Pragmatic politics and epistemological diversity

The contested and authoritative uses of historical and case-study evidence in international maternal health

Dominique Béhague, Department of Anthropology, Brunel University
Katerini Storeng, Post Doctoral Fellow, University of Oslo

Collaboration with London School of Hygiene and Tropical Medicine

Economic and Social Research Council, DFID, Norwegian Research Council,
The Wellcome Trust

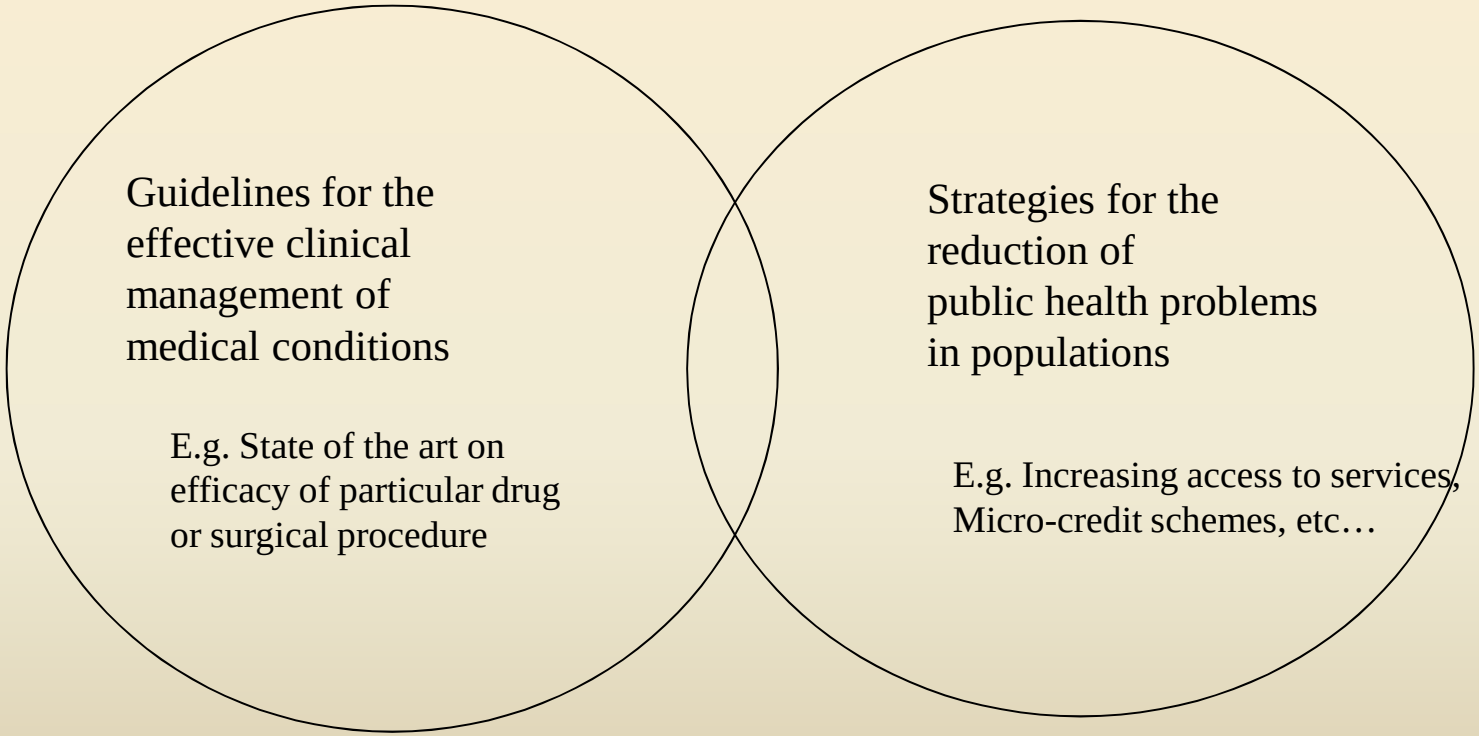
The rise of evidence-based medicine

- EBM = use of "clinical evidence [derived] from systematic research" to guide clinical practice
- Cochrane collaboration's hierarchy of evidence:
  - Systematic reviews of randomised controlled trials
  - Randomised controlled trials (shows *impact* of intervention)
  - Controlled observational studies - cohort and case control studies.
  - Uncontrolled observational studies - case reports.
  - Expert opinion

