions. An executive summary gives a preview of the long report, usually for non-technical people who need not go through details or donot have time to read the whole report. It contains enough information to understand exactly the long report and includes all key points in the same order as in the long report. Thus, it attempts to cover all the main ideas of the whole document succinctly. A policy brief might have an executive summary (see Contents below).

3. The experience in Ethiopia in research use for policy decision:

"Before starting to write a policy brief it is crucial to appreciate political realities, and any competing policy narratives, to ensure the best chance of achieving influence" (15).

In the Ethiopian context, the need for research was felt from the very beginning after the Italian Occupation [28]. "Study of . . . conditions that affect health. . ." was one of the foremost principles in the development of services. One of the Public Health Department's main aims was "to carry out a certain amount of research". A 1944 report from the Department included some preliminary laboratory research on trachoma and some medicinal plants (mainly enkoko and ketchemo for tapeworm and birbira -a fish poison). There was also some research on other diseases, malaria in particular. An Institute of Medical Research and Central Laboratory was established in 1946.

However, in spite of the good intentions, it is clear that only the ground for research could be laid in this troubled period. Later, the establishment of the All Africa Leprosy Rehabilitation and Training Center (ALERT) in 1965 and the Armauer Hansen Research Institute (AHRI) in 1970, fostered active development in epidemiology, treatment, clinical, pathological, and immunological studies and gave Ethiopia a strong role on the leprosy scene in Africa.

There were also early attempts at planning including the 1st to 4th 5-year Plans of the Haile Selassie period, the 10 Year Perspective Plan of the Derg and HSDP I-IV of EPRDF. But all took bold approaches and gave ad hoc responses to perceived need and/or to challenges based on limited preparedness and political expediency "...in keeping with all modern Ethiopian governments' practices of boldly forging ahead, disregarding the potential value of incremental adjustments to bureaucracies, and often doing so in the midst of major disasters. This is grounded on a belief in the strength of the state to continue in the midst of reform..." (29).

But notable developments in recent years include increased effort locally and joining networks such as SURE collaboration (Supporting the Use of Research Evidence; see www.who.int/evidence/sure/guides/en) and EVIDENT Network (Evidence-informed Decision-making in Health and Nutrition; see www.evidentnetwork.org)

The Ethiopian constitution establishes dual jurisdiction over public health between the Federal and the Regional governments. In line with the principle of "one plan, one report, one budget policy" (30), the FMOH has full control over the national health policy. Four agencies, which report to both the FMOH and the Ministry of Finance and Economic Development, are responsible with the implementation of technical decisions. These include:

- The Food, Medicine and Health Care Administration and Control Authority of Ethiopia (FMHACA) (www.fmhaca.gov.et) -mandated with the inspection and quality control of drugs, facilities, professional personnel and food products;
- The Ethiopian Public Health Institute (EPHI) (www.ephi.gov.et) undertakes research on health priorities as well as having responsibilities on disease surveillance;
- The Pharmaceuticals Fund and Supply Agency (PFSA) (www.pfsa.gov.et) works to ensure provision and supply of essential drugs, medical supplies and equipment in the public and private sector, as well as the rational use of medicines. The FMOH has developed a national list for procurement of essential pharmaceuticals in collaboration with regions and development partners;
- HIV/AIDS Prevention and Control Office (HAPCO) (www.hapco.gov.et) prevention and control of HIV/AIDS, at both federal and regional levels (through regional health bureaus) (15). The Armauer Hansen Research Institute (AHRI) (www.ahri.gov.et) has since 2016 been upgraded to a federal organ responsible for implementation in clinical research, clinical trial capacity building and health biotechnology (31).

Steps in developing a policy brief:

The steps in developing a policy brief could vary based on the nature and complexity of the issue(s) addressed but usually involve a number of major points (Box 2); the aim being to "turn complex ideas into succinct and powerful arguments that will capture the attention of the busy reader" (27).

