Ethics and Health Sector Reforms

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Can a theory of justice for health guide practice?

How can we tell if a health reform makes a system more or less fair?

How can we subject proposed reforms, viewed as social experiments, to appropriate ethical and scientific review?
Three questions of justice for comprehensive theory

- What, if any, is the special moral importance of health and health care?

- When are health inequalities unjust?

- How can we meet health needs fairly when we cannot meet them all?
Opportunity and Moral Importance of Health

- Health, understood as normal functioning, contributes to range of exercisable opportunities (or capabilities) open to people; disease and disability impair opportunity
If we have social obligation to protect fair equality of opportunity (or opportunities of those who are worse off) then we have obligations to promote normal functioning through appropriate health care and other determinants of health

- Just Health Care 1985; AJOB 2001
Fair Equality of Opportunity

- Rawls A *Theory of Justice* 1971
- Beyond Careers Open to Talents
- Institutions must correct for ways in which social inequalities lead to unfair development of talents and skills (free public education, early childhood intervention)
- Health care (public health, medicine) governed by fair equality of opportunity
NORMAL OPPORTUNITY RANGE

INDIVIDUAL FAIR SHARE

EFFECTIVE RANGE

NOR: Socially Relative
Array Of Plans Of Life Reasonable People Choose

IFS: Range Of Life Plans Reasonable For P To Choose, Given Talents, Skills

ER: Range Of Life Plans Reasonable For P Given P'S Choices, Talents, Skills
Health inequalities and inequities

- Knowing that meeting health needs of special importance does not tell us when health inequalities are inequities
- Not apparent if we only think about health care -- then inequalities in access to care might seem to tell us all we need to know about when inequalities become unjust
- Health inequalities are result of many socially controllable factors, not just medicine or even traditional public health
- Problem persists
Extending FEO to Social Determinants

- Health Care needs: what we need to promote, maintain, restore normal functioning
- Includes adequate nutrition, shelter, save living and working environment, exercise, rest -- as well as medical services (traditional public health)
- Whatever distribution of social determinants needed to promote normal functioning
- Anand: rest of my story redundant
- Daniels: don’t want tail to wag dog
Main problem and thesis

- When is a health inequality between socioeconomic (or other demographic) groups an inequity?

- Thesis: Rawls’s theory of justice as fairness provides a reasonable answer, though it was not designed to do so.

- Secondary thesis: Considerable convergence between Sen and Rawls on this issue.
Key empirical theses

- Observed SES gradients of health vary with policy, not laws of development.
- Gradients operate across SES spectrum, not just poverty vs non-poverty.
- Steepness of gradients affected by degree of inequality (controversy about relative income thesis).
- Causal pathways under investigation.
Figure 1: Relationship between country wealth and life-expectancy

![Graph showing the relationship between per capita gross domestic product and life expectancy.](source)


(1995 US$ purchasing power parities)
social determinants

- Whitehall study
- SES gradient (income, education)
- Correlational studies
  - Political participation
  - Social capital, social cohesion
  - Relative income -- current controversy
Fig. 1.8 All-cause mortality by grade of employment; Whitehall men, 25 year follow-up. (From Marmot and Shipley 1996.)
State-Level Income Inequality and Mortality
(Kennedy, Kawachi 1996)
Percent Responding: "most people would take advantage of you if they got the chance."
Social Capital and Mortality

Age-Adjusted Mortality Rate

Percent Responding: "most people would take advantage of you if they got the chance."
Which inequalities are inequities?

- WHO/Whitehead-Dahlgren definition:
  - Health inequalities are inequities when they are avoidable, unnecessary, unfair

- Problems:
  - What is avoidable, unnecessary, unfair?
  - Suppose poverty-rich inequalities are unfair -- what other income related inequalities are unfair?
Justice as Fairness

- Three Principles
  - Equal basic liberties; fair value of political liberties
  - Fair equality of opportunity
  - Difference principle
DP and Inequalities

- Inequalities permissible if work to make worst off as well off as possible
- Not trickle down
- Requires full Index for evaluation
  - Simplifying assumption: all goods correlate with income and wealth
  - Exceptions: workplace control vs efficiency?
  - Social bases of SR? Opportunity (health)
JAF: flattens gradient

- Compliance with 3 principles
  - Flatter than flattest we see
  - Need more knowledge of causal pathways
  - Some guidance about which inequalities are unjust--advance over Whitehead/Dahlgren

- Residual Gradient
  - DP leaves room for residual gradient
  - Should we flatten gradient further?
  - Trading health for other primary goods?
  - Political equality and decisions about trades
What does it take to reduce inequities in health?

