GWH GUIDELINES ON GENDER-RELEVANT INDICATORS IN HEALTH RESEARCH

I. Introduction

Over recent decades, interest in the ways in which sex and gender – and the gender arrangements of any given society – affect health has expanded greatly. Within the United Nations system, evidence of this expansion is visible as far back as 1979, when Member States ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). The movement picked up steam during the 1990s, when the issue of gender took center stage at such UN-sponsored meetings as the International Conference on Population and Development (Cairo, 1994), the World Summit for Social Development (Copenhagen, 1995), and the Fourth World Conference on Women (Beijing, 1995).

The WHO began officially recognizing the importance to effective health work of grappling with gender in 1998, when the Health for All in the 21st Century program included "Health Equity" as the first among its "Global Health Targets".[1] Here, gender was mixed together with other factors relevant to equity – race, ethnicity, poverty – but a few years later, in 2002, WHO passed its first Gender Policy, acknowledging the issue as important in its own right. At about the same time, WHO – like most UN organizations, as well as many governments, nonprofit organizations, and foundations – began using the UN's Millennium Development Goals (MDGs) as core targets toward which to strive in all relevant work. The MDGs, too, go beyond the Health for All framework's focus on equity in general, specifiying more particularly that gender equality and the empowerment of women are vital goals (MDG, Goal 3).[2]

Gender and gender relations, then, are "on the map" – both at WHO and at other UN institutions – as social realities with potential negative effects on health and development, which must be addressed if the world is to move forward at full speed into the 21st century. More specifically, the WHO Gender Policy calls on all WHO programs to "review and reflect on the gender aspects of their respective areas of work, and initiate work to develop content-specific materials."[3] To "review and reflect" on gender in particular areas of health work – to say nothing of taking steps to address it – health professionals will need accurate, relevant *information* – data, in other words – on gender and health.

What will such data consist of? And what are the questions that researchers will have to ask in order to be able to provide it?

[1] WHO, *Health for all in the twenty-first century*, 1998, http://whqlibdoc.who.int/hq/1998/A51_5.pdf, p. 24.
[2] http://millenniumindicators.un.org/unsd/mi/mi_goals.asp.
[3] WHO, *Integrating Gender Perspectives in the Work of WHO: The WHO Gender Policy*, 2002, http://www.who.int/gender/mainstreaming/ENGwhole.pdf, p. 3.

a. What indicators are required for gender-and-health work?[4]

What sort of measurements are necessary to make important gender-and-health issues visible to us? As a first approach to answering this question, let us think it through in its component parts, to see what each tells us about our data needs.

To begin with, and viewed from the narrowest perspective, a given person's health status, and that of a community or nation, is the sum of a variety of quantitatively measureable biological states and processes – presence or absence of disease, disability, mortality. Thus, our indicators will need to include some such clinical/quantitative measures of individual and population health.

But, as a public health approach makes clear, equally important are the broader phenomena which determine health – things such as education, income, decisionmaking authority, availability of clean water and food, political commitment to health, and so forth. Furthermore, we are interested not only in health, per se, but in the interaction of health with *gender* – which is by and large a social phenomenon. As both of these observations make clear, then, our indicator list will have to contain measures of a wide variety of familial, social, environmental, legal, and political factors, as well.

Finally, since ready access to quality health care can often make the difference between good health and disease, disability, or death, we will need some information about the health-care system itself. How extensive is it; is it sensibly and effectively distributed; does it provide quality services; are these services equitable, both in terms of how they are staffed and in terms of whom they reach; who pays for them, and how much?

b. A theoretical framework for indicator selection

A thought process such as the one above is helpful as far as it goes, but it still leaves us with only a general idea of the categories of indicators we will need. Happily, however, researchers, theorists, and other professionals working in the gender-and-health field over the past decade have put a great deal of attention into this question. Several have proposed theoretical or "health information" frameworks which systematically lay out a theory-driven list of the specific sub-groups of indicators that will be required for investigating empowerment, equity, and/or gender and health.[5]. Such frameworks are useful in that they provide a ready "touchstone" for proposed indicators lists – a reference point to which we can refer to determine if a proposed indicator really is

[4] In what follows, we present guidelines that we hope will be widely useful throughout the world. It is, of course, understood that local conditions may require that additional and/or different indicators be selected in particular countries and regions.

