

***Beyond Women's Health:
Incorporating Sex and Gender
Differences Into Graduate
Public Health Curricula***



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Rockville, Maryland 20857

Dear Colleague,

The Health Resources and Services Administration's Office of Women's Health, Department of Health and Human Services' Office on Women's Health, National Institutes of Health's Office of Research on Women's Health, Centers for Disease Control and Prevention's Office of Women's Health, and Agency for Healthcare Research and Quality's Senior Advisor on Women's Health, in collaboration with the Association of Schools of Public Health (ASPH), are pleased to provide you with a copy of *Beyond Women's Health: Incorporating Sex and Gender Differences into Graduate Public Health Curricula*.

This report is a comprehensive study that addresses women's health education in the 34 accredited schools of public health in the United States. The aim of the study was to assess how women's health is addressed in required and elective courses for the Master of Public Health (MPH) degree. Through this project, ASPH and its Federal partners sought to increase available information regarding women's health issues across the life span. To accomplish this, ASPH organized an approach to the project that involved several working groups and a set of structured data collection activities.

We would like to express appreciation to the many individuals that contributed to the preparation of this document. This report is instrumental in providing a new look at how the women's health field has broadened to encompass sex and gender differences, and how this information and ongoing research can be integrated into the training curricula for the MPH degree.

We hope that this publication will be valuable as you work to enhance and expand the focus on women's health and beyond in MPH programs.

Sincerely yours,

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PREFACE

The Congressional appropriations report for Fiscal Year 1993 requested that the National Institutes of Health (NIH), Office of Research on Women's Health (ORWH) examine women's health in the medical school curriculum. The following year, the appropriations report broadened to include curricula of all the health professions. The first report was released in June 1997, entitled *Women's Health in the Medical School Curriculum: Report of a Survey and Recommendations*. This report was then followed by two reports: *Women's Health in the Dental School Curriculum, Report of a Survey and Recommendations* and *Women's Health in the Baccalaureate Nursing School Curriculum*. In order to continue the work cited in the appropriations, the Association of Schools of Public Health, supported by NIH ORWH; the Health Resources and Services Administration (HRSA), Office of Women's Health (OWH); Department of Health and Human Services (HHS), Office on Women's Health (OWH); Centers for Disease Control and Prevention (CDC), Office of Women's Health (OWH); and Agency for Healthcare Research and Quality (AHRQ) Director, Women's Health and Gender-Based Research, supported the analyses and preparation of a curriculum review study in 2003 of women's health in the core courses for the Masters of Public Health (MPH) degree at accredited schools of public health (SPH).

The primary recommendation of the project was that MPH core curricula incorporate the following educational components:

- Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiological, behavioral, and societal factors that influence health behaviors and health status among culturally and socio-economically diverse populations;
- Understanding of the similarities and differences between men and women concerning interaction and communication with the health care system, and the impact of multiple social roles and life cycle events on shared health care decision making for self and family; and
- Knowledge of the historical and contemporary social and cultural determinants of health and wellness across the life span, particularly with respect to sex and gender roles.

Study participants agreed that women's health should be included in public health education through incorporation of content specific to the health of women but also to include sex and gender differences in health problems and health behavior across the life span. By providing students at SPH with training that is relevant to sex and gender differences, and that also is appropriate to the different life stages, students will further increase the use of preventive services and reduce health disparities as they venture into the public health field. We are grateful for the dedicated assistance to this effort from ASPH to continue the work of previous curricular reports addressing women's health in the health professions training. Without ASPH's efforts, this report would not have been possible.

This document contains important information regarding “what should be taught” and “what is taught” in the MPH curriculum. We hope public health education institutions will use this information to develop curricula to improve the health of women and men across their life span.

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EXECUTIVE SUMMARY

Many diseases affect women disproportionately, predominately, or differently than they do men. The view of women's health has also moved away from maternist traditions toward broader conceptualizations based on social, educational, and economic status, as well as on reproductive choices and family composition. Within this context, a partnership of five Federal agencies¹ has been instrumental in examining the integration of women's health in the training curricula of the health professions.

Given its orientation to the health of populations, and anecdotal information about increasing interest in women's health, the Association of Schools of Public Health (ASPH), in collaboration with the Federal agencies' women's health partnership, undertook a curriculum review study in 2003 of women's health in accredited schools of public health (SPHs). The aim of the study was to assess how women's health is addressed in required and elective courses for the Master of Public Health degree (MPH). Through this project, ASPH and its Federal partners sought to expand the available information at SPHs regarding an increased recognition of women's health issues across the life span.

Project Approach and Methods

ASPH organized an approach to the project that involved several working groups and a set of structured data collection activities. The initiative included convening a Women's Health Interest Group, consisting of women's health faculty from each of the 34 schools of public health, and an expert advisory group (EAG), which additionally included experts in women's health from associations involved in education and practice of public health and women's health experts from Federal agencies. A focus group methodology was selected for collecting information about what a typical MPH graduate is exposed to in core MPH courses concerning women's health. This strategy was adopted to ascertain nuanced information regarding factors involved in pursuing a women's health focus in the MPH curriculum, and individual perspectives about what should be done to build upon the current status of such interests and efforts. Nine focus groups were conducted in July and August of 2004, each addressing a particular perspective: The women's health faculty focus groups discussed "what should be taught" in core MPH programs in regard to women's health, and the core course faculty focus groups discussed "what is taught." These focus group discussions also addressed barriers, opportunities, and strategies related to enhancing and expanding a focus on women's health in MPH programs.

An on-line survey of ASPH interns and fellows in August 2004 provided a sampling of student and recent alumni experience and perspectives regarding women's health-related topics in core MPH courses. Concurrently, information on course offerings related to women's health was systematically abstracted from SPH 2003 course catalogues. The course data were then vetted by the designated women's health interest group member from each school. A final step in preparing this report entailed convening the EAG in a daylong meeting in October 2004 to consider findings and develop a set of recommendations.

¹ Health Resources and Services Administration (HRSA), Office of Women's Health (OWH); Department of Health and Human Services (HHS), Office on Women's Health (OWH); National Institutes of Health (NIH), Office of Research on Women's Health (ORWH); Centers for Disease Control and Prevention (CDC), Office of Women's Health (OWH); and Agency for Healthcare Research and Quality (AHRQ) Director, Women's Health and Gender-Based Research.

Findings

The primary recommendation of the project, as informed by the data and with the advice and expertise from the women's health EAG, was that MPH core curricula incorporate the following educational components:

- Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiological, behavioral, and societal factors that influence health behaviors and health status among culturally and socioeconomically diverse populations;
- Understanding of the similarities and differences between men and women concerning interaction and communication with the health care system, and the impact of multiple social roles and life cycle events on shared health care decision making for self and family; and
- Knowledge of the historical and contemporary social and cultural determinants of health and wellness across the life span, particularly with respect to sex and gender roles.

These statements of principle are intended to move beyond exclusive attention to women's health for several reasons. First, study participants acknowledged the legitimacy of and sought to address counterarguments to a women-specific focus that pose the question, "Why women's health and not men's health?" Secondly, and equally important, participants sought to address the general concern in the field of public health about health disparities as reflected in "Healthy People 2010 Objectives for the Nation," U.S. Department of Health and Human Services (HHS) priority initiatives, and Institute of Medicine (IOM) reports. This expanded approach enables ASPH and Federal partners to achieve the multiple objectives of addressing prior neglect of women's health in both public health research and graduate education, as well as implementation of IOM-recommended workforce competencies for public health professionals related, in particular, to genetics, cultural competence, communication, and diversity.

Other specific findings from the focus groups, student survey, and course review include the following:

1. **Sex and gender differences, diversity within gender, social determinants of health, and a lifespan perspective should provide the foundation efforts to incorporate women's health into the MPH core curriculum.** Women's health faculty proposed that the current focus in public health on health disparities and cultural competency should serve as the backdrop and rationale for inclusion of women's health concepts in the educational core curricula of MPH students. There was substantial agreement among core course faculty, as well as among students surveyed, that these women's health concepts were important. Moreover, the students and recent alumni surveyed overwhelmingly indicated that they anticipated needing women's health knowledge in their professional careers.
2. **There should be greater emphasis on women's health in the MPH core curriculum through integration into core courses rather than by requiring a separate course specific to women's health.** The main themes identified for integration into core courses included sex and gender differences, health disparities, and cultural competence.

- 3. The principles identified as important by women's health faculty currently are incorporated into the core MPH curriculum to at least a moderate degree.** Overall, about one-third of the participating faculty believed that the concepts and principles identified as essential already received full exposure when they considered the entire array of course offerings for their MPH programs. Student survey results appear to confirm these faculty reports.

The systematic review of 2003 SPH course catalogues and follow-up with each school representative identified a total of 324 women's health-related courses. Slightly less than 20 percent (60 of 324) of the total number of courses identified appeared to have a focus on women's health beyond reproductive health, maternal and child health, or nutrition. Sixty women's health courses were found, 112 MCH/Perinatal, 74 Reproductive Health/Family Planning, and 78 other courses, which included specific courses such as midwifery and specific nutrition courses. Not surprisingly, the elective courses were more frequently offered in the largest schools. Only two schools did not offer courses in the categories named.

- 4. Challenges in promoting a targeted emphasis on women's health include the limited number of public health faculty with expertise in women's health, and aspects of the academic culture related to independence of faculty in determining course content.** In addition, schools of public health exercise broad latitude in determining their overall curricular approach and the specific assemblage of their MPH degree requirements. The concept that the faculty focus group said would be most difficult to incorporate into the MPH curriculum is the lifespan approach to women's health.
- 5. Faculty expertise and research interests are important factors in determining the extent to which women's health is or could be taught in the core MPH curriculum. The interest levels of both deans and students also are key drivers in this regard.** Student interest in women's health appears to exist, as reported by both faculty and students, with over 75 percent of students reporting that women's health would be important to their careers to a moderate or substantial degree. A long-term strategy would be needed, however, to expand the cadre of public health faculty with expertise in the area of women's health.
- 6. Compiling and sharing resources specific to women and public health among all schools could be a significant help to core course faculty.** Particularly important for inclusion would be data sets, case examples or modules, bibliographies, and course syllabi. Opportunities to promote inclusion of women's health concepts in the core MPH curriculum are present when faculty recruitments and curricula review are underway in the schools of public health. Moreover, more efforts can be made to collaborate with faculty colleagues from schools of medicine, nursing, and women's studies programs in schools of arts and sciences. In addition, staff from State and local health departments, and faculty from the HHS National Centers of Excellence in Women's Health can be approached to further enhance the presentation of women's health in schools of public health.

Recommendations

As conceptualized in this report, leadership for implementation, while a collaborative/partnership effort, falls primarily into two domains: that of the Association of Schools of Public Health; and that of the Federal partner agencies—Health Resources and Services Administration (HRSA), Office of Women’s Health (OWH); the Department of Health and Human Services (HHS), Office on Women’s Health (OWH); the National Institutes of Health (NIH), Office of Research on Women’s Health (ORWH); the Centers for Disease Control and Prevention (CDC), Office of Women’s Health (OWH); and the Agency for Healthcare Research and Quality (AHRQ) Director, Women’s Health and Gender-Based Research. Additional suggestions are offered for consideration by philanthropic organizations and by professional journals.

Association of Schools of Public Health (ASPH)

For its part, ASPH should take the following steps toward implementation:

1. Promote, through a public statement promulgated by the deans of the schools of public health, the incorporation of content specific to sex and gender differences in health problems into the core MPH curriculum.
2. Establish an ad hoc advisory group to guide efforts that promote integration of the aforementioned key principles related to sex and gender in the MPH curriculum. The charge of this advisory group would be to:
 - a) develop a set of educational competencies specific to sex and gender health differences that would provide the basis for development of public health teaching materials and courses;
 - b) develop and promulgate recommendations for specific strategies for incorporating concepts related to sex and gender health differences into the MPH core curriculum (for example, identifying the specific concepts and teaching materials that fit best in each public health core discipline), using the competencies noted above as the focus;
 - c) guide development of a set of teaching resources on sex and gender health differences and make them available via the Internet to all SPH faculty and academic administrators. Such resources would include syllabi, readings, data sets, case examples, and teaching and assignment modules that would be keyed to the competencies noted above;
 - d) examine information further and deliberate issues related to developing a set of recommended elective courses on women’s health; and
 - e) explore further the potential for drawing on women’s studies programs and on Federal programs, to strengthen the teaching of sex and gender health differences in schools of public health.
3. Continue to include student perspectives in this and all other curricula development and use SPH exit surveys and other appropriate mechanisms to monitor the extent to which recommended changes yield desired outcomes.

Federal HHS Partner Agencies

HHS partner agencies should take the following steps toward implementation:

1. Assemble educational resources for SPH faculty interested in incorporating sex and gender specific content into MPH core courses and/or developing women's health-specific elective courses. Online resources can be posted on the HRSA Web site (www.hrsa.gov) or on the National Women's Health Information Center Web site (www.womenshealth.gov) with linkages to all HHS agencies.
2. Promote further attention and support to public health and research training programs funded by HHS that focus on integrated models, such as the NIH Building Interdisciplinary Careers in Women's Health (BIRCWH) program, the National Centers of Excellence in Women's Health program, a variety of CDC public health training programs, and the HRSA Geriatric Education Centers.
3. Increase the number of junior faculty development awards that focus on sex and gender health differences research and outcomes, and that involve graduate student roles, recognizing the importance that research funding has on graduate education.
4. Continue to support and expand funding opportunities for schools of public health and other health professions training programs in their collaborative efforts to integrate the study of sex and gender differences into graduate education curricula.

