Transforming the Health Worker Pipeline: Interventions to Eliminate Gender Discrimination in Preservice Education

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List of Acronyms

CCAMPIS Act	Child Care Access Means Parents in School Act
EEO	equal employment opportunity
GHI	Global Health Initiative
HRH	human resources for health
LMIC	low- and middle-income countries
PAEM	*Projet D'Appui a L'Enseignement Moyen* (Project to Support Middle School Teaching)
PEPFAR	President's Emergency Plan for AIDS Relief
PSE	preservice education
UK	United Kingdom
USAID	United States Agency for International Development
US	United States
USD	United States Dollar
USG	United States Government
WHO	World Health Organization

EXECUTIVE SUMMARY

While numerous countries face human resources for health (HRH) challenges, the production and development of health workers to overcome these shortages has been a major focus of many governments' HRH strategies, particularly in low- and middle-income countries (LMIC). Preservice education (PSE) is one pillar of developing competent, motivated health workforces vital to the delivery of accessible, quality health services.

A less widely acknowledged but equally important challenge to be addressed is gender discrimination in PSE and its effect on both students and faculty. Negative stereotypes, sexual harassment, and discrimination based on pregnancy or family responsibilities affect the admission, performance, retention, and graduation of health professional students, particularly female students. These forms of gender discrimination limit students' career opportunities even before they enter the workforce and often continue once they are employed. Similarly, faculty, who are essential to the education of future health workers, experience vertical and horizontal occupational segregation; delays or restrictions in promotion or tenure; and decreased career satisfaction. Governments and PSE institutions must take action against these gender barriers if they are to produce robust workforces able to respond to the health needs of the populations they serve.

The following report describes the results of a systematic and expert review undertaken to identify practices that have the potential to counter these forms of gender discrimination against students and faculty in health PSE institutions. Out of 379 articles reviewed from the peer-reviewed and non-peer-reviewed (gray) literature, 79 articles were excluded due to irrelevant or insufficient information about specific practices. From the remaining articles, 51 interventions were identified that were implemented in educational institutions at primary, secondary, tertiary, and community levels from the health and general education sectors in high- and low-resource settings. An expert panel rated and then developed recommendations on the 51 interventions.

Key findings include recommended "basic bundles" of interventions that, when implemented together, should maximize the potential to counter gender discrimination and inequalities. Multilevel strategies have more potential than do individual practices to target the complex individual, family, organizational, structural, and societal contributors to gender discrimination and violence. The "basic bundles" are as follows:

"Basic Bundle" to Counter Sexual Harassment

- *Sexual harassment policy*, including a single code of conduct for students, faculty, and staff
- *Grievance procedure* that is confidential, outlines consequences for perpetrators, and takes concrete action to end impunity and reduce victims' fear of retribution
- *Education and awareness-raising* for students, faculty, and staff

"Basic Bundles" to Counter Pregnancy and Family Responsibilities Discrimination	
For students	**For faculty**
During pregnancy: • Continuation and re-entry policies that do not require pregnant students to terminate their education • Pregnancy/maternity and parental leave *During postpartum period:* • Lactation breaks and spaces • Parental leave • Child care (daily and emergency) • Child care financial assistance (or at low cost) • Flexible training schedules, such as part-time schedules and reduced workloads	*During pregnancy:* • Pregnancy/maternity and parental leave (paid) • Pregnancy/maternity leave replacement funding to hire temporary replacements for employees on pregnancy/maternity leave to ensure continuity of instruction *During postpartum period:* • Lactation breaks (paid) and spaces • Parental leave • Child care (daily and emergency) • Child care financial assistance (or at low cost) • Flexible working hours • Flexible tenure

These "basic bundles" are intended to provide health PSE and other educational institutions with the means to recruit and retain students, faculty, and staff in support of equitable and sustainable programs. However, a consistent finding from this review was that merely offering interventions does not further equal opportunity and gender equality. Ensuring that the institutional community, especially intended beneficiaries, is aware of and actually uses the interventions is equally important. As many of these interventions challenge traditional beliefs, attitudes, and norms, some members of the institutional community may resist their implementation. To fulfill the potential of these interventions, institutions must create and maintain environments that reward efforts to address gender bias by being supportive of students and faculty with caregiving responsibilities and not condoning impunity for perpetrators of sexual harassment or other forms of discrimination.

Another key conclusion of the reviewed interventions and other equal opportunity initiatives is that providing equal opportunity and access through policies and programs must be complemented by treating the life experiences of both genders as having equal value. Schools and workplaces should be restructured to integrate family and work in order to reflect the value of caregiving for women and men and to ensure gender equality.

Institutions are not the only stakeholders that can take action to prevent and counter gender discrimination and promote gender equality in health PSE and other educational settings. Governments can also get involved by passing legislation that mandates employers to offer maternity and/or parental leave or by making funds available to assist students or faculty with children to use child care and other services that facilitate the integration of their academic/ professional and personal lives.

More broadly, the expert panel found that the practices uniformly needed more documentation and evaluation, both to better understand the feasibility of implementing the interventions in diverse settings and to determine their actual effectiveness in furthering equal opportunity and gender equality. There was only limited information on cost or sustainability, and evaluations to determine the effectiveness or impact of these interventions were nearly nonexistent. Thus, while this report presents interventions that were found to have *potential* to counter gender discrimination in health PSE settings in both LMIC and non-LMIC settings, additional research is required to generate findings on what has actually worked.

This report and its recommendations are intended to inform policy-making and programming decisions by health PSE institutions, HRH program planners, and tertiary educational institutions of all types, as well as by other national- and local-level stakeholders with decision-making responsibilities for educating the health workforce. Capacity*Plus* and USAID hope that as an increasing number of institutions implement, evaluate, and document these interventions, the cumulative effect will advance gender equality in the health workforce and improve the environment for health worker education and, in turn, health services.

INTRODUCTION

With the recent emphasis on improving health systems, governments, donors, and other health actors are increasing their focus on the key role of the health workforce in providing quality health services that meet population needs. A strong health workforce has adequate numbers of well-trained health workers deployed to where they are most needed. Shortages and maldistribution of the health workforce exist in both low- and middle-income countries (LMIC) and non-LMIC settings. In 2006, the World Health Organization (WHO) identified 57 crisis countries whose health workforces fall below the minimum recommended health worker density threshold of 2.3 doctors, nurses, and midwives per 1,000 population (WHO 2006).

While countries face numerous human resources for health (HRH) challenges, the production and development of health workers to overcome this shortage has been a major focus of many governments' HRH strategies. Interventions aimed at strengthening preservice education (PSE) have ranged from curriculum development to financing to institutional management reforms. A less widely acknowledged but equally important challenge to be addressed is gender discrimination in PSE settings and its effect on both students and faculty.

Within HRH as a whole, gender inequality and discrimination have significant consequences for the quality of health services. Female health workers constitute a large proportion of many countries' health workforce, but they experience gender disparities particular to each health professional cadre (Standing 2000; George 2007). Gender bias and discrimination also affect health workers during PSE, limiting their career opportunities even before they enter the workforce.

Gender Discrimination and Inequalities Affecting Students

For PSE students, gender inequalities exist in admission rates, distribution within different career tracks, and graduation rates. Cultural beliefs and attitudes can discourage girls and women from pursuing training and scholarship opportunities (Standing 2000). For example, in Rwanda, drop-out rates are higher for girls than for boys at all educational levels, and eligible female students are admitted into government tertiary institutions at half the rate of eligible male students (Huggins and Randell 2007). Cultural stereotypes operate from childhood to channel girls and boys into gender-appropriate work. A performance needs assessment in Kenya found gender segregation in health professional cadres such as nursing and nutrition, which are perceived to be female occupations (Newman et al. 2011). The data also showed that men were more heavily concentrated in five of eight faculty positions, such as lecturer, senior lecturer, and professor, while women held more tutor and clinical instructor positions.

Gender discrimination is "any distinction, exclusion or restriction made on the basis of socially constructed gender roles and norms that prevents a person from enjoying full human rights" (WHO 2001, 43). In education and employment systems, gender discrimination has been directly or indirectly linked to gender stereotyping, pregnancy, marital status, and family responsibilities, and is manifested in occupational segregation, wage discrimination and sexual harassment (Newman 2010).

Cultural beliefs and norms can also create an environment in which sexual harassment and/or assault go unpunished, severely disrupting student life. Sexual harassment and sexual violence, mainly targeted at female students, have been well-documented in primary and secondary schools and universities in both high- and low-resource settings (Mirsky 2003). Female students in health PSE institutions in Kenya and in tertiary institutions in Nigeria, Ghana, Zimbabwe, and Uganda report harassment by male faculty, who threaten the students with failing grades that can lead to demotions in graduation status and corresponding extra fees, other delays in graduation, or even withdrawal from the program (Newman et al. 2011; Bakari and Leach 2009; Morley and Lussier 2009; Zindi 1994; Makerere University, Gender Mainstreaming Division 2011). Sexual harassment negatively impacts a student's ability to concentrate on or complete coursework. Studies of graduating medical students in the US, Japan, and Sweden have found that sexual harassment and gender-related discrimination are prevalent in medical training programs, that a higher proportion of female students report experiencing sexual harassment than do male students, and that this affects students' selection of medical specialty and residency programs (Best et al. 2010; Stratton et al. 2005; George 2007; Nagata-Kobayashi et al. 2006; Larsson, Hensing, and Allebeck 2003). Students may not pursue a certain track for a variety of reasons, including sexual harassment, and may be channeled into seemingly gender-appropriate occupations, limiting their career options and setting the stage for the occupational segregation and disparities in compensation that persist in the workforce.