[5] See, for example, Canadian Institute for Health Information (CIHI), *Health Indicators*, May, 2002 (1): 1-7, http://secure.cihi.ca/indicators/en/about.shtml; WHO, *Monitoring reproductive health: Selecting a short list of national and global indicators*, 1997, http://www.who.int/reproductive-health/publications/HRP_97_26/HRP_97_26_table_of_contents.en.html; Abdool, S.N. and Vissandjée, B., *An Inventory of Conceptual Frameworks and Women's Health Indicators*, Montreal: Centre of Excellence for Women's Health; 2001; Malhotra, A., Schuler, S., and Boender, C., *Measuring Women's Empowerment as a Variable in International Development*, World Bank, 2002, http://www.worldbank.org/poverty/empowerment/events/feb03/pdf/malhotra.pdf. The Pan American Health Organization and the WHO Kobe Centre for Health and Development have also been working on the task of developing frameworks.

central to answering gender-and-health questions or, on the other hand, to see if there is an important dimension of gender and health for which no indicator exists, and for which one must be created.

The field has not, as yet, settled on any one such framework as being "authoritative", but several are available to choose from. Each of the available frameworks, furthermore, shares many details with the others – even if no consensus on the "best" framework has developed, a sort of consensus about what is important to measure nevertheless emerges from an examination of many frameworks. In what follows, we have chosen to use the basic framework suggested by Paula Braveman in 1998.[6] In our view, this framework, along with the article in which it is presented, is not only thorough and well thought-out, but also extremely clear and easy to understand without supplementary notes, even for those who are just beginning to grapple with gender in health. It thus appeared to us to be a good choice on which to base our indicator guidelines, which are meant to be useful to as wide a range of health professionals as possible.

Braveman's framework groups desired indicators into main topic areas as well as into a number of more detailed sub-topics. Her task, however, differs from ours in at least two ways:

- While Braveman is concerned with health and equity, generally, we are concerned with health and *gender* equity, and
- While Braveman's list of indicators consists largely of measures aggregated at community, district, or national level, we want to propose two lists of indicators: one at the national level, the other at the individual/household level.

Thus, we have found it necessary to modify Braveman's framework to make it more suitable to our specific purposes. While we have kept her main topic headings, we have modified many of her sub-topics, for one or more of the following reasons:

- To focus more sharply on gender equity
- Because questions about data availability (of central importance to us – see discussion below) made using some of Braveman's categories seem inadvisable
- To add depth and specificity to our indicators list
- Because some of Braveman's topic areas were relevant to higher levels of aggregation but not to an individual-level survey (public expenditure for health care, for example)
- Because more thorough, in-depth, and nuanced questions can be asked in an individual-level survey than are possible when using only pre-existing community, district, or national-level data.

Box A presents both the original Braveman framework and the two modified versions (for national-level and individual/household level studies) on which we have based the present guidelines.

[6] Braveman, Paula, *Monitoring equity in health: a policy-oriented approach in low- and middle-income countries*, WHO, 2002, http://whqlibdoc.who.int/hq/1998/WHO_CHS_HSS_98.1.pdf.