Additional Suggestions

The EAG discussed the potential contributions of philanthropic organizations. Specifically noted was the model of the American Legacy Foundation's funding for curricula development and dissertation research specifically related to elimination of tobacco-use. EAG members further suggested that consideration be given to soliciting the interest of a professional journal (e.g., American Journal of Public Health, Public Health Reports, Women's Health Issues/Jacobs Institute) in publishing a special theme issue or supplement devoted to enhancing attention to women's health in graduate education programs.

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INTRODUCTION

Many diseases affect women disproportionately, predominately, or differently than they do men. Over the past 40 years understanding of women's health has evolved from the maternist traditions of the first half of the 20th century (1,2) to broader conceptualizations. Concurrent trends in the social, educational, and economic status of women, and choices about reproduction and family composition, point to an increasingly complex social context influencing their health (1,2,3,4). This new perspective recognizes the impact of women's multiple roles in society on health, rejects a false dichotomy between reproductive and non-reproductive health, and focuses on women's health assets rather than on health problems alone (3).

Within this context, the Health Resources and Services Administration (HRSA), Office of Women's Health (OWH); the Department of Health and Human Services (HHS), Office on Women's Health (OWH); the National Institutes of Health (NIH), Office of Research on Women's Health (ORWH); the Centers for Disease Control and Prevention (CDC), Office of Women's Health (OWH); and the Agency for Healthcare Research and Quality (AHRQ) Director, Women's Health and Gender-Based Research have been instrumental in examining the integration of women's health in health professions' training curricula. This important work stems from the fiscal year 1993 Congressional report language that directed the NIH ORWH to examine the integration of women's health in the medical school curriculum (5). This work was subsequently expanded to include the dental and baccalaureate nursing health professions (6,7) and is currently being examined in pharmacy schools. These study reports provide a snapshot of the recent integration of women's health into the different health professions' curricula, and they also provide recommendations for future inclusion. Heightened attention among health services researchers is also found in the establishment of a Women's Health Interest Group at AcademyHealth (8).

Given its orientation to health of populations, and anecdotal information about increasing interest in women's health, the Association of Schools of Public Health (ASPH), in partnership with HRSA OWH, HHS OWH, NIH ORWH, CDC OWH, and AHRQ, undertook a curriculum review study in 2003 of women's health in accredited schools of public health (SPHs). The aim of the study was to assess how women's health is addressed in required and elective courses for the Master of Public Health degree (MPH).

Public health is a broad, multidisciplinary field, incorporating clinical, social, political, educational, and economic disciplines, and a range of analytic methods such as biostatistics, epidemiology, demography, among others. The Association of Schools of Public Health is the only national organization representing the deans, faculty, and students of the 37 accredited schools of public health. The schools of public health vary greatly in a number of ways, including size of student body (ranging from 13 to 272), size and constellation of the faculty, institutional nature (i.e., public or private), and the types of degrees offered (e.g., MPH, MHS, PhD, DrPH, ScD, ScM). Variation is also seen in the mix of public health disciplinary, topic, and orientation foci and strengths (e.g., international-domestic mix, policy-behavioral sciences). The primary commonality among the schools is with respect to the MPH degree, where the five discipline areas of epidemiology, biostatistics, environmental health, behavioral sciences, and health services management/administration constitute a core curriculum. This core was first established by the American Public Health Association in the 1940s and revised minimally since then by the Council on Education for Public Health (CEPH). Though the defined core areas do not specifically include women's health, there is broad latitude for schools to determine the overall curricular approach and the specific assemblage of MPH degree requirements, including length of time to complete a full-time program (11

months–2 academic years), required credit hours, and choice of electives.

The challenge in determining how women’s health is addressed across the institutions is substantial in the face of such diversity. A multi-component strategy was therefore developed within project funding and timeframe parameters that would tap into information from teachers, learners, and curriculum materials.

Approach and Methodology

As noted above, through this project ASPH and its Federal partners sought to extend beyond anecdotal reports the available information at SPHs on women’s health issues across the life span. To this end, ASPH organized an approach to the project that involved several working groups and a set of structured data collection activities. ASPH first formed a Women’s Health Interest Group consisting of women’s health faculty selected by the respective deans from each of the then-34 schools of public health in summer 2003. From this group, an Expert Advisory Group (EAG) was formed, which also included experts in women’s health from associations involved in education and practice of public health, and women’s health experts from Federal agencies (see Appendix II). ASPH asked well-known women’s health expert Dean Susan Scrimshaw of the University of Illinois at Chicago School of Public Health to oversee the project and chair the EAG. In addition, ASPH subcontracted with a women’s health consultant at one of the accredited SPHs to conduct the project.

Through panel discussions conducted via conference calls and through electronic communication led by consultant Holly Grason, the EAG identified the specific information to be gathered through ASPH-funded faculty focus groups and through a student/alumni on-line survey. The EAG also evolved a definitional statement of women’s health so that participants could respond with a common understanding of “women’s health.” This statement read as follows:

Everyone has their own frame of reference for the meaning of “women’s health.” In some circles, the term has been operationalized by a primary focus on the health of women as it relates to their childbearing potential and/or experience (reproductive health or maternal and child health). Most commonly, however, a far more expansive concept of women’s health is embraced by health professions (including public health), encompassing (1) sex/gender differences in social and biological status reflected in health and disease over the entire life span and regardless of reproductive status, and (2) a holistic view rather than a disease or “body parts” approach.

Early on in the project, a focus group methodology was selected for collecting information about what a typical MPH graduate is exposed to in core MPH courses concerning women’s health. This strategy was adopted in order to ascertain nuanced information regarding factors involved in pursuing a women’s health focus in MPH curriculum, and individual perspectives about what should be done to build upon the current status of such interests and efforts. In addition, when interviewed by ASPH staff, health profession associations² that conducted the previous curriculum reviews (5,6,7) indicated that the focus group methodology offered an appropriate alternative to the survey approach that was used for their women’s health curricula projects.

² Association of American Medical Colleges, American Dental Education Association, American Association of Colleges of Nursing, and American Association of Colleges of Pharmacy

The focus groups were conducted in July and August of 2004 and addressed two perspectives regarding women's health in core MPH programs: the focus groups consisting of women's health faculty discussed "what should be taught," and the focus groups consisting of core course faculty discussed "what is taught." Hypothesizing that some differences in experience might relate to the size of each SPH, participant groupings for both the women's health faculty and core course faculty groups were stratified by school size (see Appendix III for methods).

Multiple logistical considerations led to a decision to employ two additional strategies for collecting information. For the student/alumni perspective, it was determined that it would be more efficient to administer an on-line survey of the current 188 ASPH interns and fellows to assess their knowledge of women's health-related topics in their core MPH courses. This group included current SPH students and recent alumni (within 5 years of graduation). Moreover, as focus group methodology is not well suited for enumeration of specific factual information, it was decided to systematically abstract 2003 SPH course catalogues to obtain information on current course offerings related to women's health. These data also were collected in July and August of 2004 from SPH faculty. More detail on each method is found in Appendix III.

A final step in compiling information for this report entailed convening the EAG in a daylong meeting in October 2004 to consider findings and develop a set of recommendations.

In the sections that follow, a brief synthesis of the overall findings is presented. Subsequent sections discuss the results of the focus groups, student/alumni survey, and curricula review, respectively. Conclusions and recommendations of the EAG follow. A set of appendices that include detailed descriptions of methodology is also provided.

SUMMARY FINDINGS

Nine focus groups, comprising 43 faculty members, provided their perspectives on "what should be taught" and "what is taught" in the core MPH curriculum related to women's health. The focus group discussions also addressed barriers, opportunities, and strategies related to enhancing and expanding a focus on women's health in MPH programs. In addition, a group comprising 90 students and/or recent SPH alumni participated in an on-line survey regarding women's health in the SPH curriculum.

- 1. Substantial concurrence evolved among participating women's health faculty that sex and gender differences, diversity within gender, social determinants of health, and a lifespan perspective should provide the foundation for such a focus.** Issues specific to women's status in society, multiple social roles, and women's interaction with the health system (including communication and access concerns) also were noted as key concepts that should be included. Women's health faculty proposed that the current focus in public health on health disparities and cultural competency should serve as the backdrop and rationale for inclusion of women's health concepts in the educational core curricula of MPH students. There was substantial agreement among core course faculty, as well as among students surveyed, that these women's health concepts were important. Moreover, the students and recent alumni surveyed overwhelmingly indicated that they anticipated needing women's health knowledge in their professional careers. Faculty, however, noted

a number of challenges in promoting a targeted emphasis on women's health. Challenges include the limited number of public health faculty with expertise in women's health, and aspects of the academic culture related to independence of faculty in determining course content.

2. **The predominant consensus of both women's health and core course faculty supported greater emphasis on women's health in MPH core curriculum through integration into core courses rather than by requiring a separate course specific to women's health.** The main themes identified for integration into core courses included sex and gender differences, health disparities, and cultural competence.
3. **From focus group discussions with both sets of faculty, the concepts and principles identified as important by women's health faculty currently are incorporated into the core MPH curriculum to at least a moderate degree.** Overall, about one-third of the participating faculty believed that the concepts and principles identified as essential already received full exposure when they considered the entire array of course offerings for their MPH programs. Student survey and course catalogue review findings appear to confirm faculty reports. A total of approximately 325 courses specifically focused on women's health, perinatal or maternal and child health, and reproductive health were identified (see Appendix IV). A lifespan approach to women's health was reported by core course faculty to present particular challenges in terms of incorporation into MPH core course teaching.
4. **Faculty expertise and research interests were noted as important factors in determining the extent to which women's health is or could be taught in the core MPH curriculum. The interest levels of both deans and students also were discussed as key drivers in this regard.** Student interest in women's health appears to exist, as reported by both faculty and students, with over 75 percent of students reporting that women's health would be important to their careers to a moderate or substantial degree. A long-term strategy would be required to expand the cadre of public health faculty with expertise in the area of women's health.
5. **There was substantial agreement among all faculty participating in the focus groups that compiling and sharing resources specific to women and public health among all schools could be a significant help to core course faculty.** Particularly important for inclusion would be resources such as data sets, case examples or modules, bibliographies, and course syllabi (examples of resources can be found in Appendix V). It was frequently noted in focus group discussions that faculty colleagues expert in women's health could be found at their affiliated schools of medicine, nursing, arts and sciences, as well as at HHS National Centers of Excellence in Women's Health and local public health agencies. These individuals, however, are not called upon for assistance in teaching women's health as often as they might be.
6. **With respect to strategies for advancing women's health themes in public health curricula, faculty suggested that times or events when other aspects of the SPH environment are changing be seized as opportunities for inserting women's health into the change agenda.** Opportunities are likely to be found to move an interest in women's health forward, given that at any point in time SPHs are usually engaged in one or more processes such as faculty and/or department chair recruitments, curricula overhaul, and/or self studies for CEPH reviews.

As is reflected in the material that follows detailing findings from each component of the study, time and again similar results were produced through each independent data collection strategy. Therefore, sufficient credence can be given to these findings to substantiate actions proposed by the project's EAG.

In addition, some of these findings correspond with the other curriculum reviews performed by the medical, baccalaureate nursing, and dentistry schools (5,6,7). All four curricula reviews recommended a focus on the life span of the woman, as well as the impact of cultural, economic, and social aspects on women's health. Also noted was the importance of faculty interest in emphasizing women's health in curricula. Lastly, while all of the schools supported greater emphasis on women's health in their respective curricula, only the medical school offered suggestions for an actual core curriculum on women's health.

FOCUS GROUP FINDINGS

The intent of the focus groups was three-fold: (1) identify those concepts, principles, and other content that should be taught in MPH program core courses/curricula such that there is confidence that all MPH graduates attain knowledge and/or mastery before graduation, (2) learn the extent to which what should be taught is currently taught, and (3) explore potential vehicles for enhancing the inclusion of women's health in core MPH curricula.

What Should Be Taught in the MPH Core Curriculum

Although the women's health experts focus group participants articulated a broad spectrum of ideas, they concurred on specific women's health-related principles that should be considered for incorporation into the core MPH curriculum. This concurrence was observed across all groups, such that few noteworthy distinctions emerged between faculty from small as opposed to large MPH programs. The two most prominent sets of ideas related to (a) gender differences, and (b) women's roles in society and the consequent impact as related to health. Discussions related to gender differences included a number of specific considerations such as patterns of disease, social roles, health behavior, and health care utilization. Several of the focus group discussions summarized these topics under the rubric of the role of gender in health disparities. In addition, a number of faculty noted that it would be important to include a historical perspective on women and health in the curriculum. When discussing ideas related to principles associated with "women in society," concepts such as social determinants of health, women's experience related to poverty and its influence on health, and access to and use of health care services emerged. Women's multiple social roles, and cultural messages related to women also were raised as issues of note. The subject of domestic violence surfaced several times in discussions of this latter topic. Some of the representative statements were as follows:

It would be hard to teach women's health if you didn't go at it both from a clinical perspective as well as from a cultural perspective, political perspective, feminist perspective...

...people need to understand certain [issues] across genders. In other words, frequencies of disorders and where resources should go and why... the reproductive cycle should be [understood] across both genders and integrated both ways so that people really understand what are the major driving forces behind the health care focus on those issues important in women's health....