Institutional policies and practices also prevent or limit female students from participating in classes, practica, and other curricular offerings by failing to consider students' family responsibilities or potential safety issues. Women are sometimes discouraged from becoming pregnant, with some health facility administrators making comments such as: "It is unacceptable to become pregnant during residency" (Finch 2003, 419). In several countries, pregnant secondary school students must take mandatory time off before returning to school or even face expulsion upon becoming pregnant (Hubbard 2008). Pregnant health professional students may face demotion fees for taking time off and fall behind in their courses and practica (Newman et al. 2011). Trying to integrate full-time studies with family and domestic responsibilities can reduce the time available for health professional students to fully participate in educational opportunities and can play a major role in attrition rates in countries including the US, UK, Kenya, Uganda, and Tanzania (Arhin and Cormier 2008; UK Department of Health 2006; Newman et al. 2011; Griffin 2007). In the higher education system as a whole, an insufficient number of accommodations and sometimes insecure living conditions have further contributed to female students dropping out from their educational programs by limiting their ability to safely access university facilities (Griffin 2007).

Gender Discrimination and Inequalities Affecting Faculty

For faculty, gender inequality and discrimination often take the form of requirements that structurally disadvantage one sex (typically women), such as requirements that training involving travel must be completed in order to obtain promotions (Standing 2000). Discrimination creates occupational segregation within certain cadres, prevents adequate female representation in decision-making positions and professional networks, and limits career advancement opportunities through formal and informal means (Standing 2000; George 2007). In Kenya,

female health faculty were concentrated in lower-level teaching positions, even in cadres that are traditionally considered female occupations such as nursing (Newman et al. 2011). There were more male than female faculty in 20 Kenyan nursing schools. This may seem contradictory, given the female profile of the profession, but is consistent with another research finding that instructors are more likely to be male as one progresses from the primary to tertiary level (International Labour Office 2009). These findings persist in the workforce. A study in the UK found that female nurses who took career breaks for caregiving took 23 years to reach a higher professional grade, while male nurses took 8 years to reach the same grade (Halford, Savage, and Witz 1997).

An academic culture of long working hours and the perception that faculty with family responsibilities are less committed affect decisions about promotions and tenure in both health PSE and other higher education institutions. A study of medical faculty with children in 24 US medical schools found that when compared with men, women had significantly fewer publications, self-reported slower career advancement, and lower career satisfaction (Reed and Buddeberg-Fischer 2001; similar findings in Reichenbach and Brown 2004). In 2009, half of the respondents of a University of California, Berkeley (US) faculty survey cited family/personal reasons as a very or somewhat important factor in accounting for slow or delayed career progression—second only to having a large service load (Stacy et al. 2011). Similarly, a study of academic faculty in the US and Australia found that higher proportions of female faculty in both countries did not request a reduced workload when they needed it for family reasons, because they believed it would negatively impact their careers and how others would view their seriousness as academics (Bardoel et al. 2011). Indeed, some Kenyan health PSE institutions may favor recruiting male faculty because they consider the possibility of female faculty taking maternity leave as disruptive (Newman et al. 2011).

Faculty also face disadvantages as a result of sexual harassment, with Nigerian female academic staff, for example, reporting that their refusal of university officials' sexual advances led to discrimination in promotion and other benefits (Bakari and Leach 2009). These forms of discrimination impact faculty's self-confidence and career satisfaction, which can in turn affect the quality of education being provided at PSE institutions and contribute to faculty attrition rates (George 2007).

Purpose of the Review and Intended Audience

This review focused on practices that have the potential to counter gender discrimination related to sexual harassment, pregnancy, and family responsibilities in PSE settings. This topic aligns with the US Agency for International Development (USAID)'s, the US Global Health Initiative (GHI)'s, and the US President's Emergency Plan for AIDS Relief (PEPFAR)'s focus on health systems strengthening, HRH, research and evaluation, and women, girls, and gender equality. Despite the significance of this topic for health professional students and faculty, and therefore for countries' abilities to address their challenges in implementing educational strategies to address health worker shortages, the evidence base on this topic, as well as on interventions that address this topic, is scarce.

Capacity*Plus* undertook a comprehensive review that aimed to narrow this knowledge-to-practice gap and to provide PSE institutions, program planners, and other stakeholders with effective options to counter gender discrimination in PSE settings. This report describes the results of the review, which compiled, updated, and analyzed information on existing interventions implemented in both PSE and other higher education institutions in high- and low-resource settings. As described in the Methodology section, general education institutions were included because it was recognized that gender discrimination exists in many types of educational settings and is not limited to health PSE institutions.

Capacity*Plus* initially conceived this activity as a review of *promising practices* that the project would then field test, validate, and evaluate, with the goal of defining a set of best practices for HRH programs recommended for scale-up. A p*romising practice* can be defined as a "program, activity, or strategy that has worked within one organization and shows promise during its early stages for becoming a best practice with long term sustainable impact" (Compassion Capital Fund 2010, 4). While a *promising practice* may have demonstrated greater potential for improved outcomes than have existing practices, there is not yet sufficient evidence to call it a *best practice*, which has shown documented positive results when implemented by more than one organization in more than one context.

Despite widening the scope to include both health PSE and general education institutions, there was a lack of evaluative evidence with which to determine the effectiveness of the reviewed interventions. As a result, rather than identifying promising practices, a panel of experts in HRH and in gender equality instead assessed which interventions suggested the greatest potential to counter gender discrimination and inequality, according to the criteria listed in the next section. Capacity*Plus* worked with the panel to translate these findings into key recommendations for interventions and to identify areas for further research. Although the available documentation contained little information on cost or sustainability considerations associated with the interventions, this report presents other valuable lessons learned about their implementation.

This report and the recommendations contained herein are intended to inform policy-making and programming decisions made by PSE institutions, HRH program planners, and tertiary educational institutions of all types, as well as by other national- and local-level stakeholders with decision-making responsibilities for health worker PSE systems. Donors and technical advisors at international and regional levels may also find this report useful to inform their operational, research, and evaluation plans. It is hoped that as educational institutions implement, document, and evaluate these recommendations and interventions, promising practices will emerge that when replicated have the potential to increase access to and improve the environment for health worker PSE and, in turn, health services.

Structure of the Report

The next section provides a brief overview of the methodology used to identify and rate the 51 practices that were included in the final review. The Results section describes key findings for each of the three subtopics (Sexual Harassment, Pregnancy/Family Responsibilities, and General Gender), as well as common findings across all three subtopics. The Results section discusses a

subset of 39 of the 51 practices reviewed, followed by a summary of the major conclusions. The report also contains:

- Appendix A, which provides more detail on the methodology used to compile the information on the interventions, conduct the review process, analyze the findings, and develop recommendations
- Appendix B, which lists the 51 practices ranked by subtopic.

Appendix C, which provides summaries of each of the 51 practices, including more detailed information on the interventions' structure, results, cost (when available), and all references used to compile the review, is available as a separate document.

METHODOLOGY

This section provides a brief overview of the methodology used to complete this review. Please refer to appendix A for a more detailed explanation of the methodology.

Systematic Review

In January 2011, Capacity*Plus* initiated an extensive systematic review to determine what evidence existed on interventions that address gender discrimination related to sexual harassment, pregnancy, and family responsibilities in PSE contexts. The systematic review sought documents from the last 20 years from both peer-reviewed and non-peer-reviewed (gray) literature, and benefitted from outreach to and consultation with stakeholders including USAID, implementing organizations, academic and organizational researchers, and authors of documents from the literature search. Examples from both health PSE and other education institutions (primary, secondary, and tertiary) in high- and low-resource settings were included in the review. While this report focuses on implications for health PSE systems, it was recognized that these forms of gender discrimination—and interventions to counter them—also exist in the overall educational sector. Key search terms are listed in appendix A.

Gender transformative approaches actively strive to examine, question, and change rigid gender norms and imbalance of power as a means of reaching health as well as gender equity objectives (Interagency Gender Working Group 2012).