Diffusion of evidence-based medicine into non-clinical realms

Evidence-based medicine

Evidence-based policy-making



Evidence-based dilemmas: impact & process

- Evidence-based policy-making
  - Growth in demand for experimental (impact) epidemiology
  - Marginalization of other forms of observational evidence (process)
- Growth of disease-specific “global advocacy coalitions” who use impact evidence to compete for funds
  - Sometimes termed “evidence-based advocacy”

History of safe motherhood initiative

- 1987: launch of Safe Motherhood Initiative
  - Where is the “M” in MCH? (1985 publication)
  - Lack of political will & financial commitment
  - Lack of rigorous scientific evidence
  - Measurement gap and “trap”
  - Just a “bunch of feminists”
- 2007: 20th Year Anniversary
  - Acute anxieties regarding rise of evidence-based medicine
  - Shift from ideological justifications to evidence-based cost-effectiveness framework
  - Persistent recognition that maternal mortality decline requires complex interventions
  - Continual return to interests in broader mechanisms of change and sustainability: historical, case-study and ecological evidence

Methods

- Fieldwork from 2005-2009
- Review of published and grey literature
- Participant-observation in 20 international meetings and conferences
- In-depth semi-structured interviews (N=72)

UN agency officials	12
Bilateral agency officials	11
International academic researchers	23
NGOs or foundation representatives	17
National-level policy-makers, programme managers & researchers	9
Total	72

Outline of results

- 1980s-1990s
  - Early historical case-studies of 19th Century W. Europe and North America
- 2000s
  - Bifurcation of evidence-production ideals: cost-effectiveness trials vs 20th Century historical case-studies
- 2005-present
  - The ethics of epistemological power

Early historical case-studies:

the comprehensive vs selective PHC agenda

Högberg & Loudon (1986-1992)

- Comparative analysis of maternal mortality declines in 19th/early 20th C England, Wales, USA, **Sweden**
  - Increased awareness through statistical surveillance
  - Political will & governance
  - Trained, accountable, rural midwifery system
  - Equitable access
  - Improved standards of care
  - Technological innovations to control sepsis

Irvine Loudon (1992), *Death in childbirth: an international study of maternal care and maternal mortality, 1800-1950*

"Although some notable histories of maternal care have been confined to a socio-historical or feminist approach **with scarcely a statistic**, let alone a statistical evaluation in sight, I believe that **without rigorous statistical analysis, the history of maternal care can easily become impressionistic**, unreliable and in the end unsatisfying. If there is **a danger that a purely demographic approach may deflect attention from features of central importance which are inherently unmeasurable**..there is also the danger that without statistical analysis conclusions are often basedon the shaky foundation of thin evidence and small unrepresentative samples." (p.72)

1980-1992

Historical evidence: interpreting modifiability

Health systems broader institutional & governance arrangements

Integrated health systems approach

TBA vs skilled birth attendant

Skilled birth attendant versus Emoc

1990s

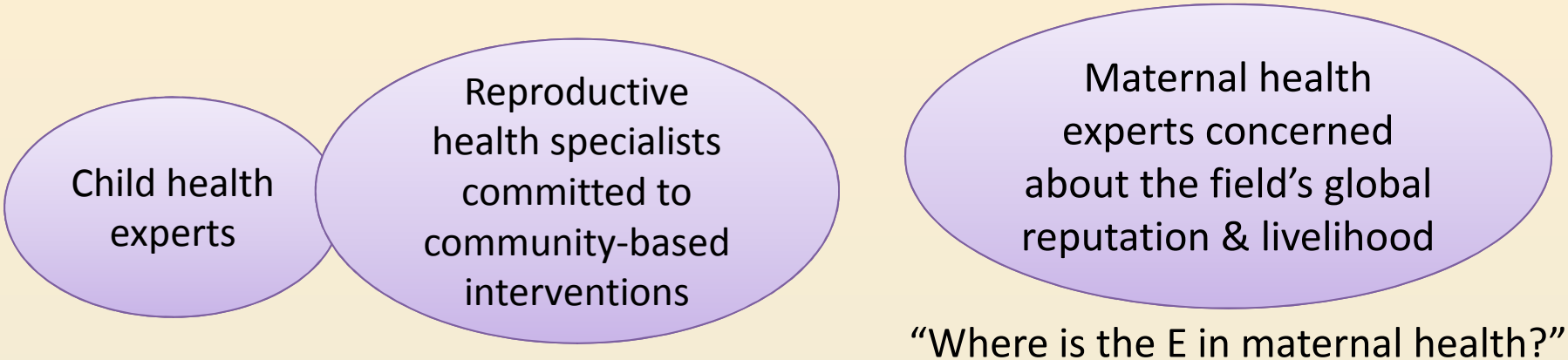
Policy shift from broad community based interventions to targetted facility-based strategies