I think it should be a requirement in each course actually, ... [to] focus on gender, race so that it's more like a competency.

Other prominent themes that emerged were that of perspective over a life span, and recognition of diversity within gender. The importance of life span was generally acknowledged by all participants, and some specifically noted the need to address older women and aging, particularly given current demographic trends. With specific regard to concepts of diversity, focus group participants emphasized that it was important to go beyond consideration of race/culture and socioeconomic status. The need to address issues specific to subgroups based on sexual orientation was mentioned on several occasions.

...social role differences and what difference that makes in terms of women's health and women's experience with health care... give students some understanding of the diversity in women's experience and the diversity around gender.

...a life course or a holistic perspective.... I would not like to see women's health be narrowed down to maternal and child health. I think it should be across the life span.

Several focus group discussions centered on women's experience within the health care system, including barriers to access, and women as health care consumers. Related to discussion of such material were several conversations about women's communication styles and patterns, and the association of these with health education strategies specific to women. **Table 1** shows the leading women's health topics as mentioned by the women's health faculty focus groups.

Table 1. Women's Health Principles That Should Be Included in the Core MPH Curriculum.

	Group I N=5	Group II N=2	Group III N=6	Group IV N=4	Group V N=5
Gender differences	5	2	2	4	3
Cultural competence	0	2	1	2	3
Women in society	3	2	5	2	0
Lifespan perspectives	2	0	2	2	2
Women's experience with health system	3	0	3	0	0
Health communication and education	1	2	2	0	0
Women's reproductive health	1	0	2	0	1

Mention was made of some specific topic areas that should be covered in MPH program curricula. These topics were women's reproductive health; women's mental health; women-specific environmental health issues; and women and violence.

The first set of focus group discussions yielded a set of three composite statements reflecting what the women's health faculty believed should be included in the MPH core curriculum. The consensus ideas were summarized as follows:

- Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiologic, behavioral, and societal factors that influence health outcomes among culturally and socio-economically diverse populations of women.
- Understanding of women's interactions with the health care system, including the impact of multiple social roles and life-cycle events on women's health, and incorporating women's access to care; women's patterns of health care access and health care seeking; women's forms of communication and interaction; and women's health decision making for themselves and others.
- Knowledge of the social determinants of the health of women across the life span and in the historical and contemporary context of culture, particularly with respect to gender roles and social status.

The focus groups held with core MPH course faculty each began with a presentation and a request for commentary on how to incorporate into the core curriculum the above content related to women's health. Most core course faculty instructors felt that one or more of the concepts should be incorporated through examples and other pedagogic strategies. Their perspectives are reflected in statements such as the following:

I guess I basically agree with these statements, but I wouldn't necessarily specifically try to incorporate them into whatever I do or present in class. It would depend a lot on the examples in the textbook or whatever field I happen to be consulting with at the time.

I would see all of these three points as important—and yet I also see them as something where I would expect that either through examples or reading they'd be introduced in core [courses]... any real depth with regard to these concepts and principles would have to come in elective courses.

I see sex and gender differences as being a common theme that should run through all of the core courses sort of much the same way that, you know, we're now looking at cultural competencies or racial and ethnic differences.

A few core faculty focus group participants, however, felt that none of these concepts should be incorporated into the core, and about one fourth noted that there should never be requirements to incorporate any material specific to particular populations. These perspectives are perhaps best represented by the following comment:

We have to assure that students are coming away with cultural competency skills and understanding what that means and how to evaluate them. I'm not a hundred percent sure that pushing a particular research agenda or particular social science agenda within the core...is the right way to do it and I'm not sure it's the right place to do it.

Faculty in both focus group categories frequently noted faculty independence in teaching, variation depending on faculty interest, and funded faculty research to be important considerations in regard to incorporation of women's health into the core MPH curriculum (see below for further discussion).

What Concepts Related to Women’s Health Are Currently Being Taught in the Core MPH Curriculum?

When asked about the extent to which women’s health is currently a part of the core MPH curriculum, slightly over half of the women’s health faculty indicated that some of the content and principles already were incorporated into core courses, particularly in epidemiology and social and behavioral sciences courses. Nearly one-half of the MPH core course instructors indicated that the concepts and information reflected in the first statement articulated by the women’s health faculty were built into core course syllabi. Concepts articulated in the second and third statements were reported to be included in the core MPH curriculum less often. Only two core course faculty indicated that gender differences were not covered at all, and one individual indicated s/he was not sure.

Participants in both sets of focus groups indicated that MPH students learned about women’s health through teaching examples. Elective courses available to MPH students constituted the second most frequently noted mechanism. Overall, about one-third of the participating faculty believed that there was full exposure to this set of ideas and content when one considered the entire array of MPH course offerings.

Representative statements in these discussions from both sets of focus groups include the following:

I think we [include women’s health] pretty well because we just happen to have sort of the configuration of the right faculty at the right time.

... [women’s health is included in] social and behavioral sciences parts of our courses, because of the people who teach it, not because of the course itself.

I think that it’s variable, and subtle, and it varies according to who’s teaching the core course... and who’s on sabbatical, and who isn’t on sabbatical. I would say it’s not built in consistently.

I think we cover issues related to health care system access to care for women throughout the life cycle and health care seeking behaviors in both our community health science course, that’s a core class, and in our health policy course. Again it’s a function of who the main instructor is.

The faculty instructors of core MPH courses were asked which concepts would be easiest and which would be most difficult to incorporate into their teaching. Gender differences and the social determinants of health were most frequently noted as the easiest to incorporate:

The last point, the social determinants of health for women across the life span, is an emphasis of ours—and a growing emphasis of ours throughout our curriculum—because we’re looking at a lot of areas of issues of health disparities across gender and ethnicities.

Sometimes they come up because I’m always looking for problems that will be current and of interest to the students so that they will be a little excited by biostatistics. ... for example when the Women’s Health Initiative came out with their results about hormone usage we picked up some data from that and used it as examples for some of our problems.

I can use gender issues in illustrating a particular analytical tool.

I think any content area of epidemiology, those content specialty courses, definitely look at gender and sex.

Some core faculty noted that the presentation of a women's health lifespan approach in the core curriculum was one of the more challenging of the concepts to incorporate:

The first and third specific statements both take a kind of lifespan approach. [This] isn't the approach we use in our health education course or in our epidemiology course so neither model works. The second one is focused on the health care system, and we're very much a primary prevention program, so that one doesn't work either.

None of our courses, to my knowledge, take a specifically lifespan approach.

One of the things that jumps out at me is one that seems pretty difficult as an epidemiologist to quantify, the impact of multiple social roles and life cycle events on women's health.

What Factors Drive Incorporation of Women's Health Material Into the Core MPH Courses?

Focus group discussions among both women's health and core course faculty were consistent in themes and specific examples. Faculty interest and expertise were universally mentioned as the determining factors as to whether women's health was included in the teaching of core courses. Some participants from both faculty groups specifically indicated that women's health is included because instructors of core courses embraced women's health as the area of interest for their research scholarship. A few focus group participants noted that there are relatively few SPH faculty with a women's health research focus. Thus a targeted recruitment effort would be needed in order to increase teaching of women's health in the MPH curricula. Moreover, in nearly every focus group discussion in both categories, participants raised the issue of faculty independence in designing course syllabi and material. Nearly all faculty involved in the focus groups noted that it would be inappropriate and infeasible to require inclusion of women's health in the core courses. Another issue mentioned frequently was the fact that the core curriculum for MPH programs is already quite extensive (as identified by the Council on Education for Public Health), and that fitting in additional required concepts would be problematic, particularly in light of the eight new competencies for public health professionals articulated by the Institute of Medicine: communication; community-based participatory research; cultural competence; ethics; genomics; global health; informatics; and public health policy/law (IOM, 2003). Specific comments in this regard were:

I struggled with this to some degree, because we don't all have control over what other people teach in different courses, and people teaching in different courses also have different sets of skills and expertise.

I think that if an instructor had a research interest in an area relevant to women's health, it was much more likely that he or she was going to include that information in the core course.

It's really about personalities. The chair of [the epidemiology-biostatistics department] is an epidemiologist who's particularly interested in women's health epidemiology ... and she's on the MCH concentration faculty even though she's not in that department.

I would recommend that you find the main pieces of information and do it across core courses. And that has to be done within the environment of each school's curriculum, because everyone's school is a little bit different.

You're burdened with ... history of curriculum and students can only take so many courses. So how do you build competencies in a structure that's fairly hard to change, hard to move? One way is just to do this through having faculty do research [in women's health] and bringing students on board.

Two other “drivers” of MPH curriculum content and emphasis identified were: (1) the interest of the deans, and (2) the interest of students. Both were noted to exert influence, formally and informally. Though participants indicated that the primary interest of students is to garner skills, the demand for content related to women's health is also evident. In this regard, specific mention was made of international health, maternal and child health, lesbian health, sexuality, and reproductive health. One core course instructor (of epidemiology or biostatistics) indicated that in the first class of the term, s/he asks students about their interests, and then seeks out material/data to include in the teaching of that course.

... reproductive epidemiology and the controversies in women's health research were, are, extraordinarily popular with students.

The issue of the influence of funding on the extent to which any given public health issue or target population is included in MPH curricula also surfaced in several conversations. Funding was mentioned in terms of the role training grants play in curriculum design, as well as related to how the availability of research funding in a given area can influence the number of faculty prepared to teach the subject matter. That is, when there is a substantial emphasis in the research arena on a specific topic, then faculty get involved in those topics, and, in turn, use that information in their teaching.

In a similar vein, several focus group discussions centered on the role in curriculum played by women's studies programs that exist in many schools of arts and sciences as well as the HHS National Centers of Excellence in Women's Health grants held by a number of universities with schools of public health. It was noted that students sometimes take courses in these other departments to broaden their electives for women's health studies. Also, there is great potential for shared resources between the SPHs, other departments, and with the Centers of Excellence.

Specific Strategies for Incorporating Women's Health Into the MPH Curriculum

A number of long-term, broad strategies were offered, such as a public statement from ASPH that women's health is important to include in the MPH curriculum.

A statement from ASPH that gender, race, ethnicity and vulnerable populations should be included in examples in all school required classes for the general MPH would be absolutely amazing.

Having a unified set of core concepts that is endorsed by the larger community is a really valuable way to build a curriculum.

I also really think a body like ASPH could have a major influence. I think it's very important that it be seen as kind of a national initiative.

An even broader strategy noted for enhancing women's health content in the MPH core curriculum would be an increased number of faculty with specific research focus on women's health. As noted above, achieving a larger cadre of women's health faculty would depend in large part on the availability of money in women's health research, and specific initiatives to increase the number of doctoral students with women's health as their research focus.

With regard to the means of ensuring greater emphasis on women's health in the MPH core curriculum, the consensus among both women's health and core course faculty was to do so through content integration into core courses (and not through any required separate course). Although no objection to separate elective course(s) on women's health was voiced, no one felt that there should be a separate required course on women's health. Appendix IV lists courses identified through systematic search of all 34 SPH catalogues and with review by each of the schools.

The focus groups identified the coverage of sex and gender differences, health differences, health disparities, and cultural competence as the primary way to integrate women's health into the core courses.

None of us, I think, are thinking you should have a course in women's health that's required in the MPH core curriculum.

We have to be careful that we make sure that what we decide is really important actually can legitimately be taught within the context of the courses that are taught in the program.

I too am resistant to sort of really having a women's health focus per se in our core courses. I'd much rather have it be a broader sense of, you know, the importance of gender, class, race, ethnicity.

There is a tremendous focus on diversity and disparities, health disparities. Now most of that focus is around race, but it seems to me that's also a pathway or an opening.

Notwithstanding a general reluctance to endorse requirements and an expressed respect for faculty independence in teaching, the discussions in both categories of participating faculty were rich with examples of what could facilitate incorporating women's health into the MPH core curriculum. Women's health faculty noted that:

...examples that go in the [epidemiology] courses, the biostatistics courses, and the health policy and management courses, and even environment. And particularly to focus on women over the life course, and particularly thinking about the effect of environment on their reproductive health status, and then the health of their offspring. And the behavioral sciences making sure that the social roles and the definitions of gender versus sex actually get brought into those courses. I think probably that and the health management courses are probably where I might actually think about some specific lecture or some specific material besides examples brought in.

Table 2. SPH Faculty-Recommended Resources for Enhancing Teaching of Women’s Health in the MPH Core Curricula.

Women’s Health Faculty	MPH Core Course Faculty
Women’s health teaching materials for core course instructors, such as data sets, syllabi, readings, and lecture modules	Data sets
Women’s health-specific competencies	Case examples, articles and readings
Marketing to enhance interest in women’s health among public health faculty	Women’s health content modules
Faculty development workshops and seminars	Women’s health-specific competencies
Guest speakers on women’s health	Guest speakers on women’s health

When you ask [biostatistics and epidemiology] people who may not work in these areas to talk about social factors—if they’re not equipped to really know a little bit more about the topic, then when things go forward—and it’s great to see them so excited about something—it might backfire on you. We might need to do more than just, you know, give them a couple of examples.

There was substantial overlap in the specific ideas generated in both sets of focus group discussions for incorporating women’s health into the core curriculum, as reflected in **Table 2** (above).