1. Identify the issue:

In preparing a policy brief, it is important to clearly define the issue to be addressed and apply what has been labeled a Laser Focus to the content. The policy brief should focus on a single topic and avoid as much as possible the temptation to address several topics in one policy brief, however important and seemingly interrelated. Then

define clearly your purpose, identify salient points that support the aim, distil points to essential information that will clearly present the identified issue.

Use the Power of Persuasion in your choice and presentation of the issue. One approach is to answer the question "What value does this have for me?" It is easier to convince others if you are strongly convinced yourself. In identifying an issue, describe the urgency of the situation and clearly present the benefits and advantages of the implied action. In all these, bear in mind that you have to limit your presentation to few words -1,500 words/ 2-4 pages.

Box 2. Steps in developing a policy brief

- 1. Identify the issue
- 2. Identify the audience: Who are your readers?
- 3. Set a target length
- 4. Identify key messages
- 5. Be specific and practical
- 6. Ensure adequate review

2. Identify the audience: Who are your readers?

General: By definition, a policy brief is written for 'policy makers' but these could be people at various levels from a manager of a health delivery unit albeit a complex one to a national health system, with varying agenda and interests (Fig 1). These are mostly people who work regularly on the issue addressed but do not usually read expert text and even less do research themselves (32, 33). Ask yourself: Who am I writing this brief for?- and select a specific target; avoid as much as possible the 'all of the above' trap. What are their interests, concerns? How knowledgeable are they about the topic? How open are they to the message? Are there specific messages that will facilitate reaching them? then tailor your message to addressing major gaps and reinforcing clear opportunities.

In identifying your audience and targeting your message, it will help to stratify/segment them by type and geography (Fig 4).

Geography / Cen-Re-Zo Dis-Ke-Community bele Type tral gional Policy mak-**CSO** ers [other] Government Health managers МОН Service Pro-Institution viders Researcher(s) General public

Fig 4: Segmenting policy brief targets by type and geography, Ethiopia

Ethiopian context: In Ethiopia, arguably the most salient feature is the decentralization to regions and woredas (Fig 4, (28). In preparing the policy brief, therefore, it is important to determine who is mandated to take the required steps for implementation at the specified level. Possible targets at the various levels could be: researchers (graduate/postgraduate students, professionals working alone or in teams); Institutions (academic, research or other) or MoH units (federal, regional or woreda health bureaus and others). Explicit targeting might be required at the various levels of structure and decentralization (Fig 5), for example of Federal Government (Central: Parliament, Office of the Prime Minster, Other ministries), or Regional Governments: (Regional Councils, Office of the Regional President, Other Regional Bureaus). Policy briefs might also target communities and civic society (political parties, professional associations, non-governmental organizations, community leaders or religious heads).

- 4. Identify key messages
- 5. Be specific and practical
- 6. Ensure adequate review

Once you have drafted your policy brief, conduct a 20-second test (34): check what stood out; try to make it more user-friendly; weed out jargons; make sure you have not overused statistics; and check soundness of arguments, proof etc. Then go through it more thoroughly with a check list (see Annex) and make sure all criteria are fulfilled. When convinced that the criteria are met, subject the draft to the scrutiny of relevant others (colleagues, supervisors ...). If available (in your institution) check/edit with language/communication expert and finalize the policy brief. Remember, the policy brief is one of the most important tools for implementing your research findings and impacting on the future in various ways so details could be important and should be reviewed closely (Box 3).