2000s

Case-study logics

Cost-effectiveness logics

Critics of historical evidence



"...dubious analyses of mortality trends"

"[Historic res ly, but rather a robust interpretation of a given set of facts"

Epistemological conviction

Pragmatic politics

"You don't really need to know about process, about how an intervention might work, as long as it was proven to work through an RCT, then we can faithfully recommended it to all countries."

Decision-makers "just don't get as excited about process"

"We keep repeating the same thing over and over. I keep saying in my advocacy papers that no country has significantly reduced maternal mortality through [...] single interventions. We have evidence of [the importance of institutional deliveries] in historical evidence, and in as trends, but that [sort of evidence is] not enough."

"Historical studies contributed [to the skilled attendance agenda] and experts loved to use this so-called evidence"

"Inappropriate policy shift supported purely on observational epidemiology and quantitative history"

Can complex interventions be trialled?

Designing a study for skilled attendance at delivery is [very difficult] because how the hell do you do a trial of a midwife versus no midwife or a midwife versus a TBA? It becomes a very difficult medical and organizational dilemma. Do you get women to deliver at home and women to deliver at hospital? So I think people are avoiding doing those kinds of studies and instead proposing studies like 'what if we put an ambulance in the villages?', does that do it?

- Junior maternal health epidemiologist

Should we be “playing the game”?

I am so convinced of the argument....But what makes policymakers shift? Do we need another beautiful trial showing that TBAs make no difference? I hope not. It’s not whether in the perfect circumstances you can train TBAs and supervise them - of course that can make a difference. But then you’re talking about an expensive system, you might as well train skilled providers…Quite a few people are calling for trials of community health workers…and the donors are taking note. If we’ve gone that far …well, I’d say, what a waste of money. Maybe we have to play the game, I don’t know…

-- Senior maternal health epidemiologist

1980-1992

Historical evidence: interpreting modifiability

- Health systems broader institutional & governance arrangements
- Integrated health systems approach
- TBA vs skilled birth attendant
- Skilled birth attendant versus Emoc

1990s

Policy shift from simple community based interventions to facility-based interventions

2000s

- Case-study logics → Reclaiming "evidence-based policy-making"
- Cost-effectiveness logics → "Evidence-based advocacy"

Reclaiming “evidence-based policy-making”

(1998-2002) de Brouwere and Van Lerberghe from Antwerp, Belgium

Comparative trend data, late 19th early 20th C, (e.g. Sweden, Denmark, Norway, England, USA) with more contextualised social history

- ✓knowledge about the magnitude of the problem
- ✓presence and functioning of vital registration systems
- ✓professionalisation of midwives, accountable and autonomous
- ✓access to good quality emergency obstetric care
- ✓political will & female emancipation
- ✓**lack of professional conflict between obstetricians and midwives**

”I tried to understand what could account for these differences, and it’s from this study we come up, with Wim Van Lerberghe and I, with two types of factors, political and technical, and the importance of the inter-relationship [between the two].”

-- de Brouwere, 2004

If anything I think Loudon got it wrong, I think he got the necessary, but not sufficient bit. I think he's right that the medical technologies were necessary – that they came into place and made a big difference – so in that sense he was right. But, what I think he didn't look at was the health systems and political context in which that happened. Whereas I think Vincent's [de Brouwere] work does that….