Some faculty in both sets of focus groups mentioned seminars and grand rounds as additional vehicles that might be employed to highlight women’s health in the core MPH curriculum. Representative sentiments of core course instructors are found in the following remarks:

If we rely simply all the time on whether what the particular faculty member’s research interests are, that can be fairly narrow, and I think it is necessary for us to have ... resources or some ways that faculty members who would like to integrate women’s health or minority health or lesbian, gay, bisexual, transgender health into their courses through examples and reading that they have some sense of where they might find those materials to work with, if it’s not an area that they’re real familiar with.

Maybe pulling together recent literature or key Web sites ... key links would be useful. ... Or data sets, yes. Having this all in one binder that’s divided into sections. Data sets on women’s health, links, syllabi, etc. That would be very nice.

Biostatisticians are always looking for neat, real-world sets of data and intriguing questions. I have a very rich data set that covers the demographics in which I will have gender, ethnicity, as well as added data obtained from epidemiological studies, clinical trials, and you name it, where it might mean that I have added characteristics for interests associated with an outcome that would be a better fit to explain the analytical tool that is being covered. ... I can use gender issues in illustrating a particular analytical tool.

I actually ask [students] on the first day of class [what their interests are.] And if they've got data sets, I ask them to bring them along because, if they're working in a particular area, we frequently use what they're doing.

Maybe a checklist of competencies and... some of the selected readings and perhaps even go so far as suggested discussion questions.

If there was a way to have a Web site that had links to articles and links to data sets regarding women's health, if there was an ASPH Web site, that... would help a lot....

There was discussion in all of the focus groups about people as resources. First, faculty talked about inviting various women's health experts to lecture in certain core courses. Most frequently, university faculty were mentioned, including colleagues in the school of public health (sometimes, but not always, "MCH" faculty), school of medicine, school of nursing, and from women's studies programs in the school of arts and sciences. Staff from local health departments and faculty from the university's National Center of Excellence in Women's Health were each mentioned on two occasions. Many focus group participants noted that they did not think that they knew about all of the people available to them for collaboration in teaching women's health. Moreover, it was noted in several conversations that it was particularly hard for new/junior faculty to become knowledgeable about colleagues that might help them in teaching women's health.

In summary, a great deal of interest and excitement was expressed by both the women's health and core course faculty focus group participants about the possibility of information being compiled (by each school, or centrally by ASPH) and shared across all schools. Particularly important for inclusion would be data sets, case examples or modules, bibliographies, and course syllabi. Web site posting was by far the most frequently mentioned vehicle for sharing such information. The only major drawback noted along these lines was that the information would need to be kept current in order to be useful.

Windows of Opportunity

A number of conversations in both sets of focus groups centered on process strategies, and suggestions were made as to how best to achieve change in the academic setting. Time and again, focus group participants suggested that, rather than introduce new emphases on women's health "out of the blue," opportunities should be seized to insert women's health into the change agenda. Given that, at any point in time, SPHs are usually engaged in one or more processes such as faculty and/or department chair recruitment, curricula overhaul, and/or self studies for CEPH reviews, opportunities are likely to be found to move an interest in women's health forward.

...when the curriculum is being revamped, when there's new faculty or where there's a new thrust around disparities, bring [women's health] into that rather than kind of out of the blue saying okay now we're going to do [women's health] but it's part of a general kind of rethinking and transformation. I think we'll be much more effective.

Overall, the focus group discussions revealed support for conceptual and cultural change related to how women’s health is addressed in MPH curricula. Several steps were identified to begin a change process with current SPH faculty nationally, and potential directions that public health leaders could take to evolve longer-term strategies.

STUDENT AND RECENT ALUMNI SURVEY FINDINGS

An important part of the assessment of women’s health in core curriculum is the student’s point of view. In the focus groups, it was noted repeatedly that student demands could drive curriculum. In addition, it was noted that students increasingly seek content on women’s health.

An on-line survey was conducted of the 188 ASPH interns and fellows in August 2004. These interns and fellows were all part of ASPH traineeships and most were in training placements at Federal agencies. For full details on the survey methodology and design, see Appendix III.

Table 3: Student Survey Respondents, by Size of SPH, 2004.

School size (Number of Grads)	Number of respondents
A: <52	6
B: 53-83	11
C: 84-106	13
D: 107–184	21
E: 185–272	33
SPH not indicated	6

Of the 188 possible respondents, 90 completed the survey, yielding a response rate of 48 percent. With respect to participation by gender, 81 percent of all respondents were female and 19 percent male; the gender profile for all SPHs is 70 percent female and 30 percent male. The average age of respondents was 28.5 with a range of 23–49 years. The respondents were from 26 schools of public health, and the number of students responding for each school-size group corresponded with the size profile of the 34 accredited schools of public health (see **Table 3**). Respondents were asked to list all degrees earned to date. As of August 2004, 63 had received an MPH (75 percent). Other graduate degrees conferred as of that date, and the corresponding number of recipients, were as follows: MS (13), MSPH (5), MHS (4), PhD (3), MD (2), MSc (2), and Other (5). Respondents were then asked to list all degrees expected. Five said that they were currently in an MPH program. Fourteen were working toward their PhD, two each on their DrPH or ScD, and one on an MD. Overall, 75 percent of the respondents either had received their MPH degree or were working toward its completion.

Anticipated Need for Knowledge Related to Women’s Health

Respondents were asked to what extent they anticipated needing substantial knowledge of women’s health in their professional careers: 42 percent indicated that they would need it to a substantial degree; 23 percent said they would need it to a minimal degree. No student responded that he/she would not need knowledge of women’s health.

Exposure to Women’s Health Concepts

The three central concepts that women’s health faculty believe should be incorporated into the core curricula of MPH programs were introduced as the subject of the next set of survey questions. Overall, respondents were in favor, either substantially or strongly agreeing, with the inclusion of each concept into the MPH core curriculum (**Table 4**).

Table 4: Student Level of Agreement With Women’s Health Faculty Regarding Inclusion of Concepts Related to Women’s Health in the MPH Core Curriculum.

Concept	Response	Percent
Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiologic, behavioral, and societal factors that influence health outcomes among culturally and socio-economically diverse populations of women.	Strongly agree	54.1
	Substantially agree	34.1
	Somewhat agree	10.6
	Do not agree	1.2
Understanding of women’s interactions with the health care system including, the impact of multiple social roles and life cycle events on women’s health, and incorporating women’s access to care, women’s patterns of health care access and health care seeking, women’s forms of communication and interaction, and women’s health decision making for themselves and others.	Strongly agree	45.9
	Substantially agree	35.3
	Somewhat agree	17.6
	Do not agree	1.2
Knowledge of the social determinants of the health of women across the lifespan and in the historical and contemporary context of culture, particularly with respect to gender roles and social status.	Strongly agree	55.3
	Substantially agree	30.6
	Somewhat agree	12.9
	Do not agree	1.2

(Note: 85 respondents)

Survey respondents were then asked about their exposure to each of these concepts in their core courses. Overall, exposure to each of the concepts was limited or moderate (**Table 5**). Thus whereas over four-fifths of students and alumni reported believing that the concepts should be incorporated into core curricula, substantial exposure to this material was reported by less than 20 percent of respondents.

Table 5: Student Exposure to Concepts that Women’s Health Faculty Believe Should be Incorporated into the MPH Core Curriculum.

Concept	Exposure in MPH Core	Percent
Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiologic, behavioral, and societal factors that influence health outcomes among culturally and socio-economically diverse populations of women.	Not at all	12.0
	Limited	32.5
	Moderate	36.1
	Substantial	16.9
	Not Applicable	2.4
Understanding of women’s interactions with the health care system including, the impact of multiple social roles and life cycle events on women’s health, and incorporating women’s access to care, women’s patterns of health care access and health care seeking, women’s forms of communication and interaction, and women’s health decision making for themselves and others.	Not at all	14.0
	Limited	43.4
	Moderate	28.9
	Substantial	10.8
	Not Applicable	2.4
Knowledge of the social determinants of the health of women across the lifespan and in the historical and contemporary context of culture, particularly with respect to gender roles and social status.	Not at all	12.1
	Limited	37.3
	Moderate	28.9
	Substantial	16.9
	Not Applicable	2.4

(Note: 83 respondents)

Educational Format

The vehicles through which students received their women’s health knowledge in their core MPH curricula were determined by asking them to indicate the educational formats used to present information specific to women’s health in the MPH core. The majority of respondents said they received this information in instructor lectures or guest lectures in either social and behavioral science, or epidemiology courses. Required reading was the second most cited means of dissemination of information specific to women’s health to students. Instructor or guest lectures in biostatistic courses were noted as the least likely way that students received information on women’s health. See **Table 6**.

Table 6. Educational Formats Used to Present Women’s Health-Related MPH Coursework.

Educational Format	Percent Response
Instructor lectures in social and behavioral sciences	60.5
Required readings	53.1
Instructor lectures in epidemiology	49.4
Guest lectures in epidemiology	32.1
Optional readings	32.1
Guest lectures in social and behavioral sciences	32.1
Course assignments; homework problems	28.4
Instructor lectures in health services management	25.9
Noon seminar series	23.5
Instructor lectures in environmental health	22.2
Case Studies	19.8
Required course	16.0
Guest lectures in environmental health	12.3
Other	11.1
Guest lectures in health services management	9.9
N/A Not applicable	9.9
Instructor lectures in biostatistics	8.6
Guest lectures in biostatistics	2.5

(Note: 81 respondents)

Women’s Health Topics

To determine the women’s health topic areas that respondents learned about in their core curricula, respondents were asked to select from the list provided in the survey all topics that were included in their core curricula.

Reported exposure was greatest with respect to “demographic implications,” followed by “socio-cultural and economic themes,” “common medical disorders,” “reproductive health,” and “women and HIV/AIDS.” Topics least frequently presented were “women’s oral health,” “legal/ethical issues specific to women’s health/effects of gender discrimination,” and “women’s health and genetics.”

When asked what topics the respondents would like to learn about or would have liked to learn about in their core curricula, “gender-specific approaches to preventive health behaviors/health promotion” and “women’s health and genetics” were cited most frequently. As reflected in **Table 7**, “risk and special groups,” “legal/ethical issues,” and “women and work” also ranked highly, followed closely by “lifespan curriculum” and “developmental and psychosocial issues.” The largest differences between “desire for [a topic]” and limited exposure were observed with respect to “women’s health and genetics,” “legal/ethical issues,” and “risk and special groups.”

Table 7: Students’ Perspectives Regarding Learning Related to Specific Women’s Health Topics.

Women’s Health Topic	Percent reporting learning about topic in MPH core	Percent reporting desire to learn about topic in MPH core
Sociocultural and economic themes	57.0	31.6
Life span curriculum (girls, adolescents, young adult women, women in mid-life, older women)	27.8	44.3
Biological considerations	41.8	30.4
Developmental and psychosocial issues	27.8	44.3
Gender-specific approaches to preventive health behaviors/health promotion	35.4	55.7
Reproductive health (biology, epidemiology, disorders/conditions)	53.2	34.2
Common medical disorders/conditions (including heart disease, breast and cervical cancer, other cancers, autoimmune diseases, diabetes, osteoporosis)	55.7	29.1
Service system organization and policies (including access and insurance)	30.4	38.0
Demographic implications (population changes in age race/ethnicity, SES literacy, rurality/urbanization, stages of the life span, immigration, etc.)	62.0	32.9
Women’s oral health	2.5	32.9
Women’s mental health and psychosocial health/wellness	16.5	40.5
Women and substance use/abuse	15.2	36.7
Women and violence	34.2	34.2
Women and HIV/AIDS	49.4	27.8
Menopause	16.5	34.2
Risk and special groups (e.g., lesbians, women with disabilities, and women who are very elderly)	17.7	49.4
Women’s nutrition fitness (including obesity, eating disorders, physical activities)	30.4	43.0
Legal/ethical issues specific to women’s health/effects of gender discrimination	11.4	45.6
Women and work	16.5	45.6
Women and caregiving	17.7	39.2
Women and sexuality	22.8	39.2
Women’s health and genetics	15.2	55.7

(Note: 79 respondents - bolded percentages are the five highest frequencies.)

Concentrations/Certificates in Women's Health

Survey responses regarding awareness of the various women's health programs at schools of public health showed that most respondents were aware of a concentration (66 percent) or certificate (8.5 percent) program in maternal and child health. Only four responses indicated a concentration or certificate program in women's health specifically. A few students noted in the "Other" category that their schools had concentrations with some relationship to reproductive health.

Overall, the survey indicated a high interest rate among students to include women's health in the MPH degree. And despite the limited sample of student/alumni experiences and perspectives, survey results were generally highly consistent with the focus group findings.

WOMEN'S HEALTH ELECTIVE COURSES IN SCHOOLS OF PUBLIC HEALTH

The time constraints of the conference call methodology for the focus groups (50–60 minutes maximum) did not allow for adequate discussion of elective courses (and/or concentrations) that should be or are offered in schools of public health. Some limited information, however, was generated by the focus groups, the student/alumni survey, and by the systematic review of course catalogues of the 34 accredited schools of public health. With respect to the women's health faculty focus group discussions, a number of participants noted that their first preference for elective courses would be for an overview or survey course on women's health, taught from a lifespan perspective. Several specific content areas were noted, although no one topic predominated. These were biology, and common medical conditions; policy and women's health; women and their identities; and, communication as it relates to women's health. Two additional areas where elective courses were suggested were women's mental health; and social concerns of women (including poverty, domestic violence, societal influences on women's health). On two occasions over the course of the focus group discussions, women's health faculty noted that women's health was particularly important in curricula presented in the domain of international health.