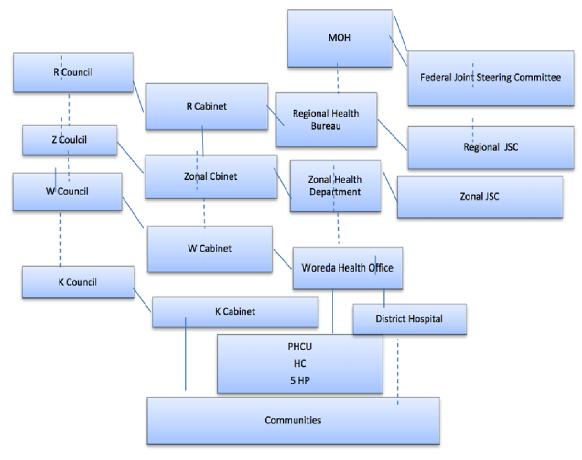


Fig 5: Governance Structure HSDP (approximate rendering by authors, not all links shown)

3. Set a target length:

Once the target audience is identified, the length of the brief should be planned. As implied in the name, it should be brief. The usual recommendation is to keep it to less than 4 pages or about 1,500 words. Most policy briefs keep to this length with very good effect. However, some policy briefs are very long extending to 20 or more pages; probably 'brief' interpreted as 'instruction', 'information' and not as 'short'; examples of this in the Ethiopian context are the EPHI/SURE policy briefs. However, engaging and well rendered, the longer the policy brief, the higher the risk of being shelved without being read by a busy policymaker.

Box 3. Points for Review of a Policy Brief			
Spelling	 Sequencing of paragraphs/ideas 		
Punctuation	 Clarity of the message 		
Format	 Missing information 		
Unnecessary information	 Politically sensitive issues 		
Logical sequence of	 Paragraph coherence 		
sentences	Unnecessary word repetition		
Repetition of information	Grammatical mistakes		
Dense, heavy sentences			

Contents of a Policy Brief:

A policy brief is usually structured in many sections (major aspects summarized in Table 1) some of which (e.g. executive summary, approaches, further readings etc.) might not be required depending on the audience and the context. If, for example, an executive summary is included, it should follow the regular format (see above) and details and presentation should be context specific. Always bear in mind that a policy brief should focus on a single topic, address a defined purpose, identify salient points that support the aim and distil points to essential information. Make statements short/brief and if illustrations, graphs, tables are used make them as simple, appealing and informative as possible.

Component ¹	Purpose	Notes
(Same)	Catch the attention of the reader	- Descriptive, relevant, and impactful
(Same)	Convey the importance and relevance of the brief, and compel the reader to read on	- Describe the problem- Outline why the current approach isn't working- Pre- scribe a new action
Context & im- portance of problem	Convince the reader that a current and urgent problem exists and requires new action	- Clearly state the problem or issue- Provide overview on the root causes of the problem- Describe the policy implications of the problem
Critique of policy option(s)	Detail shortcomings of the current approach, to illustrate the need for change	- Outline policy options- Describe why/ how the current (or proposed) approach is ineffective
Policy recom- mendation(s)	Describe the policy approach you recommend	- Rationalize your recommendation with evidence
Policy actions	Suggest concrete actions to address problem or issue	- Breakdown the specific practical steps or measures that need to be imple- mented, and by whom
Notes (optional)	To keep body of brief concise, a space to include additional support	- Statistics, graphs, legislation- Author information
	(Same) (Same) Context & importance of problem Critique of policy option(s) Policy recommendation(s) Policy actions	(Same) Catch the attention of the reader (Same) Convey the importance and relevance of the brief, and compel the reader to read on Context & importance of problem exists and requires new action Critique of policy option(s) Detail shortcomings of the current approach, to illustrate the need for change Describe the policy approach you recommend Policy actions Suggest concrete actions to address problem or issue Notes (optional) To keep body of brief concise, a space to include addi-

Table 1. Summary Notes on Contents of a Policy Brief

The **Title** should be catchy and stimulating. The **Executive Summary** if required, should distil the essence of the brief, provide an overview for busy readers, entice readers to go further, appear on cover or top of first page and be written last.

The **Introduction** should answer the question why the issue is being raised/discussed and explain the significance/ urgency of the issue. It will briefly describe the research objective and could also give overview of findings, conclusions. It should be crafted to create curiosity for the rest of the brief.