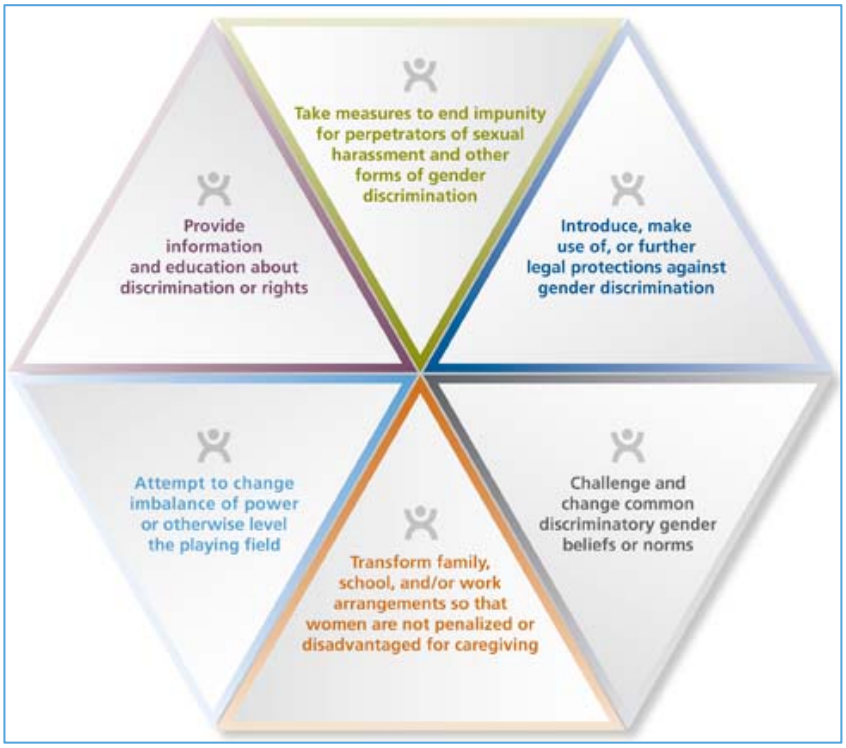
Gender transformative interventions are those considered likely to counter *de facto* (i.e., existing) or *de jure* (i.e., according to law) discrimination and to promote gender equality, based on the documented descriptions of the interventions' implementation and outcomes.

Compilation and Expert Review of Interventions

From the 300 articles included in the final systematic review, 52 distinct interventions were initially identified across the three subtopics (sexual harassment; pregnancy and family responsibilities; and other). A panel of five experts in gender and HRH[1] reviewed summaries of

[1] Despite the small number of reviewers, the quantitative rankings and development of the recommendations described in the Results section of this report drew on the experts' unique combination of expertise in gender and in HRH.

each intervention and rated them using selected characteristics of *gender transformative interventions* developed by Capacity*Plus*. Abbreviated versions of these summaries can be found in appendix C. To maximize efficiency, the summaries did not include every institution that implements a specific intervention, but identified selected institutions in a variety of resource settings for which substantial information was available. For example, many higher educational institutions offer maternity leave to employees; however, it would have been inefficient and repetitive to describe its implementation in all institutions that offer it. Although information on the outcomes of interventions was available for some interventions, most interventions lacked the assessments and evaluations necessary to determine their effectiveness, feasibility, and sustainability. Thus, although the original conception of the activity was to identify promising practices based on the existing evidence, the scope of the review was changed to assess the interventions' potential to counter gender discrimination and inequalities. Using the compiled summaries, reviewers considered whether each intervention had the six characteristics of gender transformative interventions (see inset), which were identified as essential for addressing these topics. Reviewers marked "Yes" or "No" for each characteristic.



Analysis and ranking

One practice was removed from the analysis due to insufficient evidence available to assess its gender transformative potential, leaving a final compilation of 51 interventions. As agreed to by the reviewers, each reviewer was assigned a weight for each topic, based on the reviewer's expertise in gender and HRH and on how many reviewers submitted ratings for each topic. A weighted average of the ratings was derived for each practice. An intervention was considered to have a characteristic when its weighted average was above 0.5 (marked in appendix B as ✓). An intervention was considered not to have a characteristic when its weighted average was below 0.5 (marked in appendix B as a blank box). An intervention was considered to possibly have a characteristic if its weighted average was 0.5 (marked as ½ in appendix B), but the documentation was unclear.

From among the six characteristics of gender transformative interventions, critical criteria for each of the three subtopics were selected to serve as minimum standards for countering gender discrimination in PSE settings. Critical criteria are defined as those characteristics that are so important that practices lacking these critical criteria should not be considered for recommendation, even though other characteristics may have been checked (Newman 1998). Critical criteria were *not* selected for the General Gender practices, as the subtopic was not centered on a specific issue.

For the Sexual Harassment practices, the critical criteria were:

- Take measures to end impunity for perpetrators of sexual harassment and other forms of gender discrimination
- Introduce, make use of, or further the (existing) legal protections for women.

For the Pregnancy/Family Responsibilities practices, the critical criteria were:

- Transform family, school, and/or work arrangements so that women are not economically or socially penalized/disadvantaged for caregiving
- Change or attempt to change an imbalance of power or otherwise level the playing field
- Challenge and change common discriminatory gender beliefs or norms.

Rankings for each of the three subtopics were then derived by prioritizing interventions that were rated as having the critical criteria, such that an intervention that had the top two critical criteria was ranked higher than an intervention that had only the top critical criterion. More details on how the rankings were developed are provided in appendix A, and the list of ranked interventions can be found in appendix B.

Development of recommendations

In January 2012, Capacity*Plus* convened two meetings of the expert panel. During these meetings, the expert panel refined its application of the gender transformative characteristics, developed recommendations on interventions for PSE institutions and decision-makers to consider implementing, and developed cross-cutting recommendations on the topic and the review process. These key findings and recommendations are presented in the next section of this report.

RESULTS

In this section, key findings are outlined for each set of interventions (Sexual Harassment, Pregnancy/Family Responsibilities, and General Gender). Because this section focuses on major lessons learned and recommendations, only a subset of interventions that were the focus of the reviewers' recommendations will be discussed. However, summaries of each intervention are provided in appendix C for those interested in more information on any of the interventions

reviewed for this report. In the following sections, references are included when specific institutions are mentioned, but all references for the full review are included in appendix C.

Each of the following subsections discusses interventions that are targeted to both students and faculty, those targeted only at students, and those targeted only at faculty. Categorizing the interventions by their appropriateness for certain types of resource environments would have been optimal, but the available documentation was insufficient to enable conclusions to be drawn on how differences in the effects of the interventions might be linked to their resource environments. In addition, the interventions are not categorized by level of educational institution in this section, but this information is available in the summaries in appendix C.

Each of the following subsections also explores the operational challenges encountered by the institutions included in this review and the lessons learned that can be applied to future implementation. Possible priorities for additional research are presented, followed by a summary of the reviewers' recommendations for the given set of interventions.

Sexual Harassment

The Sexual Harassment subsection contained 18 interventions, many of them interrelated. For example, some institutions have developed both *sexual harassment policies* (SH Practice No. 3 in appendix C) and instituted *grievance procedures* (SH Practice No. 7 in appendix C), while others have combined these two interventions with *sexual harassment/sexual violence prevention workshops* (SH Practice No. 4 in appendix C). These three interventions have been implemented in numerous institutions. Yet the available evidence indicates that the presence of these interventions alone is insufficient to counter sexual harassment. The underuse of *grievance procedures*, for example, repeatedly emerged as a key challenge to successfully providing victims of sexual harassment with a redress mechanism. Not only were students, faculty, and staff sometimes unaware of the existence of policies or grievance procedures, but victims of sexual harassment also did not use these mechanisms for fear of retribution.

Critical Criteria: Sexual Harassment

1. Take measures to end impunity for perpetrators of sexual harassment and other forms of gender discrimination.
2. Introduce, make use of, or further the (existing) legal protections for women.

This underscores the importance of the two critical criteria for the Sexual Harassment subsection: 1) take measures to end impunity for perpetrators of sexual harassment and other forms of gender discrimination; and 2) introduce, make use of, or further the (existing) legal protections for women. To transform existing structural inequalities related to sexual harassment, institutional and legal systems must be able to both effectively hold perpetrators accountable and protect women's rights.

Only four of the 18 interventions reviewed met the two critical criteria for this subtopic. These interventions are *legislation, radio and theatre messaging, policy*, and *sexual harassment/sexual violence prevention workshops*. In addition, two interventions, *teacher training* and *grievance procedure*, were noted as having the potential to meet both critical criteria, depending on how

the implementing institution structures the interventions. More information on these six interventions is provided below, and a ranked list of all 18 interventions in the Sexual Harassment subsection can be found in appendix B. Although these six interventions may have met the two critical criteria, no single one could counter sexual harassment alone. Sexual harassment is a complex issue that deals with power dynamics, structural inequalities, and entrenched cultural beliefs and attitudes. When combined with under-use and/or nonuse as noted above, it becomes clear that a multidimensional strategy is necessary to effectively counter sexual harassment.

Interventions for students and faculty

The expert panel made the key recommendation that a "basic bundle" of interventions has the greatest potential to counter sexual harassment. This basic bundle would include, at a minimum: a *sexual harassment policy* with clear and enforced consequences, including a single code of conduct applicable to students, faculty, and staff; a *grievance procedure*; and *education* and *awareness-raising* initiatives for students, faculty, and staff.