The student and alumni survey also captured some information in this regard (see **Table 7**). Topic areas of interest reported to be infrequently presented included women's oral health; women and genetics; legal/ethical issues; women and work; risk and special groups; women's mental health; women and substance abuse; women and caregiving; menopause; lifespan approach; women and sexuality; and women's nutrition.

Findings from the systematic review of 2003 SPH course catalogues, vetted by each school representative (see Appendix III for information on methods employed) is summarized in **Table 8**, on the next page. A total of 324 courses were identified from catalogue abstraction and follow-up. Not surprisingly, the elective courses were more frequently offered in the largest schools of public health, although the University of Puerto Rico SPH and University of South Carolina SPH also listed a substantial number. Only two schools did not offer courses in the categories identified. Overall, the review indicated substantial depth and breadth of courses related to maternal and child health, perinatal health, and reproductive health. Slightly less than 20 percent (60 of 324) of the total number of courses identified appeared to have a focus on women's health beyond reproductive health, maternal and child health, or nutrition when all other categories were excluded.

Table 8. Number of Women’s Health Elective Courses Offered at Each School by Category, 2003-2004.

School of Public Health (Schools listed in ascending order by school size.)	Women’s Health	MCH/ Perinatal	Reproductive Health/Family Planning	Other	TOTAL
University of Iowa CPH	1	1	1	-	3
University at Albany (SUNY) SPH	1	1	1	1	4
University of Massachusetts SPHHS	1	-	-	-	1
University of North Texas SPH	-	-	-	-	0
University of Puerto Rico SPH	1	4	3	8	16
University of South Carolina Arnold SPH	-	3	7	5	15
MEZACOPH(AZ)	1	2	-	3	6
NY Medical College SPH	2	6	-	3	11
University of Oklahoma CPH	-	-	-	2	2
University of Pittsburgh GSPH	3	2	3	-	8
Ohio State University SPH	1	-	-	-	1
Texas A&M University SRPH	-	-	-	-	0
Saint Louis University SPH	-	1	-	-	1
San Diego State University GSPH	1	-	-	-	1
UMDNJ-SPH	1	1	-	1	3
University of Minnesota SPH	1	2	2	5	10
University of South Florida CPH	1	3	1	1	6
University of Alabama at Birmingham SPH	-	7	2	1	10
University of Washington SPHCM	-	4	1	-	5
Loma Linda University SPH	1	4	2	1	8
University of Illinois SPH	2	5	1	4	12
University of Texas Houston SPH	-	1	-	-	1
Yale University SPH	2	3	1	-	6
University of CA - Berkeley SPH	1	4	1	2	8
University of North Carolina Chapel Hill SPH	2	10	4	2	18
University of CA - Los Angeles SPH	5	4	-	2	11
George Washington University SPHHS	1	3	3	7	14
University of Michigan SPH	5	2	9	3	19
Harvard SPH	9	5	7	11	32
Columbia Mailman SPH	2	2	6	1	11
Boston University SPH	4	9	4	5	22
Johns Hopkins Bloomberg SPH	3	9	6	6	24
Emory University Rollins SPH	4	8	2	1	15
Tulane University SPHTM	4	6	8	2	20
TOTAL	60	112	74	78	324

Included in the “Other” category were 15 courses specific to nutrition, 12 related to adolescent health, and 4 courses titled “reproductive and perinatal epidemiology.” Violence (family, community, or specific to women), immigrant health, and family and community health broadly presented, also were identified with some frequency. Although caution is warranted when examining this enumeration by category (see discussion on “limitations” in Appendix III), it is generally reflective of the scope and mix of women’s health-related courses available at schools of public health.

SUMMARY AND CONCLUSIONS

Addressing the question of the current and desired extent of teaching of women’s health in MPH core curricula, study participants agreed that women’s health should be included in public health education through incorporation of content specific to sex and gender differences in health problems and health behavior across the life span.

Focus group findings reveal broad interest in this area, both among women’s health faculty and faculty instructors of core courses. This study further documented that inclusion of women’s health in the MPH curriculum currently exists to a moderate degree, but is highly variable across schools of public health nationwide. Student/alumni survey results were consistent with these focus group findings. Information gathered on the number, type, and range of course offerings related to women’s health, based on a systematic review of course catalogues, appears to further substantiate focus group and survey findings in this regard.

Beyond the question of interest, students and alumni surveyed indicated a need for continued and perhaps expanded focus on women’s health, as they believe women’s health will be important in their public health professional positions throughout their careers. This need also was reflected in comments related to student demand for women’s health courses made by both women’s health and core course faculty during the focus group discussions. Moreover, student/alumni survey findings revealed student interest in a number of women’s health-specific topical concerns for which course offerings are quite limited.

The primary finding of the project, as informed by the data and the advice and expertise of the women’s health EAG, was that required MPH curricula should incorporate the following educational component, using the definitions of terms in Fig. A:

- Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiological, behavioral, and societal factors that influence health behaviors and health status among culturally and socio-economically diverse populations;
- Understanding of the similarities and differences between men and women concerning interaction and communication with the health care system, and the impact of multiple social roles and life cycle events on shared health care decision making for self and family; and
- Knowledge of the historical and contemporary social and cultural determinants of health and wellness across the life span, particularly with respect to sex and gender roles.

Fig. A. Definitions for Educational Components

- Culture

Culture is an integrated pattern of human behavior, which includes but is not limited to – thought, communication, languages, beliefs, values, practices, customs, courtesies, rituals, manners of interacting, roles, relationships and expected behaviors of a racial, ethnic, religious, social or political group; the ability to transmit the above to succeeding generations; dynamic in nature.³

- Sex

Sex refers to the classification of living things, generally as male or female according to their reproductive organs and functions assigned by chromosomal complement.⁴

- Gender

Gender refers to a person’s self-representation as male or female, or how that person is responded to by social institutions based on the individual’s gender presentation. Gender is rooted in biology and shaped by environment and experience.⁵

- Lifespan Perspective

A lifespan perspective is longitudinal, rather than cross-sectional in nature. This perspective gives recognition to the fact that individuals have different health and psychosocial needs as they encounter transitions across their lives and that the positive and negative effects of health and health behaviors are cumulative.

These statements of principle are intended to move beyond exclusive attention to women’s health for several reasons. First, study participants acknowledged the legitimacy of and sought to address counterarguments to a women-specific focus that pose the question, “Why women’s health and not men’s health?” Secondly and equally important, participants sought to address the general concern in the field of public health about health disparities as reflected in “Healthy People 2010 Objectives for the Nation,” HHS priority initiatives, and recent reports issued by the Institute of Medicine (9). This expanded approach enables ASPH and Federal partners to achieve the multiple objectives of addressing prior neglect of women’s health in both research and graduate education, as well as implementation of IOM-recommended workforce competencies for public health professionals related, in particular, to genetics, cultural competence, communication, and diversity.

RECOMMENDATIONS

To further the incorporation of the key principles related to sex and gender health differences across the life span in MPH core curriculum, the EAG developed specific recommendations. As conceptualized in this report, leadership for implementation, though a collaborative/partnership effort, falls primarily into two domains: that of the Association of Schools of Public Health, and that of the Federal partner agencies—HHS Office on Women’s Health, NIH Office of Research on Women’s Health, the AHRQ Director, Women’s Health and Gender-Based Research, the HRSA Office of Women’s Health, and the CDC Office of Women’s Health. Additional suggestions are offered for consideration by philanthropic organizations and by professional journals.

³ National Center for Cultural Competence—Georgetown University Center for Child and Human Development, 2001.

⁴ Institute of Medicine, 2001.

⁵ Institute of Medicine, 2001.

Association of Schools of Public Health (ASPH)

For its part, ASPH should take the following steps toward implementation:

1. Promote, through a public statement promulgated by the deans of the schools of public health, the incorporation of content specific to sex and gender differences in health problems into the core MPH curriculum.
2. Establish an ad hoc advisory group to guide efforts that promote integration of the aforementioned key principles in the MPH curriculum. The charge of this advisory group would be to:
 - a) develop a set of educational competencies specific to sex and gender health differences that would provide the basis for development of public health teaching materials and courses;
 - b) develop and promulgate recommendations for specific strategies for incorporating concepts related to sex and gender health differences into the MPH core curriculum (for example, identifying the specific concepts and teaching materials that fit best in each public health core discipline), using the competencies noted above as the focus;
 - c) guide development of a set of teaching resources on sex and gender health differences and make them available via the Internet to all SPH faculty and academic administrators. Such resources would include syllabi, readings, data sets, case examples, and teaching and assignment modules that would be keyed to the competencies noted above;
 - d) examine information further and deliberate issues related to developing a set of recommended elective courses on women's health; and to
 - e) explore further the potential for drawing on women's studies programs and on Federal programs, to strengthen the teaching of sex and gender health differences in schools of public health.
3. Continue to include student perspectives in this and all other curricular development and use SPH exit surveys and other appropriate mechanisms to monitor the extent to which recommended changes yield desired outcomes.

Federal HHS Partner Agencies

HHS partner agencies should take the following steps toward implementation:

1. Assemble educational resources for SPH faculty interested in incorporating sex and gender specific content into MPH core courses and/or developing women's health-specific elective courses. Online resources can be posted on the HRSA Web site (www.hrsa.gov) or on the National Women's Health Information Center Web site (www.womenshealth.gov) with linkages to all HHS agencies.
2. Promote further attention and support to public health and research training programs funded by HHS that focus on integrated models, such as the NIH Building Interdisciplinary Careers in Women's Health (BIRCWH) program, the National Centers of Excellence in Women's Health program, a variety of CDC public health training programs, and the HRSA Geriatric Education Centers.
3. Increase the number of junior faculty development awards that focus on sex and gender health differences research and outcomes, and that involve graduate student roles, recognizing the importance that research funding has on graduate education.
4. Continue to support and expand funding opportunities for schools of public health and other health professions training programs in their collaborative efforts to integrate the study of sex and gender differences into graduate education curricula.

Additional Suggestions

The EAG discussed the potential contributions of philanthropic organizations. Specifically noted was the model of the American Legacy Foundation's funding for curricula development and dissertation research specifically related to elimination of tobacco use. EAG members further suggested that consideration be given to soliciting the interest of a professional journal (e.g. American Journal of Public Health, Public Health Reports, Women's Health Issues/Jacobs Institute) in publishing a special theme issue or supplement devoted to enhancing attention to women's health in graduate education programs.

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Appendices

APPENDIX I – Participating ASPH Member Schools

Boston University School of Public Health

Columbia University Mailman School of Public Health

Emory University Rollins School of Public Health

George Washington University School of Public Health and Health Services

Harvard University School of Public Health

Johns Hopkins University Bloomberg School of Public Health

Loma Linda University School of Public Health

Mel and Enid Zuckerman Arizona College of Public Health

New York Medical College School of Public Health

Ohio State University School of Public Health

Saint Louis University School of Public Health

San Diego State University Graduate School of Public Health

Texas A&M University System School of Rural Public Health

Tulane University School of Public Health and Tropical Medicine

University at Albany SUNY School of Public Health

University of Alabama at Birmingham School of Public Health

University of California at Berkeley School of Public Health

University of California at Los Angeles School of Public Health

University of Illinois at Chicago School of Public Health

University of Iowa College of Public Health

University of Massachusetts School of Public Health and Health Sciences

University of Medicine and Dentistry of New Jersey School of Public Health

University of Michigan School of Public Health

University of Minnesota School of Public Health

University of North Carolina at Chapel Hill School of Public Health

University of North Texas Health Science Center School of Public Health

University of Oklahoma College of Public Health

University of Pittsburgh Graduate School of Public Health

University of Puerto Rico School of Public Health

University of South Carolina Norman J. Arnold School of Public Health

University of South Florida College of Public Health

University of Texas School of Public Health

University of Washington School of Public Health and Community Medicine

Yale University School of Public Health

APPENDIX II - Women's Health Interest Group and Expert Advisory Group

Chair, Expert Advisory Group

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Appendix III - Methods

Methods for Focus Groups

Organization and Composition of Focus Groups

The following organizations were drawn on to populate the focus groups.

1. Women’s Health Interest Group faculty, as designated by the Office of the Dean in each SPH; and
2. Faculty instructors of core courses of the MPH curriculum at each SPH, as designated by department chairs in epidemiology, biostatistics, environmental health, behavioral sciences, and health management and administration.

Structuring and Sequencing the Focus Groups

Hypothesizing that some differences in experience might relate to the size of each SPH, participant groupings were stratified by school size. Using 2003 ASPH annual report data, the 34 accredited SPHs were listed in order by size, as identified by the number of MPH graduates in that year. The schools were divided into five primary sampling groups as follows:

SPH Size Group	Number of MPH Graduates in 2003	Number of Schools
A	<52	8
B	53-83	7
C	84-106	7
D	107-184	6
E	185-272	6

Both the women’s health faculty and core course faculty participants were assigned to focus groups using this school size schema.

The objective of gathering information about MPH core curricula and soliciting perspectives of faculty involved in teaching core courses introduced additional variation, as we primarily sought equal distribution of the five core disciplines across the 34 SPHs. Using the same school size listing (Groups A–E), disciplinary representation for the MPH core course faculty focus groups was achieved by random assignment such that, for each SPH, a primary discipline (e.g., epidemiology, environmental health) was identified for participation. Each of the five disciplines was assigned a number between 1 and 5. Within the schools ordered from smallest to largest according to size of graduating class, each school contributed one disciplinary representative.