The **Approaches and Results** provides summary of the facts; describes issue and context; describes research and analysis without being overly technical; and should highlight and benefits, opportunities. 'Approaches' is deliberately selected here instead of 'methods' to stress that PB is not a technical document and should not be burdened with technical methodological explanations. It suffices to present essential information in non-technical terms to convey the credibility of the recommended action. This means briefly and clearly, in plain language, explain how the study was conducted, who conducted it and describe relevant background and method used to collect data. The results should convey the lessons learnt through easy to follow content starting by painting a general picture, moving from general to specific, using simple illustrations and basing conclusions on results.

The **Conclusion** answers the question of **What Does It Mean?** It should be used to interpret data and convey concrete conclusions (no confidence intervals, p-values ...) and express ideas using strong assertions but ensure that the ideas presented are balanced and defensible. An important mission of this section is demonstrating **policy relevance** by, where appropriate, showing public support for a particular issue; demonstrating priority for an issue over

many others; showing relevance at the local (voting district) level; and personalizing an issue by telling a compelling story of how people's lives are affected (16). As underscored by Pahlman (6), "... the practice of evidence-based policymaking is not necessarily a guarantee of more robust, effective or successful policy... professionals must be able to explain the appropriateness and efficacy of their advice".

Implications and Recommendations: Implications are what the researcher believes could happen by commission or omission; recommendations are what should happen. Both flow from the conclusions and must be supported by evidence. *Implications* describe what the researcher thinks will be the consequences of action or inaction and is less direct than recommendations. It is a useful when advice has not been requested and a softer approach is required but it can still be persuasive. *Recommendations* on the other hand are a call to action and describe clearly what should happen next and are stated as precise steps. It is therefore important to ensure that they are relevant, credible and feasible (34). *Other sections* could include:

- · Annexes/notes for additional information
- Further readings which should be limited to the most essential and authoritative sources that are easily accessible or would be provided to the target audience by the researcher if requested.
- Contact address for any questions, further info/data or follow up

Disseminating and tracking use/implementation of the policy brief:

Optimally, a *Plan for Dissemination* of the research outcomes, through several means (Box 1) including the PB, would have been prepared with the initial project. It should be reviewed and refined along with the preparation of the PB. This should include the when, how and where the PB will be delivered to the primary target audience and requires meticulous planning and investment in relationship-building and addressing stakeholder interests. Other actions across the advocacy process (Box 4) might be required and should be planned.

Once the policy brief has been disseminated, the researcher should **track the use/implementation** of the recommended policy. You should never take implementation of policy (as recommended) for granted. In fact, the contrary is true most of the time (35). The researcher should engage policy makers starting from setting the research agenda through the murky fields of policy implementation using various avenues (Box 4).(36)

In addition to personal or informal networking, a number of different tracking or assessment methods could be employed. An *Information use log* could be established with feedback from stakeholders; news stories reported and articles written; and number of times research cited in academic literature. A *formal survey* of sample of stakeholders, for example questionnaires sent via e-mail at 6 months or a year, could be conducted. There could also be a survey of event or clients attending relevant services or *key informant interviews* (18) (37). If and when the policy advice has been implemented, **assessment of impact** could be undertaken to determine whether improvements have been registered in health outcomes, in care-giving or care-seeking behaviors or in processes needed to enable better health outcomes (Table 2). The assessment could include ways in which impacts are realized including whether project data was used to inform policy and practice; innovations were adopted and adapted by others; additional funding was secured for scale-up; project tools were adopted by others; and project staff were asked to give advice or to conduct further research.