Policy. (SH Practice No. 3 in appendix C). Sexual harassment policies have been established in both high- and low-resource settings, often in response to institutional studies that identified sexual harassment as a major issue in the institutional community. Common components of a sexual harassment policy include definitions; a description of the grievance procedure, if the institution has implemented one; possible disciplinary and/or criminal action; a description of responsible agencies or disciplinary structures and their duties; and resources available to victims of sexual harassment. More comprehensive policies also discuss the prevalence of sexual harassment at the institution, the rationale behind issuing the policy, guiding principles, and a strategic plan for implementing the policy (e.g., staff training, dissemination). Note that while *zero tolerance policies* (SH Practice No. 10 in appendix C) were identified at some institutions, this type of policy was not ranked as highly because a lack of documentation made it difficult to assess its gender-transformative potential.

Grievance procedure. (SH Practice No. 7 in appendix C). The grievance procedures reviewed for this activity outlined both informal and formal procedures. Informally, those wishing to report cases of sexual harassment may consult with staff, administration representatives specifically designated as sexual harassment points of contact, or counselors. Some institutions, such as the University of Cape Town (South Africa) and the University of Toronto (Canada), also offer a mediation process (University of Cape Town 2008; University of Toronto 2012) (see discussion of *conflict resolution*/mediation below). By contrast, formal complaints are investigated and heard by a committee generally consisting of administrators or counselors, and for committees dealing with student incidents, student representatives. If the committee decides that disciplinary action is necessary, common actions include fines, suspension, and expulsion/dismissal. The University of Western Cape (South Africa) also publishes the name of the accused in the university newsletter in an effort to eliminate the acceptability of sexual harassment (Hames, Beja, and Kogsimmele 2005).

Education and awareness-raising. As noted above, well-designed policies and procedures and empowerment of the responsible agencies and structures are essential components of the basic bundle. However, their implementation hinges on a well-trained, well-informed institutional community. *Sexual harassment and sexual violence prevention workshops* (SH Practice No. 4 in appendix C) are important for providing information on the types of sexual harassment and on the resources and programs available for victims, particularly if the workshops are mandatory for all students, faculty, and staff. For example, all faculty and staff at the Stanford University School of Medicine (US) are required to attend education sessions (Stanford University Sexual Harassment Policy Office 2012). The available evidence demonstrates that *teacher training* (SH Practice No. 6 in appendix C) on the content and implementation of their institutional policies and procedures should also be part of the basic bundle. Whether as committee members, designated points of contact, or simply resources for students or colleagues to approach, instructors are in critical positions for maintaining an environment that does not condone impunity and for promoting the successful implementation of sexual harassment policies and grievance procedures. Finally, an *awareness-raising campaign* (SH Practice No. 9 in appendix C) that disseminates information about available resources and how to access them can increase knowledge of the issue and alleviate confusion about what to do when incidents occur. Dissemination can take many forms, including websites, pamphlets, posters, *radio and theatre messaging* (SH Practice No. 2 in appendix C) seminars, and events.

Together, this basic bundle of sexual harassment policies, grievance procedures, and education and awareness-raising interventions has the potential to end impunity for perpetrators of sexual harassment and to strengthen legal protections for women. Yet the basic bundle is just that—a starting point from which institutions can build more comprehensive, robust programs. Once the basic bundle has been implemented, institutions may also consider offering supplementary services such as a *hotline* (SH Practice No. 8 in appendix C) and *counseling* (SH Practice No. 14 in appendix C), both of which can refer victims to sources of legal protection and provide valuable support to victims.

As is the case with other forms of sexual violence, eliminating sexual harassment requires a multilevel approach that targets the roots of discrimination. Thus, while institutions cannot enact sexual harassment *legislation* (SH Practice No. 1 in appendix C)—one of the four interventions that met both critical criteria for the Sexual Harassment subsection—it is a key intervention that can provide a foundation to change norms of social interaction, increase accountability, and end impunity and should be incorporated into broader national strategies. On the other hand, litigation is a high-risk, high-cost means of redress and reform that can lead to intensified harassment of plaintiffs and damaged school and work relationships. Without educating stakeholders, legal decisions cannot change norms, provide accountability, or end impunity (Abrams 1989). As an alternative to litigation, a code of conduct can be included in a sexual harassment policy to operationalize the policy, in conjunction with comprehensive administration, faculty, staff, and student education and compliance. In addition, an *institutional network* (SH Practice No. 12 in appendix C) among Southern African universities illustrated the potential for increased action when members leverage resources and share knowledge.

Importantly, the expert panel noted that *conflict resolution policies* and *workshops* (SH Practices No. 15 [tied] in appendix C) treat sexual harassment against women as an interpersonal conflict, thereby ignoring its sociocultural determinants and the related gender and power dynamics involved in its perpetuation. Some policies are structured such that only when conflict resolution does not produce a mutually agreed-upon solution is the case heard by a higher-level committee. Thus, since it does not address the roots of discrimination and unequal treatment of women, conflict resolution fails to address the larger structural, cultural, and institutional contributors to sexual harassment or to end impunity for perpetrators. As such, the expert panel recommended that while a grievance procedure may incorporate a step in which the parties communicate with one another, with or without mediators present, institutions should *not* include conflict resolution as a component of sexual harassment policies and programs.

Operational challenges

Although many health PSE and other higher education institutions included in this review have implemented interventions to counter sexual harassment, the documentation indicates they faced numerous challenges. For example, while sexual harassment policies may outline strong principles and institutional responsibilities, the practical implementation of such policies can differ widely from their intentions. The University of Stellenbosch's (South Africa) sexual harassment policy mandates a sexual harassment advisory and disciplinary committee that consists of faculty and staff. Yet a qualitative assessment found that many managers were unaware of the policy's existence, and the already full workload of committee members made trainings on the policy difficult to schedule (Gouws, Kritzinger, and Wenhold 2005). In addition, although most policies explicitly prohibit retaliation against victims who report incidents of sexual harassment, flawed designs of grievance procedures (see below) and prevailing environments of intimidation can render such a policy ineffective.

More than any other intervention in the Sexual Harassment subsection, the existing documentation indicates that grievance procedures faced major implementation challenges that greatly reduced their ability to counter sexual harassment and may even have had negative effects. A general lack of awareness of the grievance procedure (and of sexual harassment policies) and inadequate training of both committee members and institutional communities as a whole can contribute to anemic use of the grievance procedure. Assessments of the University of Malawi's Chancellor College (Kayuni 2009) and the University of Botswana (Tidimane and Mosarwe 2005) noted that when cases are reported, significant errors in handling investigations, maintaining confidentiality, coordinating with the responsible agencies, and even following the prescribed procedures have caused many students to lose confidence in the procedures. This compounds the fear of retribution and lack of accountability that discourages many victims of sexual harassment from using the grievance procedures, as has been reported at institutions including the University of Botswana, the University of Malawi's Chancellor College, the University of Stellenbosch (South Africa), and the University of Western Cape (South Africa) (Tidimane and Mosarwe 2005; Kayuni 2009; Gouw, Kritzinger, and Wenhold 2005; Hames, Beja, and Kogsimmele 2005). A grievance procedure should therefore constitute one of the components of the basic bundle of interventions in this area as long as it is designed with these issues in mind and implemented with strong leadership and timely follow-up. The expert panel

recommended that grievance procedures keep cases confidential, clearly outline consequences for perpetrators of sexual harassment, and take concrete action to both decrease and eliminate fear of retribution.

These operational challenges and lessons learned highlight the need for sexual harassment policies, grievance procedures, and the other interventions included in the recommended basic bundle to be implemented in conjunction with one another. Although there is not enough evidence that these interventions had an effect on the quality of students' or faculty members' educational or professional experiences, the documentation does indicate that this is more a result of flawed and disjointed implementation than of the inherent capacity of the interventions to counter sexual harassment.

Areas for research

In addition to an overall need for more documentation and evaluation of interventions in this subsection, reviewers made recommendations for research regarding specific aspects of grievance procedures. Several of the institutions included in this review have separate grievance procedures for students and for faculty and staff. As there are no assessments of the effectiveness of separate procedures compared to the effectiveness of a single procedure, the expert panel recommended that this question be studied further. In addition, institutions that had procedures specifically for students frequently placed student representatives on the respective advisory/disciplinary committee. The expert panel recommended increased documentation of who is represented on such committees. Particularly in cases where the harassment occurred between a faculty member and a student, the presence of student representatives may mitigate the unbalanced power dynamic between faculty and students. The gender balance of the committees should also be examined. It is possible that men and women perceive sexual harassment differently. Since women are far more often the victims of sexual assault, they are more concerned with any form of aberrant or aggressive sexual behavior (Gregory 2003). This has implications for the recommended gender balance and training of members of a grievance committee.