Box A: Theoretical Framework for Selecting Gender-Relevant Health Indicators

Braveman framework	Braveman framework as modified by GWH for use with national-level indicators
A. Health Status Indicators 1. Children's growth and nutrition 2. Child mortality 3. Life expectancy 4. Maternal mortality 5. Chronic non-infectious disease 6. Other mortality measures B. Major Determinants of Health Apart from Health Care 1. Safe water and sanitation 2. Food supply 3. Housing 4. Poverty 5. Education 6. Income inequality in the society C. Health Care Financing and Resource Allocation 1. Households' burden of payment for health care 2. Public expenditures for health care 3. Qualified health care personnel 4. Geographic distribution of primary, secondary, and referral facilities D. Health Care Utilization and Quality 1. Immunization coverage 2. Reproductive health care coverage a. Antenatal care coverage b. Safe delivery coverage c. Contraceptive prevalence 3. Quality of care: availability of essential drugs 4. Access to health care referral services	A. Health Status Indicators 1. Children's growth and nutrition 2. Child mortality 3. Life expectancy 4. Maternal mortality 5. Other reproductive health 6. Chronic non-infectious disease 7. Infectious disease B. Major Determinants of Health Apart from Health Care 1. Safe water and sanitation 2. Food supply 3. Housing 4. Poverty 5. Economic context 6. Economic activity 7. Education 8. Income inequality in the society 9. Demographics 10. Household characteristics 11. Fertility 12. Legal / Policy environment 13. Violence 14. Environmental health C. Health Care Financing and Resource Allocation 1. Households' burden of payment for health care 2. Public expenditures for health care 3. Qualified health care personnel 4. Geographic distribution of primary, secondary, and referral facilities D. Health Care Utilization and Quality 1. Immunization coverage 2. Reproductive health care coverage a. Antenatal care coverage b. Safe delivery coverage c. Contraceptive prevalence 3. Quality of care: availability of essential drugs 4. Gender mix of health personnel

Box A: Theoretical Framework for Selecting Gender-Relevant Health Indicators, cont'd

Braveman framework as modified by GWH for use with individual- and household-level indicators
A. Health Status Indicators
1. Children's growth and nutrition
2. Child mortality
3. Maternal mortality
4. Other reproductive health
a. General
b. Sexual Initiation
5. Chronic non-infectious disease
6. Infectious disease
B. Major Determinants of Health Apart from Health Care
1. Safe water and sanitation
2. Food supply
3. Housing
4. Risk behaviors
5. Harmful traditional practices
6. Protective behaviors
7. Health knowledge
8. Poverty
9. Economic activity
a. paid
b. unpaid / informal
10. Economic autonomy
11. General autonomy / mobility
12. Education
13. Social Connectedness
14. Demographics
15. Household characteristics / marriage / sexual unions
16. Fertility
17. Violence
18. Environmental health
C. Health Care Financing and Resource Allocation
1. Households' burden of payment for health care
2. Participation as health care workers
D. Health Care Utilization and Quality
1. General Coverage
2. Immunization coverage
3. Reproductive health care coverage
a. Antenatal care coverage
b. Safe delivery coverage
c. Contraceptive prevalence
4. Quality of care: Satisfaction with healthcare system
5. Autonomy re: health care

c. Criteria for Selecting Indicators

Our framework only directs us to the specific topic areas of desired indicators. Selection of the indicators themselves requires a further thought process, one which was naturally shaped by particular goals and selection criteria. These are as follows, in descending order of importance. As noted, the first three criteria apply to both the National and

Individual-Level guidelines, while the last three are relevant to the National-Level guidelines only.

1. Does indicator inform us about a health issue or health determinant of major importance? Obviously, there is no point in going to the trouble to collect data if what it tells us about is not centrally related to the health of individuals and populations. Here, the theoretical framework functioned as our guide, directing us toward indicators that a consensus of researchers working in the field feel are important.

2. Does the condition or determinant measured contain an important gender-equity "story"? Our focus here is on health equity in general, and equity between men and women in particular. Thus, conditions and determinants which vary strongly (but unnecessarily) between men and women, or between rich and poor countries and/or families, will be of more interest than conditions which do not vary markedly in this manner.

3. Is the condition or determinant subject to change? Ultimately, we would like to be able to measure the effects of health and development interventions on changing and improving the gender-and-health situation in the different regions of the world. Thus, we have selected indicators on health conditions and determinants which we may reasonably hope to change through the taking of some definable action. For example, we include an indicator on incidence of cervical cancer (which can be prevented by proven screening and treatment interventions), but not one on incidence of breast cancer (a disease for which no established, highly effective means of prevention exists).