Figure 1 outlines our approach for random assignment of MPH core disciplines for participation. For example, school #7 was assigned to provide a representative from Environmental Health (#2), since school #6 was assigned faculty representation from Biostatistics (#1). The first school thereafter in

increased size was assigned the next number corresponding to another MPH discipline. Replacements were similarly assigned. Thus, while each group did not include representation of each of the five disciplines, equitable disciplinary representation was achieved across the full spectrum.

Fig. 1. Approach used to assign discipline representation in focus groups.

SPH #	MPH Discipline # Participation Assignment
1	1
2	2
3	3
4	4
5	5
6	1
7	2
8	3
9	4
10	5
11	1
12	2
13	3
14	4
15	5
etc.	etc.

Biostatistics = 1;
 Environmental Health = 2;
 Epidemiology = 3;
 Health Services Management = 4;
 Social and Behavioral Sciences = 5

Development of Discussion Guides

Over a 2-month period, two guides were developed through an iterative process of exchange and refinement among ASPH staff, the consultant, the Health Resources and Services Administration project officer, and ASPH’s Expert Advisory Group for the project. The consultant prepared preliminary draft discussion guides drawing on: (a) summaries of ASPH conference calls with the Federal partners, representatives from other health professional organizations, and with the 34 members of the Women’s Health Interest Group; and (b) examination of the surveys and reports from the previous women’s health curriculum reviews in medicine, nursing, and dental schools. Questions were sequenced to reflect the Expert Advisory Group’s determination that the priority for information collection was to be about the core MPH curriculum. Thus, the questions were sequenced to reflect the EAG areas of greatest interest. **Figure 2** includes the discussion guide questions for each faculty group. The focus group guide was prefaced with a broad statement reflecting the operational definition of “women’s health” being used. This statement read as follows:

Everyone has their own frame of reference for the meaning of “women’s health.” In some circles, the term has been operationalized by a primary focus on the health of women as it relates to their childbearing potential and/or experience (reproductive health or maternal and child health). Most commonly, however, a far more expansive concept of women’s health is embraced by health professions (including public health), encompassing (1) sex/gender differences in social and biological status reflected in health and disease over the entire lifespan and regardless of reproductive status, and (2) a holistic view rather than a disease or “body parts” approach.

Fig. 2. Focus group discussion questions.⁶

Women's Health Faculty

1. First, I would like each of you, to, in turn, identify the top 3 women's health knowledge areas or skill competencies that you believe should be covered in required curricula for all MPH students. Please also then explain your rationale for your first choice.
2. What do you believe is the best way to include women's health content (concepts and principles) in the core required courses within the MPH Curricula?
3. In general, would you say that "women's health"-related content is currently being presented in the core MPH curriculum in your SPH?
4. Whom do you believe should be responsible for assuring incorporation of this women's health content into the MPH core curriculum?
5. Are you responsible for any teaching with respect to women's health? If you do teach, please describe the nature and scope of your teaching in this regard.
6. As your school's women's health expert, are you tapped (called on) to assist other faculty in incorporating women's health into core MPH courses and if so, how so?
7. How could you be used to assist faculty instructors of core MPH curriculum?
8. Now, I'd like to move to the question of freestanding elective courses related to women's health that the SPH should offer. Let's go around again, and will each of you tell us... beyond these areas that you identified as critical to include in the core MPH curricula, what additional 3 knowledge and/or skill areas should be the focus of one or several elective courses?
9. Again for each of you, what material (knowledge, skills) should be included in an academic track or concentration (a "MPH major") related to women's health?
10. At your school of public health how are issues specific to maternal and child health addressed in relation to the women's health curriculum?

Core Course Faculty

1. I'd like to hear from each of you your reaction to the statements of women's health experts that the following set of concepts and principles should be incorporated in core MPH courses.
 - Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiologic, behavioral, and societal factors that influence health outcomes among culturally and socio-economically diverse populations of women;

(focus group questions continued on next page)

⁶ The focus group guides that include probes for discussion items are available on request from ASPH.

- Understanding of women’s interactions with the health care system, including the impact of multiple social roles and life cycle events on women’s health, and incorporating women’s access to care; women’s patterns of health care access and health care seeking; women’s forms of communication and interaction; and women’s health decision making for themselves and others; and
 - Knowledge of the social determinants of the health of women across the lifespan and in the historical and contemporary context of culture, particularly with respect to gender roles and social status.
2. Thinking about this core women’s health content, can you tell us generally how much of this content is integrated into the core MPH curriculum?
 3. Thinking about a set of women’s health-related concepts and principles, what would you think would be easy to include?
 4. Thinking about a set of women’s health-related concepts and principles, what would you think would be difficult to include?
 5. Are there specific teaching approaches that you use to teach these women’s health content areas?
 6. Who or where would you go to for consultation if you had a curriculum-related question about women’s health?
 7. Do you draw upon the women’s health experts in your school or university in developing and/or presenting course material related to women’s health? Why or why not?
 8. What do you see as the demand among students for curriculum specific to women’s health?

Logistical Arrangements

As noted previously, Women’s Health Interest Group faculty were identified by the deans’ offices. In order to form the four core MPH faculty focus groups, ASPH staff worked with department chairs to identify and secure participation. The Johns Hopkins Bloomberg School of Public Health Committee on Human Research reviewed and approved the study proposal.

ASPH staff contacted participants to schedule the focus groups and sent email communications confirming date, time, and dial-in information. Attached to that message was a document with a letter, project overview, disclosure statement, and discussion questions. Background information on the intent of the focus groups and on conceptualization of “women’s health” prefaced the question list. Focus groups with women’s health faculty were held first in order to analyze their perspectives regarding “what should be taught” in the core MPH curriculum. This analysis was then used to form Question 1 for the focus groups with the core MPH faculty, asking them to respond to what the women’s health faculty thought should be taught on women’s health. Arrangements were made by ASPH for digital transcription of the focus group discussions by Conference America, Inc.

Focus Group Participants

Participation was sought from all 34 eligible schools of public health in both sets of focus groups. The women’s health focus group participants ultimately consisted of a panel of 22 women’s health representatives from 22 different SPHs. Most women’s health focus group participants were female (20 of 22). Participation across the spectrum of school size was fairly evenly distributed. Two-thirds of the public SPHs and 60 percent of the SPHs located in private universities were represented among the women’s health focus group participants. Those SPHs where the representative faculty failed to dial in and participate were evenly distributed in the size groupings and type. The predominant departmental/disciplinary affiliation was behavioral sciences (10 of 22). A profile of women’s health focus group participants is provided in **Table A**.

Table A. Profile of Participants in Women’s Health Faculty Focus Groups

Focus Group	Total Participants	Sex		SPH Size (number of SPHs)	School Type (number of SPHs)		Department/Discipline (number of participants)
		M	F		Public	Private	
I	5	1	4	A(5)	4	1	Behavioral Sciences (3) International Health (1) Family/Child Health (1)
II	2	-	2	B(2)	1	1	Behavioral Sciences (2)
III	6	-	6	C(6)	5	1	Behavioral Sciences (3) Health Services (1) MCH (1) Community/Family Health (1)
IV	4	-	4	D(2) E(2)	2	2	Epidemiology (1) Behavioral Sciences (1) MCH (1) Population/Family Health (1)
V	5	1	4	B(3) C(1) E(1)	4	1	Obstetrics/Gynecology (1) Community Health (2) Behavioral Sciences (1) Epidemiology/Biostatistics (1)
Total	22	2	20		16	6	

School Size Key (Number of Graduates): A <52; B 53-83; C 84-106; D 107-184; E 185-272.

Participants in the second set of focus groups consisted of 21 faculty members representing different core departments from 20 different SPHs; these departments included Biostatistics (3 participants), Epidemiology (4 participants), Social and Behavioral Sciences (3 participants), Environmental Health (3 participants), Health Management/Administration/Services (5 participants), Community Health (1 participant), and Epidemiology & Biostatistics (2 participants). See Table B for more details. Again, most participants were female (15 of 21). An even distribution of public-private university SPHs and school sizes was achieved, similar to that for the women’s health focus groups. Nonparticipating SPHs were also found to be evenly distributed across the size category groupings.

Table B. Profile of Participants in Core MPH Course Instructor Faculty Focus Groups

Focus Group	Total Participants	Sex		SPH Size (number of SPHs)	School Type (number of SPHs)		Department/Discipline (number of participants)
		M	F		Public	Private	
I	7	2	5	A(3) B(4)	6	1	Biostatistics (2) Epidemiology (2) Behavioral Sciences (2) Environmental Health (1)
II	5	2	3	C(5)	4	1	Behavioral Sciences (2) Biostatistics (1) Epidemiology (1) Environmental Health (1) Health Mgmt/Admin (1)
III	5	2	3	D(5)	3	2	Epi & Biostatistics (2) Community Health (1) Health Policy/Admin (1) Environmental Health (1)
IV	4	-	4	A(1) B(1) C(1) E(1)	3	1	Biostatistics (1) Epidemiology (1) Health Management/ Admin/Policy (2)
Total	21	6	15		16	5	

School Size Key (Number of Graduates): A <52; B 53-83; C 84-106; D 107-184; E 185-272.

Seven schools of public health did not participate in either set of focus groups, primarily because of scheduling conflicts. Three of these schools were affiliated with private universities and four with public institutions. They were evenly distributed across size categories.

Focus Group Analysis

Using the electronic files of the transcripts, data reduction was initiated using a straightforward, cut-and-paste method to organize the material for each question. This material was further organized by the primary sampling units for faculty focus group participants (women's health = W, core course instructor faculty = C), as well as the sampling subunits (stratified) by school size (I, II, III, IV, V). For example:

Question 1

Women's Health Faculty

Group WI

Group WII

Etc.

Core Course Faculty

Group CI

Group CII

Etc.

The new documents derived from this process were independently reviewed by three individuals (two ASPH staff and the consultant) to identify themes; each reviewer independently highlighted assertions that could be used for coding the text of the discussions. The resulting lists of independently generated themes were then discussed among the three coders and merged, and a consensus-coding scheme was developed. All focus group transcripts were then coded independently, and checks for inter-rater reliability were conducted. Summary documents were created, which, where sufficient discussion material was present, included tables enumerating the comments by theme (e.g., faculty roles, influence of students, “diversity”), and/or by sampling unit. These tables, in conjunction with abstracted representative statements, were then used to compare responses between women’s health faculty and core course faculty. The consultant prepared the report narrative using the transcript information organized by question, themes, and sampling units.

Limitations of the Focus Group Methodology

Although the focus group methodology provides an effective strategy to generate discussion among colleagues, stimulate new ideas, and evolve consensus, this method fell short in several regards. First, focus groups are not the optimum approach for systematic collection of quantitative information, for example, frequency of certain events, such as number of courses in women’s health, amount of specific teaching, precise amount of incorporating concepts, and so forth. For this reason, additional data collection activities were carried out—the student survey and the review of course catalogues—to supplement what could be learned from the focus groups.

Second, funding and logistical considerations required telephone focus groups. In most cases participants in these telephone conversations did not know one another, and of course were unable to read nonverbal cues; this “blindness” to one another was initially a problem for all participants, but especially the focus group facilitator. It took longer for participants to warm up to the discussion, and the overall pace of discussion was slower. As a consequence, few group discussions covered all the questions outlined in the focus group guide. Follow-up data collection therefore may be needed to provide a full picture of the current status of thinking and efforts in regard to curricula specifics.

Methods for Student/Alumni Survey

Originally, student views were going to be collected similarly to the way they were collected for faculty, that is, via focus groups. Once it was realized, however, that ASPH has access to a number of students and recent alumni that participate in various ASPH-sponsored internships and fellowships, it was decided to do a web-based survey, which offered the added benefit of ease of data handling. The survey was designed similarly to that of the core faculty focus group, in that the three statements from the women’s health focus group were used to assess respondents’ reactions. See Fig. 3 for the survey questions.

The survey was conducted via the Internet using [SurveyMonkey.com](https://www.surveymonkey.com), an on-line survey instrument. After an initial email was sent with a link to the survey, a reminder was sent requesting responses within 10 days of the initial email. The survey was sent to 188 ASPH interns and fellows, who were participating in internship and fellowship programs at the following Federal agencies: CDC, HRSA, U.S. Environmental Protection Agency, United States Department of Agriculture, National Highway Traffic Safety Administration, and also within ASPH. The respondents were either current students or recent alumni that had graduated within the past 5 years.

The survey questions were developed by the consultant with input from the Expert Advisory Group. ASPH staff used draft questions to design the survey using the question format options available through SurveyMonkey.com.

Limitations of this survey include the scope of students surveyed, as a consequence of taking advantage of the convenience of highly accessible ASPH trainees. More than 19,000 students were enrolled in accredited SPHs in the fall of 2003, yet this survey was fielded with only 188 students and recent alumni. In addition, 20 percent (8) of all respondents were from a single school of public health. This particular school generally has the largest number of students involved with the ASPH internship and fellowship program. Sufficient background information is not available to determine possible undue influence of this group of respondents.

Another area to consider when reviewing the results of the survey is the length of time a given student has spent at an SPH. A longer time period could result in more exposure to women's health in the curriculum by virtue of taking more classes, attending more lectures, or other learning opportunities.