-- Senior maternal health demographer/epidemiologist

Reclaiming “evidence-based policy-making”

Pathmanathan et al. (2003) World Bank funded – Malaysia, Sri Lanka...declines from 1930s onwards

Koblinsky et al. (2003) World Bank funded – Bolivia, China, Egypt, Honduras...declines from 1970s/80s onwards

McPake, Koblinsky (2009) ICCDDR-B, John Snow funded – Bangladesh...declines from 1990s onwards

- ✓skilled attendance
- ✓good quality care
- ✓**elimination of financial barriers, equitable access**
- ✓strong political support
- ✓long-term planning
- ✓**coordination between different levels of care**
- ✓accountability of local officials for performance

all hospital-based model does not necessarily lead to significant mortality decline, especially where there is poor quality of care and high levels of mortality from unsafe abortion

I think it's really important now to be talking about what happened in Sri Lanka, you know, those good World Bank studies…you know something that's more pragmatically oriented and positive… These countries reduced their MMR by half every seven to 10 years, for, like 50 years. And it wasn't rocket science, you know, it wasn't magic, it was just kind of putting one foot in front of the other.

-bilateral donor representative

We haven't spoken to the governments who have to do the planning, I think the next step is reaching the decision makers in countries…. is to governments and help them…that's where Marge's work is so important…it helps governments to plan; it's not the donors who do the planning, it's governments. So, it's important to have the donors on board for the money and the vision behind it, but it's governments who have to start.

-- Senior Epidemiologist

[Policy makers] are much more impressed by a study that shows that [a certain country managed to reduce it, mortality rate, especially MMR by ~50% …] national program in the time of 10 years…, they are much more impressed by this than by a randomised controlled trial from country X showing something about a small component…their eyes sparkle if you show them a 'before and after' or a case study…it's intuitive, it's in a similar context to what they work, and they can feel they can get political gain from it…if they do the same.

-Academic, leading WHO policy advisor

We are relying on research. We are using the internet. We are using World Bank documents. We are trying to learn how it's being done in other parts of the world and I have gone into the history of this, you know, like Loudon and all those names and trying to learn, how Sweden could do it, how UK did it, how USA was initially lagging far behind – so its very important to learn.

-high level civil servant (India)`

Two audiences, two forms of evidence

- Gold standard evidence for donors, global institutions, advocacy, and competition for resources...
- Evidence of context, process, and change for national/regional levels:
  - Time-frame of trials not long enough
  - Experimental evidence can only test one sub-component at a time; in broader political context, this leads to fragmentation
  - Governments and programme managers need to know more about process, not impact
  - Process can vary in different places and still achieve desired reductions in mortality
  - Unmeasurable aspects may be the most important for effective sustainable change

1980-1992

Historical evidence: interpreting modifiability

- Health systems broader institutional & governance arrangements
- Integrated health systems approach
- TBA vs skilled birth attendant
- Skilled birth attendant versus Emoc

1990s

Policy shift from simple community based interventions to facility-based interventions

2000s

- Case-study logics → "Evidence-based policy-making"
- Cost-effectiveness logics → "Evidence-based advocacy"

Ethics of epistemological power

Ethics: what are the real motivations for demanding trials?

- Demand for gold standard experimental evidence of programmatic issues relating to complex interventions is (often) political, not epistemological
- How has this demand been generated? Who/what endorses it? Donors? Academics? Competition?

"I am convinced that our over-emphasis on evidence and numbers has basically slowed safe motherhood down. If we only focus on small things that go on within facilities or small things that affect women's behaviour without looking at the political and social environment in which policy decisions are made, we can't really hope to get very far."

-Demographer (NGO & academic)

Ethics: what model of development for poor countries?

- Major difference with history of industrialised west is that many of today's developing countries are run by donor-driven global agencies as well as (or instead of) autonomous nation-states:

> "If you look at the UK over the last 100 years, we've developed getting most of these pieces together…but.... I don't think [we are doing this] in developing countries. I'm always a bit surprised and concerned when agencies think, well, if we just focus on this [technical component], we'll get it right. But we've never done that in any developed country. We've always had all of it, together."
>
> -- Ex-academic and policy advisor

Ethics: the mythic power of experimental evidence

- Developing country informants held an idea that investing in trials (as opposed to other forms of evidence) would make their countries “advanced”
- Critical epidemiologists highlight that advanced countries reduced mortality rates before the popularization of the trial
- The ideology of experimental evidence marginalizes much needed evidence: long-term surveillance & monitoring, case-studies

Conclusions

- Unintended consequences: political uses of hierarchy-of-evidence epistemology
- Evidence-based policy-making when used for global advocacy:
  - Tends towards technocratic solutions that minimize importance of effective governance
  - Contributes to fragmented and weakened health systems governance
- Informants have high levels of critical awareness
- Attempts to reclaim plural forms of policy-relevant evidence are partially effective