- All socially controllable factors, not just health care: complex task (ignore responsibility issues, aim at needs of free and equal citizens)
- Must work toward understanding causal factors -- policy efforts can help disentangle (early life interventions, workplace, housing, income distribution)
- Challenge to separate spheres
- Incorporate democratic deliberation, fair process, because of reasonable disagreements about egalitarian, maximizing trades and among egalitarians
Health Inequalities

- Inequitable when the result of an unjust distribution of the socially controllable factors (SCFs) determining population health and its distribution, specifically, when distribution of SCFs fail to conform to principles of justice as fairness
  - Daniels, Kennedy, Kawachi 1999, 2000
Meeting health needs fairly under resource constraints

- General distributive principles give indeterminate answers to family of unsolved rationing problems; reasonable disagreement in foreseeable future
Accountability for reasonableness: conditions on fair deliberative process

- Publicity
- Relevant Reasons
- Revisability
- Enforcement
  - Daniels and Sabin 1997, 2002
Some General Implications

- Intersectoral risk reduction and equalization, fair distribution of social determinants
- Distribution according to needs—reduction of financial and non-financial barriers to care, equity in benefit packages
- Contribution according to ability to pay
- Accountability for reasonableness in resource allocation
- Efficacy, Quality, Efficiency— in order to meet needs more equitably
Social Experiments in need of ethical and scientific evaluation

- Health sector reform is not research but shares with research use of untested measures that alter patient access and care and impose risks on a population
Central rationale for conducting ethical review of clinical research applies to social experimentation

- Protect subjects by examining rationale for experiment and assessing risks and benefits

- Provide proper governance constraints

If such review needed, what should it involve?
Social Experimentation (2)

- Review of goals of reform and justification for pursuing them
- Review of means for carrying out reform and rationale for them
- Assessment of potential risks and benefits of reform
- Plan for governance of experiment, including monitoring and evaluation and modification
Social Experimentation: Proposal

- Benchmarks provide model for content of such review and a tool for conducting it

- Not a call for IRBs for all reform measures -- leaves open question whether conducted by planners and implementers or independently and just what institutional form it should take

- Compatible with retaining political accountability for reformers - would enhance that with transparent ethical and scientific evaluation
Benchmarks of fairness (BMF)

- A generic matrix of 9 benchmarks (WHO Bulletin June 2000); result of international adaptation of et al 1996

- BMF combines familiar operations research methods for assessing progress with an ethical framework that focuses on these equity, accountability, efficiency.

- The BMF approach asks how much a reform improves or worsens aspects of fairness within the health sector and provides evidence base for policy.
Historical Development of the Benchmarks

- 1993 Clinton Task Force


- Pilot work in Pakistan, 1997


- 2001-3 Demonstration Phase: Mexico, Portugal, Pakistan, Thailand; Vietnam Cameroon, Ecuador, Nicaragua, Guatemala, Chile, Yunnan (China), Sri Lanka, Bangladesh, Zambia
  - Daniels et al Bul WHO, 2005
International Adaptation

- Original BMF developed as translation of general ideas about justice into matrix

- International generic BMF developed after seeking agreement on country case studies regarding judgments of fairness in specific cases—broad convergence with original, though some key modifications

- Think of this as a form of reflective equilibrium

- Cross-cultural agreement on matrix
## Nine benchmarks and corresponding concerns of fairness

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Concern of Fairness</th>
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</thead>
<tbody>
<tr>
<td>B1 Intersectoral Public Health</td>
<td>EQUITY</td>
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<tr>
<td>B2 Financial Barriers to Equitable Access</td>
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<tr>
<td>B3 Nonfinancial Barriers to Access</td>
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<td>B4: Comprehensiveness of Benefits and Tiering</td>
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<td>B5 Equitable Financing</td>
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<tr>
<td>B6 Efficacy, Efficiency, and Quality Improvement</td>
<td>EFFICIENCY</td>
</tr>
<tr>
<td>B7 Administrative Efficiency</td>
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<tr>
<td>B8 Democratic Accountability and Empowerment</td>
<td>ACCOUNTABILITY</td>
</tr>
<tr>
<td>B9 Patient and Provider Autonomy</td>
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BMF and evidence-base application

- Adaptation: Generic benchmarks and criteria must be adapted locally by an interdisciplinary team.