Raise the general awareness of issue	Communicate findings to policymakers	Actively lobby on behalf of particular issue
Publish a scientific article Publish a popular piece Present findings at professional meeting Present findings at community meeting Issue a press release	Develop short policy summaries Transform epidemiologic data into forms readily understandable by policymakers Provide testimony at a legislative hearing Educate legislative staff members on public health issues	Form and activate community-based coalitions Learn and use media advocacy techniques Write for newspapers on a specific issue (letters to the editor and editorials) Meet with an elected official to get across a specific point of view Publicize the tactics of vested interests that are at odds with public health goals Support candidates who are of like mind

Box 4. Actions across advocacy

Table 2. Research Impact Framework

Research-related impacts	Policy impacts	Service impacts	Societal impacts
Type of problem/	Level of policy-	Type of services: health/	Knowledge, attitudes and
knowledge	making	Intersectoral	behavior
Research methods	Type of policy	Evidence-based practice	Health literacy
Publications and papers	Nature of policy impact	Quality of care	Health status
Products, patents and translatability potential	Policy networks	Information systems	Equity and human rights
Research networks	Political capital	Services management	Macroeconomic/related to the economy
Leadership and awards		Cost-containment and cost-effectiveness	Social capital and empower- ment
Research management			Culture and art
Communication			Sustainable development outcomes
Source: [36]			

Conclusion: "Someone working in the policy arena will quickly realize that science is only one of many important drivers in decision making" (38). A policy brief that is prepared well, is judiciously disseminated and is assessed for impact will provide the best chance for all the hard work of evidence gathering to bear the ultimate fruit of changing lives on the ground.

REFERENCES

- 1. Durham E BH, Smith M, Moore E, Morgan V. The BiodivERsA Stakeholder Engagement Handbook. Paris: BiodivERsA; 2014. http://www.biodiversa.org/stakeholderengagement.
- 2. The Royal Society. The Scientific Century: securing our future prosperity. In: *RS Policy Document*. London: Royal Society; 2010: 73.
- 3. Topol EJ VC. Venter and Topol on the True Revolution in Medicine. In. Edited by Medscape. www.medscpae.com: Medscape; 2013.
- 4. Thulstrup EW FM, Negewo A. Building research capacity in Ethiopia. In: *Sida Evaluation*. Stockholm: Sida Department of Research Cooperation; 1996: 130.
- 5. Adam T, Ahmad S, Bigdeli M, Ghaffar A, Rottingen JA: Trends in health policy and systems research over the past decade: still too little capacity in low-income countries. *PloS one* 2011, 6(11):e27263.
- 6. Pahlman K. A critical examination of the idea of evidence-based policy making. *ANU Undergraduate Research Journal* 2014, 6:83-93.
- 7. Neves J, Lavis JN, Panisset U, Klint MH. Evaluation of the international forum on evidence informed health policymaking: Addis Ababa, Ethiopia-27 to 31 August 2012. *Health Res Policy Sy* 2014; 12:14.
- 8. Lavis JN, Boyko JA, Oxman AD, Lewin S, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP) 14: Organizing and using policy dialogues to support evidence-informed policymaking. *Health Res Policy Sy* 2009; 7 Suppl 1:S14.
- 9. Lorenz N, Tanner M. Upholding health for all. In: *Evidence for Policy Series*. Edited by C M. Bern: Center for Development and Environment University of Bern; 2013.
- 10. Ghaffar A, Gilson L, Tomson G, Viergever R, Rottingen JA: Where is the policy in health policy and systems research agenda? *Bull World Health Organ* 2016; 94(4):306-8.
- 11. The National Academy of Sciences, Engineering and Medicine. Health literacy: Past, present and future. In: Round Table on Health Literacy, Board on Population Health and Public Health Practice, Institute of Medicine: 2015; Washington DC: The National Academy Press; 2015: 130.
- 12. Alliance for Health Policy and Systems Research. Strengthening health systems: the role and promise of policy and systems research. Geneva: Global Forum For Health Research; 2004.
- 13. Petkovic J, Welch V, Jacob MH, Yoganathan M, Ayala AP, Cunningham H, Tugwell P: The effectiveness of evidence summaries on health policymakers and health system managers use of evidence from systematic reviews: a systematic review. *Implement Sci* 2016; 11(1):162.
- 14. Remme JH, Adam T, Becerra-Posada F, D'Arcangues C, Devlin M, Gardner C, Ghaffar A, Hombach J, Kengeya JF, Mbewu A *et al*: Defining research to improve health systems. *PLoS Med* 2010; 7(11):e1001000.
- 15. Vecchione E, Parkhurst J. Evidence Advisory System Briefing Notes: Ethiopia. Working Paper. In.: London School of Hygiene and Tropical medicine; 2016. http://researchonline.lshtm.ac.uk/ 3213919/
- 16. Brownson RC, Royer C, Ewing R, McBride TD: Researchers and policymakers: travelers in parallel universes. *Am J Prev Med* 2006; 30(2):164-72.
- 17. Mijumbi RM, Oxman AD, Panisset U, Sewankambo NK. Feasibility of a rapid response mechanism to meet policymakers' urgent needs for research evidence about health systems in a low income country: a case study. *Implement Sci* 2014; 9:114.
- 18. MEASURE Evaluation. Making Research Findings Actionable: A quick reference to communicating health information for decision-making. In.; 2009 www.classtoolkit.org/sites/default/files/.../
 Making_Research_Findings_Actionable.pdf.
- 19. Murry VM. Transporting Evidence-Based Prevention Interventions into Community Settings: Challenges and Opportunities. In: *Implementing Evidence-Based Prevention by Communities to Promote Cognitive, Affective, and Behavioral Health in Children: Jun 9-10, 2016.*; Washington DC: National Academies; Jun 9-10, 2016.
- 20. Hogwood BW, Gunn L. Policy Analysis and the Real World: Oxford University Press; 1984.
- 21. Gary B: Evidence-based policy-making: What is it? How do we get it? In: *Challenges of Evidence-Based Policy Making* Canberra, Australia: Australia National University Press; 2009.
- 22. Shroff Z, Aulakh B, Gilson L, Agyepong IA, El-Jardali F, Ghaffar A: Incorporating research evidence into decision-making processes: researcher and decision-maker perceptions from five low-and middle-income countries. *Health Res Policy Sy* 2015; 13:70.
- 23. Corluka A, Cohen M, Lanktree E, Larocque R: Uptake and impact of research for evidence-based practice: lessons from the Africa Health Systems Initiative Support to African Research Partnerships. *BMC Health Ser Res* 2014; 14 Suppl 1:I1.
- 24. Kassaw A, Weldeselassie S. Research-policy linkage in Ethiopia: A focus on selected Ministries/Government Agencies and research Institutions. *Publ Pol Admin* 2015; 15(9):87-101.