Conclusions

Certainly, sexual harassment affects individual victims. Yet institutions cannot treat sexual harassment as a phenomenon that can be resolved between individual parties, because sexual harassment is a societal, organizational, and structural problem that affects individual and institutional performance. Institutions that strive to offer a high-quality education and produce competent health workers—or workers of any type—must commit themselves to facing the complex contributors to sexual harassment, with strong leadership and commitment to promoting women's rights and ending gender discrimination.

Summary of Recommendations: Sexual Harassment

Interventions
To increase the PSE system's potential to counter gender discrimination and inequality:

- Implement a "basic bundle" of interventions, consisting of:
    - *Sexual harassment policy*, including a single code of conduct for students, faculty, and staff
    - *Grievance procedure* that is confidential, outlines consequences for perpetrators, and takes concrete action to end impunity and reduce victims' fear of retribution
    - *Education and awareness-raising* for students, faculty, and staff.
- Eliminate use of conflict resolution both as a standalone strategy to handle sexual harassment incidents and as a component of sexual harassment policies and/or programs.

Areas for research

- Evaluate and document the effectiveness of having a single grievance procedure as compared to the effectiveness of having separate grievance procedures for students and for faculty and staff.
- Evaluate and document the impact of having student and gender-balanced representation on sexual harassment reporting committees.

Pregnancy and Family Responsibilities Discrimination

In the educational context, gender equality means not only equal opportunity, but also that the life experiences of both genders are treated as equal norms (Bender 1989) and that health educational settings are structured to integrate family and work, to reflect the value of caregiving for women and men (Williams 1989). Hence, interventions to counter discrimination based on pregnancy and family caregiving status must transform family, school, and/or work arrangements so that women of childbearing age and men with family responsibilities are not economically or socially penalized or disadvantaged for caregiving. This applies to faculty, staff, and students. To achieve this goal, institutions must change the traditional gender beliefs that women's primary roles are as caregivers; that caregiving is not of equal value to professional work; and that taking time off for reproductive or caregiving reasons reflects a lack of commitment or represents academic or professional incompetence. Ridgeway and Correll (2000) note that useful types of interventions to achieve gender equality include workplace accommodations of family duties and caregiving; equal treatment of women and men; and equitable resource distribution to women and men. Such interventions must be available and their use actively promoted, allowing women with

Critical Criteria: Pregnancy/Family Responsibilities

1. Transform family, school, and/or work arrangements so that women are not economically or socially penalized/disadvantaged for caregiving.
2. Change or attempt to change an imbalance of power or otherwise level the playing field.
3. Challenge and change common discriminatory gender beliefs or norms.

families to "participate more fully in the workforce" and enabling men to take on caregiving responsibilities—a major change that would "help reduce the degree of difference culturally presumed between men and women in this fundamentally gendered activity [caregiving]" (Ridgeway and Correll 2000, 118).

Of the 27 interventions reviewed in the Pregnancy/Family Responsibilities subsection, 24 were rated as meeting the top critical criterion: transform family, school, and/or work arrangements so that women are not economically or socially penalized/disadvantaged for caregiving. (A ranked list of all 27 interventions can be found in appendix B.) In addition, 23 interventions met at least the second critical criterion—change or attempt to change an imbalance of power or otherwise level the playing field—and 16 interventions met all three critical criteria.

Regardless of how many other gender transformative characteristics these interventions may have been rated as having, the variety of interventions available with the potential to counter school-based or work-based discrimination against women is notable. Some interventions, such as *maternity leave*, will be familiar to readers, since many countries have legislation requiring certain categories of employers to offer some form of maternity leave. Other interventions such as *flexible working hours* are well-known in high-resource settings, but have not yet been widely implemented in low-resource settings. Still other interventions are fairly unique and have been implemented in only a handful of institutions, including *remote learning rooms* and *discounting caregiving résumé gaps*.

The expert panel developed a recommended basic bundle of interventions targeted at students and a recommended basic bundle of interventions targeted at faculty. Because there is some overlap between the two basic bundles, the discussion below of these and other key interventions is structured as follows: interventions targeted at both students and faculty; interventions targeted at students only; and interventions targeted at faculty only. The discussion is followed by a list of the interventions included in the two basic bundles.

Interventions for students and faculty

Although students with families and faculty with families face different challenges, certain interventions can be implemented that assist both groups to integrate their family responsibilities with their educational and professional commitments. Allowing students, faculty, and staff the option to take *pregnancy/maternity leave* (P/F Practice No. 2 [tied] in appendix C) or *parental leave* (P/F Practice No. 2 [tied] in appendix C) signals the legitimacy of being both a parent and a student/employee. Depending on the institution and the laws of its respective nation, maternity leave for employees (e.g., faculty) is often paid for a specified number of weeks. Women wishing to take additional time beyond the provided leave receive a lower level of salary and/or benefits such as health insurance. Maternity leave for students is less well-documented, but is offered in institutions like Dalhousie University (Canada), where graduate students can take pregnancy or parental leave without owing additional fees (although they generally do not receive scholarship stipends during their leave) (Dalhousie University Faculty of Graduate Studies 2012). The expert panel noted that this practice should be expanded to all students and not reserved for graduate students. Parental leave (including paternity leave) is

similarly structured, with salary and benefits covered for a predetermined length of time. Parental leave is offered to mothers *and* fathers, indicating an expectation that both sexes are responsible for caregiving and therefore challenging traditional gender norms. While offering parental leave to both sexes does not guarantee that both sexes will use the leave, this type of intervention has the most potential for transforming the traditional gendered division of labor.

Offering pregnancy/maternity and parental leave enables students and faculty to continue their education and careers, respectively, without being automatically demoted or otherwise penalized. Indeed, these interventions meet all three critical criteria for the Pregnancy/Family Responsibilities subsection. However, the impact of these policy interventions varies greatly with respect to their provisions—whether the leave is paid or unpaid; whether institutions implement other interventions that support individuals to take leave without making individuals feel that they are disrupting the work environment; and whether gaps in schooling or employment play a factor in future decisions regarding scholarships, graduation, employment, or promotion. One supporting intervention for faculty is *pregnancy/maternity leave replacement funding* (P/F Practice No. 2 [tied] in appendix C), which also meets all three critical criteria for this subtopic. Replacement funding has been implemented at the University of Alberta (Canada) and the University of California (US) to allocate resources toward hiring temporary instructors when faculty members take pregnancy or maternity leave (University of Alberta 1998; University of Alberta 2006; The UC Faculty Family Friendly Edge 2012). Awareness of this intervention is key to faculty actually using it, as surveys at the University of California indicated that faculty had declined to take reduced duties because they were unaware of the replacement funding policy and feared negative effects on their careers (Mason et al. 2005). In addition, institutions may be reluctant to allocate replacement funding due to limited resources. Yet to maintain performance, institutions must have a plan for employees' pregnancies. Establishing such a replacement fund would allow employees to take leave without feeling pressured to return before they are ready to do so and might reduce the burden on other employees required to take on higher workloads. Thus, the expert panel recommended that to further gender transformative potential, institutions should implement pregnancy/maternity leave and parental leave at a minimum, and if at all possible, in conjunction with replacement funding.

Pregnancy/maternity leave policies for students can differ widely, from allowing pregnant students to continue with their studies (*continuation policies*, P/F Practice No. 9 [tied] in appendix C), to allowing pregnant students to pause their studies for a specified period before returning to school (*reentry policies*, see discussion in Practice No. 20), and to requiring pregnant students to cease their education entirely (*expulsion policies*). Expulsion policies embody pregnancy discrimination. Continuation and reentry policies are being developed in an increasing number of countries, though generally for middle and secondary school students. In sub-Saharan Africa, Botswana, Namibia, Malawi, Swaziland, and Zambia have reentry policies, while Cameroon and Madagascar have continuation policies (Hubbard 2008). Several countries in Central and South America have also passed laws supporting girls' rights to receive education during pregnancy (Hubbard 2008). As noted above, some higher education institutions allow students to take pregnancy or maternity leave without levying fees; however, this review did not find evidence of legislation in any country that deals with students in higher education.

Other interventions that permit students and faculty to better integrate their work and personal lives include *lactation breaks* (P/F Practice No. 17 [tied] in appendix C)*, lactation spaces* (P/F Practice No. 17 [tied] in appendix C)*,* and several interventions related to the provision of *child care*. As with pregnancy/maternity leave and parental leave, some governments require certain categories of employers to allow lactating employees to take breaks to breastfeed or pump milk. For example, the US does not require that employees be paid for the time taken during these breaks, while Cambodia does. In either case, this intervention introduces legal protection for new mothers in the workplace. This is especially significant in medical workplaces, where clinical employees may not have scheduled breaks (Walsh et al. 2005). Designating lactation spaces further challenges gender beliefs by legitimizing caregiving in a concrete, visible way and helps decrease disadvantages experienced by female employees by allocating resources toward caregiving. For example, Harvard University (US) and the University of Washington (US) have a network of lactation rooms across their campuses and schools—including the medical schools—that contain pumps and refrigerators for employees' convenience (Child Care @ Harvard 2012; Women's Center, University of Washington 2012). Given the value and utility of providing spaces for mothers to take lactation breaks, the expert panel recommended the implementation of both of these interventions together.