4. Is the indicator sex-disaggregated, where appropriate (national-level indicators only)?[7] As our focus is on gender and health, and, thus, on the differences in health experience of men and women, it follows that, wherever appropriate, our data should be sex-disaggregated. Of course, "wherever appropriate" is the operative phrase – clearly, for data that are collected at a level of aggregation higher than the individual (per-capita GDP, for example, or % of population with access to improved water supply), sex disaggregation is not possible, nor is it for indicators (such as the maternal mortality ratio) which are specific to only one sex. But, wherever data is based on the responses of individuals (disease incidence rates, membership in parliament, literacy, etc.), the goal is to obtain data that is sex-disaggregated.

In a few instances, readers will note that an indicator that would appropriately be sex-disaggregated is included even though it is *not* disaggregated in the indicated source. In such cases, we decided that the indicator in question was so important that inclusion was warranted even in less-than-ideal form (for example, rates of tuberculosis and malaria, two diseases of central importance both for the harm they cause and for current health interventions, or rates of poverty, an economic factor that is centrally linked to health outcomes). In such cases, it should be borne in mind that disaggregated data would certainly be preferable – and that efforts to advocate for the regular provision of such disaggregated data should be made wherever possible.

[7] As individual-level data will contain information on the sex of each respondent, it is assumed that any data gathered at this level will be sex-disaggregatable.

5. Is data on the condition readily available (national-level indicators only)? One of the goals of these guidelines is to provide a means of beginning to work on gender and health questions which anyone with appropriate training can begin using, quickly, simply, and easily. Too often, indicator guidelines propose lists of fine-sounding measures, but provide only the vaguest suggestion of where appropriate data for constructing the indicators can be found. This can lead to frustration, and to the indicator being, in the end, simply discarded. To avoid this pitfall, our national-level indicator list[8] contains, wherever possible, a clear indication of a data source which is available to anyone with internet access. In the few cases where this is not true, the indicator has nevertheless been included because we considered it of such importance (on the basis of the other priorities listed above) that it could not be omitted. In such cases, furthermore, we consider it our duty – and hope other researchers will, as well – to point out to the field the lack of data on the indicator, and to advocate for development of a data source for it in the coming months and years.

6. Is the indicator contained in one of the lists associated with the Millennium Development Goals (MDGs) (national-level indicators only)? Once we had narrowed our choice of indicators based on the above criteria, we applied one final selection rule: Is an acceptable version of the indicator included in the Millennium Development Goals' "millenium" or "background" indicator series (see http://millenniumindicators.un.org/unsd/mi/mi_goals.asp for more information)? If so, we have chosen to use this MDG-related version. In this way, we hope to demonstrate the centrality of gender and health work to realizing the MDGs – the goals and targets which have taken center stage in development work of all kinds throughout the world. In all, over a third (16 of 45) of our national-level indicators come directly from one of the MDG lists. Using the MDG indicators has also allowed us to provide a user-friendly data source for many of our measures, since MDG-related data is readily available on the web site of the United Nations Statistics Division (see link above).

Note, however: Unfortunately – and, from our point of view, inexplicably – many of the indicators in both the "millennium" and "background" series, including some of interest to us here, are *not* recorded in sex-disaggregated fashion. But appropriate sex-disaggregation is one of the most important criteria for indicators included in these guidelines. If, then, in such situations, a quality alternative data source which *is* sex-disaggregated is available, we have chosen to use this source instead of the MDG databse. In all, 9 percent of our national-level indicators (4 of 45) are sex-disaggregated versions of indicators that appear (in non-disaggregated form) in one of the MDG lists. (In total, then, 44 percent of our indicators (20 of 45) are shared in one way or another with the MDG lists.)

Having sketched the rationale for producing these guidelines, and the thought process and framework which produced them, we will now turn to their presentation.

[8] Since the indicator categories proposed in the individual- and household-level guidelines are meant to be used in original survey research, proposing data sources for these indicators would be redundant.