- 25. World Health Organization. The Bamako Call to Action on Research for Health: Strengthening research for health, development, and equity From the Global Ministerial Forum on Research for Health. In: Global Ministerial Forum on Research for Health. Bamako, Mali: World Health Organization; 2008.
- 26. Inter academy Panel. A call for action to strengthen health research capacity in low and middle income countries. In.: Inter academy Medical Panel; 2013.
- 27. Herman L. Executive Summary Guidelines: A Communications Program Workshop. In. Edited by University H: Harvard University. https://projects.iq.harvard.edu/files/hks-communications-program/files/ho_herman-exec-summary 2-14-13 0.pdf
- 28. Kitaw Y, Teka G, Meche H, Hailemariam D, Fantahun M: The Evolution of Public Health in Ethiopia. Addis Ababa: Ethiopian Public Health Association; 2012.
- 29. Lautze S, Raven-Roberts A, Erkineh T. Humanitarian Governance in the new millennium: an Ethiopian case study. In. Edited by Group HP. London: Overseas Development Institute; 2009: 38.
- 30. Mammen S, Vyas S. A brief for policy makers in developing countries: breast feeding versus bottle feeding. *Nurs J India* 1984; 75(2):32-3.
- 31. Council of Ministers. Council of Ministers Regulation to Provide for the Establishment of the Armauer Hansen Research Institute No 376/2016. In: 22;45. Edited by Gazette N, vol. 376/2016. Addis Ababa: Council of Ministers; 2016: 8.
- 32. International Centre for Policy Advocacy. Policy brief guidelines. In.; 2015. http://www.icpolicyadvocacy.org/sites/icpa/files/downloads/icpa policy brief guidelines 0.pdf
- 33. Young E, Quinn L. An Essential Guide to Writing Policy Briefs. In.: International Centre for Policy Advocacy ICPA gGmbH; 2017. http://www.policy.hu/ipf/fel-pubs/samples/PolicyBrief-described.pdf.
- 34. IDRC. How to write a policy brief. In. Canada: International Development Research Centre; 2015. https://www.idrc.ca/sites/default/files/idrcpolicybrieftoolkit.pdf
- 35. Lieberman JA. Politics are sick: Time to call a Doctor? May 25, 2017 edn; 2017 http://www.medscape.com/viewarticle/880512.
- 36. Voller S, Becker AJ. Dissemination activity and impact of maternal and newborn health projects in Ethiopia, India and Nigeria. In.: London School of Hygiene and Tropical Medicine; 2014. http://researchonline.lshtm.ac.uk/1917775/ DOI: 10.17037/PUBS.01917775
- 37. Kuruvilla S, Mays N, Pleasant A, Walt G: Describing the impact of health research: a Research Impact Framework. *BMC Health Serv Res* 2006; 6:134.
- 38. Brownson RC PE, Luke DA, Baumann AA, Staub M, Brown MT, Johnson M. Building capacity for dissemination and implementation research: one university's experience. In: *Implement Sci 2017*; . 12 (1) 104.