- Constructing Evidence Base: Team specifies indicators appropriate to adapted criteria under local conditions; agrees on how to evaluate changes in these indicators.
- **Using adapted BMF**: Multidisciplinary team includes planners, community groups, coordinated evaluation and advocacy regarding impact of health policies.

- **Advantage**: Using locally useful information gives evidence base that improves policy and implementation regarding disadvantaged groups.
Implementing process

- Guatemala
  - A multidisciplinary team: MoH, NGO’s and two universities
  - Purpose: Improve the analysis & monitoring of health policy implementation; to make better use of routine available information; work can later be extended to include civic advocacy groups.

- Ecuador
  - Multidisciplinary team: MoH, NGO’s, local government and civil society organizations
  - Purpose: Improving monitoring of policy reforms; involving civil society and local government in monitoring equity and acting on findings.
Experience in Guatemala

- Adapting BM framework to public health (includes RH)

- Using key RH (and other child health) indicators as tracers for the assessment of equity, efficiency & quality in health policy.

- Emphasis in the development of tools to assess equity issues in RH
Using routine available info to assess equity in access to RH services

- Experience carried out in Baja Verapaz region.
  - Low coverage RH services
  - High levels of poverty (70%)
  - High concentration of indigenous population (60%)
Inequities in access to RH services

- Indicators: deliveries, qualified attendance and low birth weight
- Analysis: estimation of proportions for all deliveries and deliveries with qualified attendance disaggregated by districts. Plotting prevalence of low birth weight against qualified attendance
Results:

- Access to qualified attendance during delivery concentrated mostly in one district (hospital)

- Association between qualified delivery and registration of low birth weight (LBW). Possibility of underreporting of LBW in districts where deliveries are attended by TBA’s and relatives.
PROPORTION OF DELIVERIES, QUALIFIED ATTENDANCE AND LOW BIRTH WEIGHT - 2003- BAJA VERAPAZ REGION

PROPORTION FROM ALL CASES

Proportion from all deliveries occurred in the region
Proportion from all deliveries by medical personnel
Proportion from all cases of low birth weight
Analysis by composite indicators

- Inequities in resource allocation
  - Decentralisation transfers some decision making to regional authorities to allocate resources

Key question: Are resources allocated according to need among districts?
- Availability of community volunteers (CoV)

- Why interest in CoV?
  - Existing HSR policy delivering basic packages of services through NGO’s and community volunteers
  - Priority districts (low coverage of basic services) receive resources to subcontract NGO’s

Key question: Can priority districts benefit from this policy?
Index of priority for health services (IPSS)

\[
\text{IPSS} = \frac{(\text{Ciin} - \text{CDxin}) + (\text{Ciap} - \text{CDxap}) + (\text{Cips} - \text{CDxps})}{\text{Ciin} \cdot \text{Ciap} \cdot \text{Cips}^3} = \text{Va}
\]

- \text{IPSS} = \text{Index of priority for health services}
- \text{Ciin} = \text{Ideal coverage for immunization (100%)}
- \text{CDxin} = \text{Immunization coverage for district X}
- \text{Ciap} = \text{Ideal coverage for antenatal care (100%)}
- \text{CDxap} = \text{Antenatal coverage for district X}
- \text{Cips} = \text{Ideal coverage for supervised deliveries (100%)}
- \text{CDxps} = \text{Coverage of supervised deliveries for district X}
- \text{Va} = \text{Sum of three values}
- \text{Coefficient from 0.01 to 1}
- \text{IPSS: high coefficient = high priority}
Index of resources (IR)

\[ IR = (GPD_x \times 0.4) + (MD_x \times 0.3) + (FD_a \times 0.3) \]

GPD_a, MD_a, FD_x

IR = Index of resources
GPD_x = per capita expenditure district x
GPD_a = District with the highest per capita expenditure
MD_x = Medical staff per population for district x
MD_a = District with the highest number of medical staff/pop
FD_x = health facility per population in district x
FD_a = District with the highest number of health facilities per population

IR: high coefficient = higher resources
Comparing priority with resources

### IPSS VERSUS IR

- **Vertical Bars** are measures of priority, the higher the value, the greater the need for resources to fill gap in coverage;
- **the points** represent the index of resource distribution, with higher values corresponding to greater allocation per district.
- **The mismatch** is a reflection of inequity in meeting needs.
Index of availability
community volunteers
(IRRHHCo)

IRRHHCo = \( (PrD_x \times 0.33) + (CoD_x \times 0.33) + (CoD_x \times 0.33) \)

PrDa                   CoDa                   CosDa

IRRHHCo = Índex of availability of community volunteers
Prx= Health promoters per 1,000 inhabitants in district x
PrDa= District with highest number of health promoters per population
CoDx=Traditional birth attendants (TBA) per 10,000 inhabitants in district x
CoDa= District with the highest number of TBA’s per population
CosDx= % of communities within x district organizad in health committees
CosDa= District with the highest % of communities organized in health committees.