Child care (P/F Practice No. 9 [tied] in appendix C) is a frequently offered intervention in developed country institutions and has been implemented in some developing country institutions as well. Of the institutions included in this review, universities in the US and Tanzania offered child care facilities for faculty, staff, and students, while universities in South Africa offered child care only for faculty and staff. No formal evaluations were available for the African universities. However, program documents for both the American and African universities indicated that although child care was helpful for faculty and staff (and students) with children, the cost to use the services could be prohibitive, particularly for junior-level faculty. In addition, several universities in the US offer *emergency child care* (P/F Practice No. 9 [tied] in appendix C) when a child falls sick or regular child care arrangements are disrupted. The University of California (US) found that parents who used this service were satisfied and that 550 days of work were saved over two years, prompting the university to expand the program (internal presentation by Karie Frasch and Angelica Stacy, Back-up care at U.C. Berkeley: Results of a two-year pilot program with Bright Horizons); Michigan State University (US) even provides some subsidies for students, faculty, and staff to use the service (Michigan State University Family Resource Center 2012).

Indeed, cost was mentioned numerous times in program documents as a key challenge for users. *Child care legislation* (P/F Practice No. 2 [tied] in appendix C) has been enacted in countries including Cambodia, which requires the provision of child care for certain categories of employers, and the US, which authorized funds to assist tertiary institutions with child care programs. Under the Child Care Access Means Parents in School (CCAMPIS) Act, grantee institutions receive funds to establish on-campus child care programs, subsidize students' costs, or conduct programs for parents or staff development. As of 2007, 63% of parents at two-year institutions and 69% of parents at four-year institutions who received CCAMPIS-funded child care services stayed enrolled for at least one academic year at the same institution (US

Department of Education 2007), though no data were available on whether this represented an increase or decrease from the pre-CCAMPIS period. Several universities in the US offer *child care financial assistance* (P/F Practice No. 9 [tied] in appendix C) to students through CCAMPIS funds, state and local government funds, or the universities' own funds. Eligibility to receive these funds generally depends on financial need and educational status (e.g., full-time, part-time). Harvard University (US) offers financial assistance to faculty and staff, but not to students.

These four interventions (*child care*, *emergency child care*, *child care financial assistance*, and *child care legislation*) meet all three critical criteria for this subtopic, aiding students and faculty to better integrate their work and personal lives. In a survey of campus child care centers, respondents believed that the services have enabled students to attend school and stay in school longer than they would have been able to otherwise:

> There was a better integration of the parent into college life by having their child there with them, cared for and safe, providing peace of mind and the ability to focus and concentrate knowing that their children were in a safe environment near to them. (Respondent) (Miller 2011, 31)

With some evidence to suggest that these four child care-related interventions positively affect the educational and professional experiences of students and faculty, the expert panel recommended offering child care, optimally in conjunction with child care financial assistance. Indeed, it has been noted that continuation policies cannot succeed without financial support for caregiving, as young mothers may not be able to afford child care (Sichone 2011). Further, the expert panel highlighted the importance of offering this set of interventions to students in addition to faculty and staff. Child care not only transforms educational arrangements for students with children, but also challenges the norms that students with children cannot stay in school.

Interventions for students

Flexible class scheduling (P/F Practice No. 23 in appendix C) has been documented in universities in Africa and the UK and community learning centers in Asia and the Middle East. The intervention can be structured in diverse ways, including part-time degrees, distance learning, and evening and weekend classes. The few surveys that assessed this intervention were conducted primarily in community settings in Iran and Vietnam and indicated that community attitudes toward women's education had changed (Pant 2003). However, this intervention could also be seen as accommodating the traditional gender division of labor, rather than changing the expectation that a woman's primary role is as a caregiver. A similar intervention that was rated as transforming school/work arrangements and leveling the playing field was *flexible training* (P/F Practice No. 19 in appendix C), which has been offered in institutions in the US and Canada and for UK medical trainees completing workplace training. Flexible training has been structured as part-time schedules and reduced workloads. In the UK, workplaces that offer a flexible training option do so through slot sharing, in which two trainees work part-time to cover one full-time position; permanently flexible posts, if funding is available; and flexible, training-friendly pay structures (National Health Service Employers 2005). Although some full-time residents surveyed at the University of California (US) resented the increased workload

associated with flexible training for other students, most residents supported the option (Kamei, Chen, and Loeser 2004).

Two interventions that meet all three critical criteria for the Pregnancy/Family Responsibilities subsection, as well as several additional gender transformative characteristics, have not yet been widely implemented. The University of Washington School of Law (US) offers a *remote learning room* (P/F Practice No. 2 [tied] in appendix C) on campus so that student-parents can listen to or watch selected classes while nursing or engaging in other caregiving activities. This is a transformative practice that allocates resources to reducing barriers for student-parents to participate in classes and continue their studies. Student-parents can also find support through *student clubs* (P/F Practice No. 1 in appendix C), which have been implemented in Zambia to help girls make informed choices and provide them with skills-building training. Program reports indicate that the student clubs increased girls' confidence and assertiveness (Forum for African Women Educationalists 2004). This forum for empowering and reshaping attitudes gives this intervention great potential for challenging gender norms and reducing gender inequalities. While the student clubs in Zambia were targeted at adolescents, it would certainly be possible to establish similar structures in health PSE and other tertiary institutions. *Student-parent support groups* (P/F Practice No. 20 [tied] in appendix C) have been implemented in universities in the US and Kenya, but have not been studied or evaluated. The scope of these groups' activities also varies by institution, from organizing social activities to liaising with the administration in order to advocate for resources to providing opportunities for information-sharing and networking.

Interventions for faculty

Flexible work mechanisms have a more extensive track record than do flexible education mechanisms. Supplementing pregnancy/maternity leave and parental leave is *reduced duties leave* (P/F Practice No. 20 [tied] in appendix C), in which faculty can take on a reduced workload over a given period to take care of a child. As described for pregnancy/maternity leave, the University of California (US) sets aside funding to hire a temporary replacement during the reduced duties leave. Some institutions in the US and Canada also offer faculty *flexible working hours* (P/F Practice No. 9 [tied] in appendix C). Faculty may request modified working hours in the form of reduced time (e.g., part-time), telecommuting, a compressed work week, or swapping or sharing tasks with another employee.

Innovative interventions allowing faculty to continue pursuing a tenured position while taking care of family responsibilities have been implemented at a handful of universities in the US. Of those included in this review, faculty at the Universities of California, Minnesota, and Michigan—including their respective medical schools—can request to be placed on a part-time tenure track or to delay tenure review to care for a child. Surveys of faculty at the University of California have found that most respondents believed this *flexible tenure* option (P/F Practice No. 9 [tied] in appendix C) to have a positive effect on their career (Stacy et al. 2011). In fact, the proportion of assistant professors with children has increased since the introduction of these and several other family-friendly interventions, which has equalized the ability of female faculty to balance professional and personal responsibilities: "Family-responsive policies and a seemingly

supportive culture make [waiting until tenure is granted to begin a family] unnecessary for most Assistant Professors" (Stacy et al. 2011, 69).

The University of California also *discounts caregiving résumé gaps* (P/F Practice No. 8 in appendix C) when recruiting new hires, an intervention that the expert panel noted reduces the discrimination faced by women (and men) who have nontraditional career paths in the hiring process (e-mail correspondence with Karie Frasch, director of equity and welfare, University of California, Berkeley, May 31, 2011; University of California, Berkeley 2011). By challenging the discriminatory norm that women with caregiving responsibilities must be continually employed to keep current or be qualified for a job, this intervention makes progress in achieving gender equality by treating women's life experiences as a norm.

National-level interventions

This review included several higher-level interventions that have the potential to create a supportive environment for the institutional-level interventions discussed above. Strengthening legal protections can be achieved through legislation (such as child care legislation, as described above) or through *litigation* (P/F Practice No. 25 in appendix C). This review looked at two examples from the US in which teachers sued their employers for discrimination when being considered for tenure and for parental leave. The teachers in both cases won under laws that prohibit discrimination based on sex (or race, religion, and other characteristics) in employment. Due to the time and expense to victims of discrimination, policy-makers and PSE decision-makers cannot rely on litigation to achieve their gender transformative goals. Nevertheless, it is an option that not only provides students and faculty with legal protection, but also highlights the need for supportive legal frameworks.

*Student-parent policy advocacy (*P/F Practice No. 22 in appendix C) is another avenue for increasing awareness around the challenges that student-parents face and promotes the adoption of interventions such as those described above. The Institute for Women's Policy Research launched an initiative in 2010 to advocate for resources for student-parents in the US (Institute for Women's Policy Research 2012). Such advocacy has the potential to be implemented in other countries as well. Although policy advocacy is not by itself an intervention that levels the playing field, it is an important step toward doing so.