Lastly, our findings may be skewed by the high motivation of the participating students (i.e., those that applied for and succeeded in obtaining an internship or fellowship), as well as by the perceived social acceptability of the answers. It is possible that reported interest in women's health is inflated.

Fig 3. Student survey and recent alumni survey questions

Disclosure Statement
The purpose of this project is to identify the current scope of how women's health is addressed in MPH programs and to identify women's health curriculum needs at accredited schools of public health (SPH). The intent of this assessment is to document incorporation of women's health topics into public health curriculum. You have been identified for participation by your involvement in an ASPH Internship or Fellowship program. The information you provide will be used to enhance training of public health professionals at accredited SPH. Your participation is completely voluntary; you may refuse to participate in the assessment or may choose not to answer any specific questions. Your responses will not be shared with your academic program or employer and all of your responses will be kept confidential. Results will be reported in aggregate only in a final report. If you wish to talk with someone about this project please contact Holly Grason at ***.***.**** or contact the Johns Hopkins office for Research Subjects ***.***.****.

I agree and would like to continue.
I would like to exit the survey.

1. Please indicate your gender.
Female
Male
Other (please specify): _____

2. Please enter your age: _____

3. Please indicate graduate degrees earned to date.

MPH _____
MSPH _____
MHA _____
MHS _____
MHSA _____
MS _____
MSc _____
MA _____
ScD _____
DrPH _____
PhD _____
N/A _____
Other (Please list) _____

4. Please indicate graduate degrees expected (currently working toward).

MPH _____
MSPH _____
MHA _____
MHS _____
MHSA _____
MS _____
MSc _____
MA _____
ScD _____
DrPH _____
PhD _____
N/A _____
Other (Please list) _____

5. Name of MPH program attended or currently attending (circle).

Emory University Rollins School of Public Health
Yale University School of Public Health
Tulane University School of Public Health and Tropical Medicine
University of Michigan School of Public Health
Saint Louis University School of Public Health
University of Alabama at Birmingham School of Public Health
University of North Carolina at Chapel Hill School of Public Health
University of Washington School of Public Health and Community Medicine
Boston University School of Public Health
Johns Hopkins Bloomberg School of Public Health
San Diego State University Graduate School of Public Health
University of Texas School of Public Health
Mel and Enid Zuckerman Arizona College of Public Health
University of California at Berkeley School of Public Health
University of Pittsburgh Graduate School of Public Health
Columbia University Mailman School of Public Health
George Washington University School of Public Health and Health Services
Harvard School of Public Health
Texas A&M School of Rural Public Health

University of Iowa College of Public Health
 University of Medicine and Dentistry of New Jersey-School of Public Health
 University of Minnesota School of Public Health
 University of North Texas Health Science Center School of Public Health
 University of Puerto Rico Graduate School of Public Health
 University of South Carolina Arnold School of Public Health
 University of South Florida College of Public Health
 Drexel University School of Public Health
 Loma Linda University School of Public Health
 New York Medical College School of Public Health
 Ohio State University School of Public Health
 University at Albany SUNY School of Public Health
 University of Arkansas for Medical Sciences College of Public Health
 University of California at Los Angeles School of Public Health
 University of Illinois at Chicago School of Public Health
 University of Massachusetts School of Public Health and Health Sciences
 University of Oklahoma College of Public Health
 Other (please specify): _____

A panel of public health faculty with expertise in women's health have identified three major concepts which they believe should be incorporated into the core curricula of MPH programs.

Questions 6-8 list these three concepts. Please indicate the extent of your agreement that the concept should be included in the core curricula of MPH programs.

6. Knowledge of the major sex and gender differences in health and disease across the life span particularly in terms of physiologic behavioral and societal factors that influence health outcomes among culturally and socioeconomically diverse populations of women.

- Do not agree
- Somewhat agree
- Substantially agree
- Strongly agree

7. Understanding of women's interactions with the health care system including the impact of multiple social roles and life cycle events on women's health and incorporating women's access to care women's patterns of health care access and health care seeking women's forms of communication and interaction and women's health decision making for themselves and others.

- Do not agree
- Somewhat agree
- Substantially agree
- Strongly agree

8. Knowledge of the social determinants of the health of women across the life span and in the historical and contemporary context of culture, particularly with respect to gender roles and social status.

- Do not agree
- Somewhat agree
- Substantially agree
- Strongly agree

For questions 9–11, using the scale provided, please indicate the extent to which you were exposed in your MPH core curriculum to the areas of women’s health indicated.

9. Knowledge of the major sex and gender differences in health and disease across the life span, particularly in terms of physiological, behavioral, and societal factors that influence health outcomes among culturally and socioeconomically diverse populations of women.

Exposure in your MPH core curriculum?

- Not at all
- Limited
- Moderate
- Substantial
- N/A

10. Understanding of women’s interactions with the health care system, including the impact of multiple social roles and life cycle events on women’s health, and incorporating women’s access to care; women’s patterns of health care access and health care seeking; women’s forms of communication and interaction; and women’s health decision making for themselves and others.

Exposure in your MPH core curriculum?

- Not at all
- Limited
- Moderate
- Substantial
- N/A

11. Knowledge of the social determinants of the health of women across the life span and in the historical and contemporary context of culture, particularly with respect to gender roles and social status. Exposure in your MPH core curriculum?

- Not at all
- Limited
- Moderate
- Substantial
- N/A

12. There are many educational formats that could be used to present information specific to women’s health in the core MPH curriculum. Using the check boxes, please identify the strategies that were used to present content specific to women’s health in the core curriculum of your MPH program.

- Instructor lectures in epidemiology
- Guest lectures in epidemiology
- Instructor lectures in biostatistics
- Guest lectures in biostatistics
- Instructor lectures in environmental health
- Guest lectures in environmental health
- Instructor lectures in health services management
- Guest lectures in health services management
- Instructor lectures in social and behavioral sciences
- Guest lectures in social and behavioral sciences
- Noon seminar series
- Required readings
- Optional readings
- Case studies

- Required course
- Course assignments; homework problems
- Not applicable
- Other (please specify) _____

13. In your MPH program, what women's health-specific programs were offered? Click all that apply.

- Concentration in Women's Health
- Certificate program in Women's Health
- Concentration in Maternal and Child Health (MCH)
- Certificate program in Maternal and Child Health (MCH)
- Others (Please list all) _____

14. Using the check boxes, please indicate the women's health topic areas that you learned about in your MPH program and those that you would like to learn about (or would have liked to learn about).

[Check box included for "Learned about" and "Would like to learn about."]

- Sociocultural and economic themes
- Life span curriculum (girls, adolescents, young adult women, women in mid-life, older women)
- Biological considerations
- Developmental and psychosocial issues
- Gender-specific approaches to preventive health behaviors/health promotion
- Reproductive health (biology epidemiology disorders/conditions)
- Common medical disorders/conditions (including heart disease; breast and cervical cancer; other cancers; autoimmune diseases; diabetes; osteoporosis)
- Service system organization and policies (including access and insurance)
- Demographic implications (e.g., population changes in age, race/ethnicity; SES literacy; rurality/urbanization; stages of the life span; immigration)
- Women's oral health
- Women's mental health and psychosocial health/wellness
- Women and substance use/abuse
- Women and violence
- Women and HIV/AIDS
- Menopause
- Risk and special groups (e.g., lesbians, women w/disabilities, women that are very elderly)
- Women's nutrition fitness (including obesity, eating disorders, physical activities)
- Legal/ethical issues specific to women's health; effects of gender discrimination
- Women and work
- Women and caregiving
- Women and sexuality
- Women's health and genetics

15. To what extent do you anticipate you will need substantial knowledge of women's health in your professional career?

- None
- Minimal degree
- Moderate degree
- Substantial degree

Thank you for completing this survey of Women's Health in Curriculum at Accredited Schools of Public Health. If you have any questions about the project, or would like to be added to the email list for notification when the final report is finished, please email Christine Plepys at cplepys@asph.org.

Methods for Elective Course Review

To compile a list of women's health-related classes for each of the ASPH member schools, course offerings were viewed at SPH Web sites and/or at on-line versions of 2003–04 catalogs. Often the information sought was available in separate documents by semester, generally under the heading of "Academics" or "Academic Programs." Often searches were available only for one department at a time.

Scanned-for courses were ones that related, for example, to women's health, reproductive health, family planning, maternal and child health, perinatal health. In cases where course offerings were not presented as Adobe Acrobat files, page searches were conducted to correct for any omissions in the visual scan. Occasionally, schools (such as JHU) had a course search engine; in such cases, the above terms and search parameters (semester, department) were entered. Independent research and thesis classes for degrees pertaining directly to an MCH or women's health concentration or track were excluded. Course title, number, credit value, and instructor/s were all recorded. Overall, relatively few schools had search engines, so multiple strategies to locate information may have introduced undesired variation in results. In addition, keyword definition and assignment were not consistent across school Web sites. Thus, it could be that course titles do not adequately highlight women's health (see keywords) and so were not identified in the review.

In an attempt to address the limitations of the Web site catalogue abstraction, the table identifying courses was sent to the Women's Health Interest Group members at each school. The group members reviewed the course information in order to check for accuracy, and add or delete listed courses. This process significantly increased the number of reported women's health-related courses. The review process, however, simultaneously introduced some new variation in that multiple individuals were responding to the term "women's health-related course," with some faculty appearing to interpret the term more broadly than others.

APPENDIX IV - Women's Health Elective Courses, 2003-2004

School of Public Health	Women's Health	MCH/Perinatal	Reproductive Health/ Family Planning	Other
Univ of Iowa CPH	The Anthropology of Women's Health	Maternal, Child and Family Health: An Overview	Epidemiology of Reproductive Diseases	_____
Univ of Albany SUNY SPH	Topics in Women's Health	Maternal and Child Health	Reproductive Epidemiology	Introduction to Family and Community Health
Univ of Mass SPHHS	Women's Health	_____	_____	_____
Univ of North Texas SPH	_____	_____	_____	_____
Univ of Puerto Rico SPH	Women: A Biosocial Perspective	<ul style="list-style-type: none"> • Legislation in MCH • Seminar on MCH Services in Developing Countries • Maternal & Child Concepts & Strategies • Normal Obstetrics Management 	<ul style="list-style-type: none"> • Population & Family Planning • Human Sexuality & Well Woman Gynecology • Reproductive Physiology for Nurse-Midwives 	<ul style="list-style-type: none"> • Pharmacology for Nurse-Midwifery • Problems & Complications of Obstetrics • Maternal & Infant Nutrition • Nurse-Midwifery Practice & Management I • Nurse-Midwifery Practice & Management II • Nurse-Midwifery Clinical Management & Practice • Integral & Comprehensive Care • Social Aspects on Aging
Univ of South Carolina Arnold SPH	_____	<ul style="list-style-type: none"> • MCH Education • Maternal and Child Nutrition • Maternal-Child Health Education 	<ul style="list-style-type: none"> • Reproductive Epidemiology • Sexually Transmitted Diseases: Their Epidemiology and Control • AIDS: Epidemiology and Control • AIDS Seminar • Prevention of Teen Pregnancy • HIV/AIDS Education: Principles and Practices • Family Life and Sex Education Programs 	<ul style="list-style-type: none"> • Maternal & Child Nutrition • Exercise and Childhood Obesity • Exercise Physiology of Children and Youth • Obesity and Eating Disorders • Interdisciplinary Perspectives on Child Abuse and Neglect
MEZACOPH (AZ)	Violence Against Women	<ul style="list-style-type: none"> • MCH • Women and Children Health Policy 	_____	<ul style="list-style-type: none"> • Maternal and Child Nutrition • Adolescent Health • Nutrition and Physical Activity in a Biocultural Context
NY Medical College SPH	<ul style="list-style-type: none"> • Women and Health: An International Perspective • Issues in Women's Health: Epidemiology & Prevention 	<ul style="list-style-type: none"> • Clinical Topics in International MCH • Legal & Ethical Issues in MCH • Introduction to MCH • Disease Prevention and Control in MCH • Seminar in MCH • Community Needs Assessment 	_____	<ul style="list-style-type: none"> • Survey of Adolescent Health and Medicine • Nutrition in Health and Disease • Violence: a Public Health Issue