Annex: Examples of Policy Brief Checklists

Policy brief evaluation tool The Policy brief Score

- described the context for the issue being addressed
- described different features of the problem, including how it affects particular groups
- described options for addressing the problem
- described what is known, based on synthesized research evidence, about each of the options and where there are gaps in what is known
- described key implementation considerations
- employed systematic and transparent methods to identify, select and assess synthesized research evidence
- took quality considerations into account when discussing the research evidence
- took local applicability considerations into account when discussing the research evidence
- took equity considerations into account when discussing the research evidence
- employed a graded-entry format
- included a reference list for those who wanted to read more about a particular systematic review or research study
- was subjected to a review (by at least one policymaker, one stakeholder and one researcher)
- Is engaging
- Is brief
- purpose to properly inform a policy dialogue achieved ^b

All questions Likert scale of 1–7 with 1 'Very Unhelpful' to 7 'Very Helpful' except ^b Likert scale as 1 'Failed' to 7 'Achieved'.

Yes	nent Flows Clo	•	Comments and
	Work		suggestions:
		Aim is clear	
		Conclusion is clear at the outset	
		Problem is clearly stated and backed with evidence	
		Recommended actions are clear and specific	
		Recommendations flow logically from the evidence presented	
		All information is necessary for the development of the argument	
Conten	nt is Appropri	ate for the Audience	
Yes	Needs	are for the familier	Comments and
100	Work		suggestions:
		Importance to the audience is clear	
		Recommendations are appropriate for the audience	
		Understandable without specialized knowledge	
		Concise, and Engaging	
Yes	Needs		Comments and
	Work		suggestions:
		Words are not unnecessarily complex	
		Jargon is not used	
		Sentences are not cluttered with unnecessary words or phrases	
		Text is engaging (e.g., active voice, varied sentence structure)	
Visual	Cues Help the	Reader Navigate and Digest Information	
Yes	Needs		Comments and
	Work		suggestions:
		White and an arrive are sufficient	
		White space and margins are sufficient	
		Text is broken into sections with identifiable focus	
		Headings cue the key points that follow	
Doto A	re Presented	Key points are easy to find	
Yes	Needs	Effectively	Comments and
ies	Work		suggestions:
	WOIK		suggestions.
		All data are necessary for the argument	
		Data are easy to understand	
		Data are presented in the most appropriate format	