Operational challenges

As with the Sexual Harassment subsection of interventions, the implementation of Pregnancy/ Family Responsibilities interventions has faced operational challenges. One of the major issues noted repeatedly was the adverse consequences—or fear thereof—associated with some of the interventions. For example, some colleagues resented employees who took reduced duties leave or flexible training programs. In addition, faculty did not always take advantage of transformative interventions, for fear that others would perceive them as uncommitted or that their careers would be negatively affected.

Many of these practices challenge longstanding gender norms and divisions of labor. Gender discrimination, whether cultural or structural, begins in the family and the community. However,

"girls must be able to attend school, have time to complete homework, and get unbiased vocational counseling" (Newman et al. 2011, 31). Girls who go to school need a reduced workload at home, potentially adding to their families' workload. Families and communities may resist the changes required by these interventions. Accordingly, the expert panel stressed the need for program planners to anticipate and plan for resistance in their intervention designs. A potential model for this is the *Projet d'Appui a L'Enseignement Moyen* (PAEM) in Senegal, which conducted *community forums and outreach* (P/F Practice No. 9 [tied] in appendix C) and *radio and theatre messaging on pregnancy and housework* (P/F Practice No. 2 [tied] in appendix C) to mobilize communities around reducing girls' housework and preventing early marriage and pregnancy. Project reports described engaged communities that were actively taking measures to reduce student housework. This implies a long-term, multisectoral strategy that targets keeping girls in school from primary to tertiary levels.

Comprehensive faculty and staff initiatives like the University of California's (US) "Family-Friendly Edge" and the University of Michigan's (US) family-friendly programs may be a key strategy to counter discrimination based on pregnancy and family responsibilities. At both universities, faculty members are supported by options like flexible tenure, child care and related financial assistance, and numerous other interventions. By using multiple avenues to equalize opportunities for women and men, these initiatives signal the value that the institutions place on enabling faculty and staff to have a career and a family without professional setbacks. This is a strong message to send to the educational community.

Institutions considering implementing interventions from this subsection may have concerns about the funding required, particularly for interventions that entail the development or restructuring of physical and human resources (e.g., child care, lactation spaces, reduced duties leave). More documentation is needed on this topic by existing implementers. Nevertheless, institutions should not dismiss these initiatives until they have conducted a cost-benefit analysis for their own contexts. For example, employers at coffee plantations in Kenya found that offering onsite child care led to reduced employee absenteeism, higher productivity, and lower turnover (Hein and Cassirer 2010).

Areas for research

Although some information is available on the perception and use of these interventions, additional research is needed to understand how they affect gender discrimination in faculty recruitment, retention, and development and student retention, performance, and graduation. No assessments or evaluations were found comparing the outcomes of these interventions to one another, or with those of settings with no such interventions. Indeed, interventions' outcomes could vary widely depending on differences in their designs, such as whether financial assistance is available to beneficiaries or to implementers. Evidence on these differences could help inform institutional decision-making on which interventions may be effective, affordable, and appropriate for their contexts.

Further, the assessments that were available for this review often looked at the features or effects of a larger project or strategy, but did not provide details on specific components. For

example, the Programme for Adolescent Mothers in Jamaica reported savings to the health sector of 13.8 million Jamaican dollars (about USD 160,000) (McNeil 1998). However, it is unclear how much of that savings can be attributed to specific interventions such as child care or remedial classes, or if it is even possible to do so. Research on the extent to which specific interventions are gender transformative and on their implementation features (e.g., cost), as compared to those of multilevel strategies, will be particularly useful to decision-makers with limited resources.

Conclusions

The potential advantages in recruiting high-quality students, faculty, and staff and increasing their satisfaction, retention, performance, and graduation would presumably outweigh the financial outlays associated with these interventions. A report by the University of California (US) noted that "… work-family concerns are frequently cited by first-offer faculty candidates (both women and men) who turned down a position with [the University of California], and by professors (both women and men) who left [University of California] faculty positions" (Mason et al. 2005, 2). Institutions that offer students and faculty with families the same opportunities as are available to students and faculty without families may therefore have a competitive edge in recruitment, though as noted above, research on this is needed. Indeed, the University of Washington Law School (US) "has tried to use its family-friendly atmosphere as a recruiting tool" for students and faculty (Long 2011), and the University of California and University of Michigan (US) both highlight their family-friendly initiatives to faculty candidates.

With numerous intervention options available to institutions to transform arrangements for caregivers and equalize educational and professional opportunities for women, the expert panel recommended the following basic bundles of interventions:

Interventions Included in the "Basic Bundles" to Counter Pregnancy and Family Responsibilities Discrimination

For students

During pregnancy:

- Continuation and reentry policies that do not require pregnant students to terminate their education
- Pregnancy/maternity and parental leave

During postpartum period:

- Lactation breaks and spaces
- Parental leave
- Child care (daily and emergency)
- Child care financial assistance (or at low cost)
- Flexible training schedules, such as part-time schedules and reduced workloads

For faculty

During pregnancy:

- Pregnancy/maternity and parental leave (paid)
- Pregnancy/maternity leave replacement funding to hire temporary replacements for employees on pregnancy/maternity leave to ensure continuity of instruction

During postpartum period:

- Lactation breaks (paid) and spaces
- Parental leave
- Child care (daily and emergency)
- Child care financial assistance (or at low cost)
- Flexible working hours
- Flexible tenure

These basic bundles of interventions for students and faculty make progress in rectifying resource and power imbalances by legitimizing caregiving; designating equal responsibilities for caregiving between women and men; and allocating resources that make caregiving (and taking leave due to caregiving) more viable. To maximize institutional performance and eliminate gender inequalities, it is imperative that institutions not only make them available, but also work to encourage and facilitate their use.

Summary of Recommendations: Pregnancy/Family Responsibilities Discrimination

Interventions

To increase the PSE system's potential to counter gender discrimination and inequality:

- Implement comprehensive basic bundles of interventions for both students and faculty, including *pregnancy/maternity leave*, *parental leave*, *child care*, *child care financial assistance*, *lactation breaks* and *spaces*, and flexibility in structuring educational and work schedules. Implementing complementary interventions is also important because some interventions may not achieve their gender transformative potential if implemented alone.
- Plan to provide financial and institutional resources when implementing interventions that students or faculty may not use if they cannot afford it. For example, offer *financial assistance for child care* or *replacement funding* when faculty take pregnancy/maternity leave to ensure that other colleagues' workloads are not overly burdened.
- Anticipate and plan to address resistance to interventions that challenge longstanding discriminatory gender beliefs, norms, and division of labor. For example, this may include collaboration between ministries of health and education to strengthen vocational guidance and sustained institutional and community mobilization and education.
- Enact legislation mandating interventions such as *pregnancy/maternity leave*, *parental leave*, and *lactation breaks*. Incorporating these interventions into the legal system is a key way to boost funding and ensure that they are widely offered.

Areas for research

- Evaluate and document the impact of interventions on gender discrimination outcomes on faculty recruitment, retention, and development as well as student retention, performance, and graduation.
- Evaluate and document aspects of implementation, such as cost-effectiveness or factors that contribute to use of family-friendly services.

General Gender

This subsection consists of interventions that do not directly address sexual harassment or discrimination related to pregnancy and family responsibilities, but may do so indirectly because they address gender equality issues more broadly. Critical criteria were not selected for this subsection, since the interventions do not address a specific topic (the intervention summaries in appendix C are therefore listed in alphabetical order). However, it is interesting to note that all six of the interventions in this subsection were rated as meeting two or more of the gender transformative characteristics, and that none of the interventions met the characteristic of "Take measures to end impunity for perpetrators of sexual harassment and other forms of gender discrimination." All six interventions in this subsection are described below.

Interventions for students and faculty

The two interventions that met the highest number of gender transformative characteristics were *gender centers* and *equal employment opportunity (EEO) units*, the features of which are described below. Both have been implemented in high- and low-resource settings, with most examples of gender centers coming from universities in Africa. Both structures serve accountability and advocacy functions. The *gender centers* included in this review had similar reasons for their establishment. In most cases, the universities had conducted equality and/or climate studies that identified gender equality as a major issue. The universities had responded by creating academic departments and programs focused on gender and gender centers that were charged with improving gender equality in the institutions. By contrast, one of the driving forces behind the establishment of *EEO units* is national legislation like that in South Africa, which passed an act in 1998 requiring certain employers to implement affirmative action measures toward achieving employment equity (University of Cape Town 2004).

The functions of the gender centers vary widely by institution, but have included the development of gender policies; gender sensitization workshops; sexual harassment training; research and university assessments; financial assistance to female students; mentoring; leadership training for women; awareness-raising; and advocacy. While these functions were included as distinct interventions in this review, the overarching structure was also included so that broader lessons could be drawn. The expert panel noted that there is some overlap between the functions of gender centers and EEO units, which also conduct training and awareness-raising on discrimination and harassment; establish career development programs for women; and develop equal opportunity policies.