School of Public Health	Women's Health	MCH/Perinatal	Reproductive Health/ Family Planning	Other
Univ of Oklahoma CPH	_____	_____	_____	<ul style="list-style-type: none"> • Pediatric Epidemiology • The Family and Health
Univ of Pittsburgh GSPH	<ul style="list-style-type: none"> • Public Health Approaches to Women's Health • Epidemiology of Women's Health • Women, International Development, and Global Health 	<ul style="list-style-type: none"> • Introduction to Health Services Mother & Child • Seminar in Maternal & Child Health 	<ul style="list-style-type: none"> • Seminar on Family Planning • Introduction to Population Problems • Environmental Causes of Reproductive Failure 	_____
Ohio State Univ SPH	Women's Health Issues	_____	_____	_____
Texas A&M Univ SRPH	_____	_____	_____	_____
St. Louis Univ SPH	_____	MCH Epidemiology	_____	_____
San Diego State Univ GSPH	Seminar in Women's Health	_____	_____	_____
UMDNJ SPH	Contemporary Women's Health Issues & Public Health	Maternal and Child Health	_____	Perinatal Health & Family Planning
Univ of Minnesota SPH	Women's Health	<ul style="list-style-type: none"> • Foundations of MCH Leadership • Family Health: an Ecological Approach 	<ul style="list-style-type: none"> • Race, Class, and Family Formation • Sexuality Education 	<ul style="list-style-type: none"> • Maternal & Infant Nutrition • Reproductive & Perinatal Health • Child Health • Adolescent Health • Global Health
Univ of South Florida CPH	Women's Health Issues in Public Health	<ul style="list-style-type: none"> • MCH I: Issues & Concepts • MCH II: Case Studies in MCH Programs, Policies & Research • International MCH 	Reproductive Health Trends & Issues	Population and Community Health
Univ of Alabama at Birmingham SPH	_____	<ul style="list-style-type: none"> • Advanced Leadership & Practice in MCH • Comparative MCH • Issues in MCH • Programs & Policies in MCH • MCH Systems of Care • Perinatal Epidemiology • Comparative MCH in Developing & Developed Nations 	<ul style="list-style-type: none"> • Reproductive Health in Developing Countries (603) • Reproductive Health in Developing Countries (703) 	Nutrition in MCH
Univ of Washington SPHCM	_____	<ul style="list-style-type: none"> • Epidemiology of MCH Problems • MCH in Developing Countries • Topics in MCH I • Topics in MCH II 	Reproductive Epidemiology	_____
Loma Linda Univ SPH	Women in Development	<ul style="list-style-type: none"> • Epidemiology of Maternal and Child Health • Maternal and Child Health • Seminar in MCH Practice • Seminar in Maternal and Perinatal Health 	<ul style="list-style-type: none"> • Reproductive Health • Issues and Programs in Family Planning 	Maternal and Child Nutrition

School of Public Health	Women's Health	MCH/Perinatal	Reproductive Health/ Family Planning	Other
University of Illinois at Chicago SPH	<ul style="list-style-type: none"> • Women's Sexual Health (every other year) • Women's Health and International Health (every other year) 	<ul style="list-style-type: none"> • Introduction to MCH • Advanced Applied Methods in MCH Epidemiology • Advanced MCH Applied Programs • MCH Policy & Advocacy • MCH Leadership Seminar 	Family Planning: Practices & Policies	<ul style="list-style-type: none"> • Public Health Approaches to Maternal & Child Nutrition • Reproductive & Perinatal Health (every other year) • Readings in Reproductive and Perinatal Health Course (every other year) • Public Health Aspects of Adolescent Health
Univ of Texas SPH	_____	Pregnancy & Perinatal Health	_____	_____
Yale Univ SPH	<ul style="list-style-type: none"> • Gender, Health & Development: Program & Policy Perspectives • Health Disparities by Race & Sex: Epidemiology & Intervention 	<ul style="list-style-type: none"> • MCH in a Global Context • Topics in Perinatal Epidemiology • Health of Women & Children 	Epidemiologic Methods in STD/HIV Research	_____
Univ of CA - Berkeley SPH	Current Issues in Women's Health	<ul style="list-style-type: none"> • MCH Specialty Area Core Course • Needs Assessment of MCH • International MCH • Money, Management and MCH 	Family Planning, Population Change & Health	<ul style="list-style-type: none"> • Reproductive Perinatal Epidemiology • Public Health Aspects of MCH Nutrition
Univ of North Carolina Chapel Hill SPH	<ul style="list-style-type: none"> • Violence Against Women • Epidemiology/Prevention of Women's Health Issues 	<ul style="list-style-type: none"> • Problems in MCH • MCH Policy and Program Development • Maternal & Infant Health • Research Methods in MCH • Perinatal Epidemiology • Issues in International MCH • MCH Program Planning & Evaluation • Theoretical Perspectives on MCH • MCH Program Evaluation • Advanced Topics in Perinatal & Pediatric Epidemiology 	<ul style="list-style-type: none"> • International Family Planning • Reproductive Health Policy • Reproductive Physiology & Conception Control • Reproductive Health in Developing Countries: A Population Perspective 	<ul style="list-style-type: none"> • Nutrition of Children & Mothers • Maternal and Child Health Issues for Immigrant Populations
Univ of CA - Los Angeles SPH	<ul style="list-style-type: none"> • Women's Health & Well-Being • Women's Mental Health • Seminar: Advanced Issues in Women's Health • Women, Health & Aging: Policy Issues • Demography of Women 	<ul style="list-style-type: none"> • MCH in Developing Areas • Recent Developments in MCH in Disadvantaged Countries • Perinatal Health Care: Principles, Programs & Policies • Women's Roles and Family Health 	_____	<ul style="list-style-type: none"> • Family and Sexual Violence • Maternal & Child Nutrition
George Washington Univ SPHHS	Women's Health	<ul style="list-style-type: none"> • MCH: I (Foundations) • MCH: II (Advanced) • MCH Policy Analysis 	<ul style="list-style-type: none"> • Reproductive Health and Disease • International Perspectives in the Reproductive Health of Young People • Overview of International Reproductive Health 	<ul style="list-style-type: none"> • International Family Health • Maternal and Child Nutrition • School Health • Adolescent Health • Elective & Specialty Courses (e.g., workplace, HIV/AIDS) • Child Health & Development • Children with Special Health Care Needs

School of Public Health	Women's Health	MCH/Perinatal	Reproductive Health/ Family Planning	Other
Univ of Michigan SPH	<ul style="list-style-type: none"> • The Epidemiology of Women's Health • Public Health Policy Issues in Women's Health • Gender and Health: Ethnographic Approaches • Intersectionality and Women's Health: Ethnographic Approaches to Race, Class, Gender, and Differences • Women's Health Care 	<ul style="list-style-type: none"> • Foundations of Reproductive, Maternal and Infant Health • Families and Health 	<ul style="list-style-type: none"> • Fundamentals of Reproductive Health • Reproductive Epidemiology • Population Change: Sex, Gender, Family, and Fertility • Women's Health and Reproductive Health • Mechanisms of Reproductive Toxicology • AIDS: A Public Health Challenge • The Challenge of HIV/AIDS: Strengthening Health Systems in Resource-Poor Settings • Women's Health and the Timing of Reproduction • Women and Fertility 	<ul style="list-style-type: none"> • Maternal and Child Nutrition • Theory, Research and Practice in Adolescent Health • Foundations of Child and Adolescent Health
Harvard Univ SPH	<ul style="list-style-type: none"> • Women, Health and Development: Reconciling Science & Policy • Women, Gender and Health • Advanced Topics in Women, Gender & Health • Women, Gender & Health: Critical Issues in Mental Health • Women, Gender & Health: Introductory Perspectives • Practice of Preventing Intimate Partner Violence • Health and Human Rights • Population and Development Policymaking • History, Politics and Public Health: Theories of Disease Distribution and Social Inequalities in Health 	<ul style="list-style-type: none"> • Issues in MCH Programs and Policies • Childbirth Health Policy and Epidemiology • Social Services for Children, Adolescents and Families • Infant Assessment in the Context of Perinatal Exposure • Physical Growth and Development 	<ul style="list-style-type: none"> • Advanced Topics in Epidemiology • Epidemiologic Research in Obstetrics and Gynecology • Epidemiology of Reproductive Morbidity due to Trauma, Stress and Psych Health • Biological and Clinical Foundations of Reproductive Health • Reproductive Health Care in Developing Countries • Knowledge in HIV/AIDS Prevention • Sex, Reproduction and Reproductive Health 	<ul style="list-style-type: none"> • Human Development and Public Health: A Lifecourse Approach • Health, Human Rights, and the International System • American Violence: The Intersection Between Home and Street • Social Policy and Legal Dilemmas: Child Custody and Visitation • Society and its Effects on Child Health • Services for Children with Disabilities • Adolescent Health • Community-Based Child Health Programs in Developing Countries • Mental Health of Children and Adolescents • Nutrition in Child Growth and Development • Adolescent Health
Columbia Mailman SPH	<ul style="list-style-type: none"> • Seminar in Sexuality, Gender, Health and Human Rights • Women & AIDS 	<ul style="list-style-type: none"> • Working with Women & Children in War Zones • Maternal and Child Health in International Primary Health Care 	<ul style="list-style-type: none"> • Public Health Aspects of Reproductive Health • Theories & Perspectives on Sexuality and Health • History of Sexual Health Promotion • Ethics & Human Rights Perspectives on Sexuality & Sexual Health • Current Issues in Sexual Health • Reproductive Health for Refugees and War-Affected Populations 	<ul style="list-style-type: none"> • The Health of Latino Children and Families

School of Public Health	Women's Health	MCH/Perinatal	Reproductive Health/ Family Planning	Other
Boston Univ SPH	<ul style="list-style-type: none"> • Seminar in Women's Health Policy Making • Women, Development and Health • Public Health and Women • Management of Primary Care for Women 	<ul style="list-style-type: none"> • MCH Policymaking • Community-Based Needs Assessment in MCH • Planning, Implementation and Management of MCH Programs • Global MCH • MCH Research and Evaluation • Perinatal Health Services • Comparing Maternal and Infant Health Care Systems • Planning and Managing MCH Programs in Developing Countries • Women, Children and Adolescents: Public Health Approaches* 	<ul style="list-style-type: none"> • Infertility as a Public Health Problem • Reproductive Epidemiology • Population Dynamics and Reproductive Health • Management of Reproductive Health Programs in Developing Countries 	<ul style="list-style-type: none"> • Professional Integration of Nurse Midwifery and Public Health • Sexual Violence: Public Health Perspectives in Intervention and Prevention • Family violence and the Practice of Public Health • Nurse-Midwifery Management: Normal and Complex • Introduction to Nurse-Midwifery Management
Johns Hopkins Bloomberg SPH	<ul style="list-style-type: none"> • Women's Health • Women's Health Policy • International Perspective on Women, Gender, & Health 	<ul style="list-style-type: none"> • MCH Legislation & Programs • Issues in Perinatal Research • Advanced Seminar in Perinatal Research • Clinical Aspects of Maternal & Newborn Health • Maternal Healthcare in Developing Countries • Issues in Maternal Mortality Reduction in Developing Countries • Prevention of Infant Mortality/Promotion of Health of Women, Infants & Children • HIV Infection in Women, Children and Adolescents • Research Seminar in Reproductive, Perinatal & Women's Health 	<ul style="list-style-type: none"> • Family Planning Policies and Programs • Couples and Reproductive Health • Reproductive Health Research in Developing Countries: Issues and Methods • Fundamentals of Reproductive Biology • Clinical Aspects of Reproductive Health • Project Designs in Reproductive Health Program 	<ul style="list-style-type: none"> • Adolescent Pregnancy-Causes, Consequences, Interventions-Growth & Development I • Reproductive and Perinatal Epidemiology • Nutrition and Growth in MCH • Principles of Health and Development Across the Lifespan • Adolescent Health
Emory Univ Rollins SPH	<ul style="list-style-type: none"> • Issues in Women's Health • Women's Health Policy: A Lifestyle Approach • Seminar: Race, Class, and Gender Change • Gender, Health and Population Change 	<ul style="list-style-type: none"> • MCH Demography • Surveillance • Pediatric and Perinatal Epidemiology • MCH Biostatistics • MCH Epidemiology methods • Applied MCH Epidemiology I, II, III (perinatal, women's, and children's health) • Field Methods in MCH Epidemiology • Introduction to MCH Program Data 	<ul style="list-style-type: none"> • Reproductive Health Program Management • Reproductive Epidemiology 	Maternal & Child Nutrition

School of Public Health	Women's Health	MCH/Perinatal	Reproductive Health/ Family Planning	Other
<p>Tulane Univ SPHTM</p> <ul style="list-style-type: none"> • Health Care of Women • Gender, Race, and Ethnicity in Health Education • Introduction to Issues in Obstetrics & Gynecology • Gynecologic Problems in Developing Countries 	<ul style="list-style-type: none"> • Contemporary Issues in MCH • Perinatal Epidemiology • Maternal & Child Issues in HIV Disease • Seminar in Women's and Children's Health • Obstetric Problems in Developing Countries • M&E MCH Programs in Developing Countries 	<ul style="list-style-type: none"> • Contraceptive Technology and Family Planning Services • Epidemiology of Sexually Acquired Infections & Women's Reproductive Health • Design/Implementation of Reproductive Health Programs in Developing Countries • Human Sexual Behavior • Reproductive Epidemiology • Communications Research for Family Planning and Health • Epi of Sexually Transmitted Diseases • Epidemiology of Infectious Agents and Reproductive Health 	<ul style="list-style-type: none"> • Issues in Adolescent Health • Adolescent Health Policies and Programs 	

APPENDIX V – RESOURCE MATERIALS

1. The Association of Teachers of Maternal and Child Health (ATMCH) offers syllabi from MCH courses in the “Teaching Tools” section of its Web site. Five courses on the subject of women’s health are listed. www.atmch.org/TeachingTools/TeachingTools.htm
2. The Department of Health and Human Services’ National Women’s Health Information Center offers information on women’s health, including links to women’s health statistics. www.womenshealth.gov
3. The Health Resources and Services Administration Office of Women’s Health offers the Women’s Health USA Databooks, plus other links to related information. www.hrsa.gov/WomensHealth/
4. The Centers for Disease Control and Prevention Office of Women’s Health offers publications and other materials related to women’s health. www.cdc.gov/od/spotlight/nwhw/pubs.htm
5. The National Institutes of Health Office of Research on Women’s Health offers a multitude of resources for research on women’s health. www4.od.nih.gov/orwh/
6. The Agency for Healthcare Research and Quality funds research on women’s health care. www.ahrq.gov/research/womenix.htm