IRRHHCo: high coeffiicient=strong network of community volunteers
Priority districts (high IPSS) have a weak network of community volunteers (low IRRHHCo)

Existing policy reform (delivering a basic package of services through NGO’s and community volunteers) is inadequate for priority districts.
Lessons learned from Guatemala experience

- Serious inequities in access and utilization of RH services exists even within poor regions.

- Priority districts (low coverage of RH services and high MMR) have low institutional resources and a weak network of community volunteers.
Policy approaches associated with HSR (ie basic packages of services delivered through community volunteers) may not work in those geographical regions that need it the most.

Improving specificity while focusing interventions. Districts that are part of a same geographical regions present different health indicators/outcomes.
Experience in Mexico

- Emphasis on a specific reproductive health issue: cervical cancer.

- Evaluating the equity and fairness implications of the Mexican Cervical Cancer Screening Program (CCSP)
Relevance of the analysis:

- Targeted to traditionally marginalized women
- Focus on preventive actions and services

Key questions:

Who is benefiting from the CCSP?
Who are the women dying from a preventable condition?
## Examples of Indicators and data sources (BM 1& 2)

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Indicator</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriate allocation of financial resources to the program</td>
<td>Public expenditure for cervical cancer screening per women between 25 and 64 years old. Public expenditure for the Cervical Cancer Screening Program as a percentage of the total health care expenditure (national, per state, and per type of provider)</td>
<td>National health Accounts. Public Expenditure Report (Ministry of Health)</td>
</tr>
<tr>
<td>Benchmark 2 Reduction in maldistribution of human resources and infrastructure</td>
<td>Cytotechnologists per 10,000 women between 25 and 65 years old (per state) Reading centers per 10,000 women between 25 and 65 years old (per state) Dysplasia Clinics per 10,000 women between 25 and 65 years old (per state) Gynecological oncology units per 10,000 women between 25 and 65 years old (per state)</td>
<td>Information on Personnel (Ministry of Health) Infrastructure inventory (Ministry of Health) Infrastructure inventory (Ministry of Health) Infrastructure inventory (Ministry of Health)</td>
</tr>
<tr>
<td>Reduction of cultural barriers</td>
<td>Percentage of women having a Pap smear for the first time per year (per age group and per state). Proportion of smears collected by female providers vs. male providers. Percentage of facilities that offer privacy for pelvic examination</td>
<td>Surveillance system of the Cervical Cancer Screening Program. Exit surveys with women with Pap smear in randomly selected facilities; probability sampling procedures.</td>
</tr>
</tbody>
</table>
Conclusions about BMF

BMF approach feasible: can employ existing data from previous studies and integrate them into an ethically coherent framework for assessing equity and fairness more generally; evidence base constructable even when information limited.

BM approach locally useful: can help to develop specific indicators and indices to monitor and evaluate performance using available information sources (Guatemala and Mexico).
BMF approach effective with ministry: When it involves ministry of health personnel in the process, MoH takes interest in results, motivated to apply them (Guatemala).

BMF approach effective with advocates: When it involves civic society groups (Ecuador), the chance of converting monitoring into action is enhanced.

## WHO vs BMFs

<table>
<thead>
<tr>
<th></th>
<th>WHO</th>
<th>BMF</th>
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</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td>Cross national</td>
<td>National, subnational</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>Current performance</td>
<td>Evaluate reform</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Motivate</td>
<td>deliberate</td>
</tr>
<tr>
<td><strong>Product</strong></td>
<td>Index, ranks</td>
<td>Pattern of scores</td>
</tr>
<tr>
<td><strong>Requires</strong></td>
<td>Weighting function</td>
<td>Local deliberation</td>
</tr>
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Can a theory of justice for health guide practice? -- yes, *it better do so*.

How can we tell if a health reform makes a system more or less fair? -- *BMKs as tool*
How can we subject proposed reforms, viewed as social experiments, to appropriate ethical and scientific review? **BMKs as illustration of content, review adds to political accountability**