Both gender centers and EEO units were recognized by the expert panel as important mechanisms for promoting gender equality in an institutional setting. Although formal evaluations and data on outcomes specific to these practices were unavailable, the anecdotal evidence available from institutional websites and program documents indicate that these structures have contributed to making gender equality more visible. The expert panel therefore recommended that institutions have a mechanism such as a gender center, EEO unit, or other type of structure that addresses forms of gender discrimination and inequality. Further, the mechanism should be as specific and clear as possible in outlining its goals and functions through its mission statement, strategies, and plans of action. The EEO unit at the University of

Melbourne (Australia) was cited as a good example of this. Rather than using general terms like "gender mainstreaming," the unit states its goal as working "towards equal opportunity and freedom from unlawful discrimination, harassment and bullying in the learning and working environment for staff and students & an inclusive working environment that promotes and values equity and diversity for all staff" (University of Melbourne 2012).

One of the activities that some gender centers undertake is offering *gender awareness and sensitization workshops*, which have been held occasionally for students, faculty, and staff in universities such as the University of Dar es Salaam (Tanzania) and Sokoine University of Agriculture (Tanzania). Although the documentation on the design of these workshops was not comprehensive, the expert panel felt that such workshops may be effective if they focus on specific topics that illustrate the power imbalances and exclusion in which gender discrimination and inequalities are rooted, rather than generally aiming to change beliefs. However, evidence on results and effects of the practice was also limited.

Seemingly more transformative are *mentoring/female role models* and *faculty career and leadership development programs*. By providing examples of female leaders and cultivating leadership skills in female students and faculty, these interventions challenge beliefs that women are not competent managers and leaders. Universities in low- and high-resource settings have developed mentoring programs that pair students with faculty and junior faculty with senior faculty. Networking events, seminars, and skills trainings are common features of these programs and have been well-received by survey respondents at the University of Michigan (US) and University of Ottawa (Canada), who reported improved job satisfaction (University of Michigan 2005; University of Ottawa Centre for Academic Leadership 2012).

Interventions for students

The gender center at the University of Dar es Salaam (Tanzania) was home to a *student gender club* that engaged students, especially female students, in gender sensitization trainings, awareness-raising, and advocacy activities. The student gender clubs focused more on changing norms, creating solidarity, and providing information and access to resources, than on broader-level effects such as transforming educational arrangements or introducing legal protections.

Operational challenges

Documentation and evaluative results were again scarce in this subsection. The expert panel recognized that while the interventions in this subsection have gender transformative potential, a better understanding is needed of how these interventions are implemented and the factors that make them more or less effective. Further, more details on the funding and resources required to establish mechanisms like gender centers or EEO units would be helpful for institutions wishing to develop such a structure.

Areas for research

The expert panel noted that more documentation is needed on the design, implementation, and results of these interventions to adequately determine their effectiveness and their potential for transforming gender inequalities. In addition, reviewers noted that EEO units are more explicit

about their role in addressing discrimination in their mission statements than are gender centers. However, it was unclear whether there is a difference in effectiveness between structures that address discrimination explicitly and those that address discrimination implicitly. It is probable that such mechanisms are more effective when backed by equal opportunity laws. The expert panel recommended further research into this topic.

Conclusions

As with the Sexual Harassment and Pregnancy/Family Responsibilities subsections, the interventions in this subsection need to be better documented and evaluated. Nevertheless, many of the interventions have notable potential to counter gender discrimination and transform school and work arrangements through a variety of strategies. Additional research and documentation will help institutions and other stakeholders understand the appropriateness of these interventions for their own contexts.

Summary of Recommendations: General Gender

Interventions

To increase the PSE system's potential to counter gender discrimination and inequality:

- Establish a structure or mechanism that promotes attention to and action on nondiscrimination, equal opportunity, and gender equality, and implements interventions that address major forms of discrimination. This could be a gender center, equal employment opportunity unit, or other type of structure.
- In the mechanism's mission, vision, and strategic plans, specifically outline the types of discrimination and inequality that the mechanism is working to eliminate.

Areas for research

- Conduct research on differences in effectiveness of structures that directly address gender discrimination and structures or interventions that indirectly address gender discrimination.
- Increase documentation, monitoring, and evaluation to understand the specific features of these mechanisms and their potential role in reducing gender inequalities and discrimination.

Cross-Cutting Findings

A common challenge when rating the three groupings of interventions was the insufficient amount of documentation on the implementation of the interventions and the virtual absence of evidence to determine their impact. Extensive descriptions were only available for some interventions, while assessments and evaluations were limited or nonexistent for all interventions. For example, no rigorous assessments were conducted to measure changes in gender attitudes among institutional decision-makers. Thus, while some interventions seemed effective in principle, it was unclear whether they had been effective in practice.

More documentation is also needed on the funding and other resources required to implement and sustain these interventions. As institutions consider their options, one of the key questions

will be whether or not their budgets can afford it. Documenting financing mechanisms and low-cost strategies will be invaluable to decision-makers, as will cost-benefit and cost-effectiveness analyses that can help make the case for developing programs to address this topic and inform the design of those programs. It will also be important to identify ways to empower those who would most benefit from these interventions to be able to advocate for resources to implement these interventions, as well as to create ownership that will facilitate their sustainability.

Nonetheless, the expert panel recommended that across the three subsections, but particularly for the Sexual Harassment and Pregnancy/Family Responsibilities subsections, combinations or packages of interventions had the greatest potential to counter gender discrimination. Because gender discrimination is complex and embedded within familial, societal, institutional, and legal structures and systems, multidimensional strategies will likely have the best chance of reducing—or even eliminating—discrimination against women in educational settings.

Summary of Recommendations: Cross-Cutting

Interventions
To increase the PSE system's potential to counter gender discrimination and inequality:

- Employ multilevel strategies to ensure a comprehensive approach that targets the complex roots of gender discrimination.

Areas for research

- Document and evaluate the implementation and impact of interventions in educational settings (whether health professional PSE or general education), including feasibility aspects such as financing.

CONCLUSIONS

Gender discrimination is a wide-ranging problem that affects all aspects of the health worker educational and employment cycle. Countering gender discrimination in educational systems is certainly not limited to the topics under discussion in this report, nor is it limited only to higher education. Yet making a concerted effort to reduce and ultimately eliminate gender discrimination during health worker PSE can have significant effects on the entry to and retention of students in PSE, as well as their graduation and entry into the health workforce. As discussed in this report, sexual harassment and discrimination related to pregnancy and family responsibilities can affect students' opportunities, treatment, and ability to complete their studies and can limit faculty members' career satisfaction and advancement opportunities.

Fortunately, there are ways to counter these forms of gender discrimination. This review has identified a significant need for more documentation both on these forms of gender discrimination and on the design, implementation, and results of interventions to address them. While the review was comprehensive, due to limited resources it covered only a fraction of the educational institutions worldwide. As such, it is possible that interventions or specific

institutional examples exist that were not identified by this review. Nonetheless, little information was readily available to determine the feasibility, sustainability, or effectiveness of the interventions, limiting the ability of the review to make recommendations for specific contexts (e.g., low-resource settings). The expert panel noted that although the lack of such information made it impossible to recommend promising practices, it would be helpful to decision-makers to develop a mechanism to consider feasibility during the review process with the information available.

Despite these limitations, the existing evidence does indicate that many of the 51 interventions reviewed have gender transformative potential. By ending impunity for perpetrators of sexual harassment and strengthening legal protections for women, the recommended "basic bundle" of interventions to counter sexual harassment offers institutions a multifaceted strategy that has been implemented in high- and low-resource settings. Numerous interventions that work to transform school and work arrangements so that mothers and family caregivers are not penalized have also been implemented in both high- and low-resource settings. The recommended basic bundle of interventions for students and basic bundle of interventions for faculty serve as a foundation on which institutions can build comprehensive programs that can enhance their attractiveness to both students and faculty. From restructuring faculty workloads to offering flexible leave without demotion for students and faculty members with families to designating facilities and other resources for students and faculty members with families, PSE institutions can make use of a wide range of options to change unequal treatment of parents and other caregivers in the classroom and the workplace.

PSE institutions and managers of programs to strengthen PSE should also consider incorporating outreach components and other strategies to preempt possible resistance from the institutional community. Gender inequalities are rooted in longstanding cultural beliefs and norms, and most social groups tend to be more comfortable with the status quo. Those most affected by discrimination will need to be in the vanguard of transformation. Advocacy for resources and strategies to eliminate discrimination—especially by women empowered to advocate for equal opportunity, access, and gender equality in the academic setting—can be an important complement to institutional accountability mechanisms.

As Ridgeway and Correll (2000) note, the aggregate effects of multiple such interventions, each with its own "small" effects, can eventually change discriminatory gender beliefs and reduce gender inequalities:

> [M]odifying gender beliefs and, with them, the gender system must be understood as an iterative process. Since gender is a system of mutually reinforcing processes acting at several levels of social organization, changes at one point in the system will be undercut and blunted by gender processes at other points in the system. Yet many specific, local changes leaving small residual effects can accumulate gradually to flatten out the inequality that the gender system constructs. Changing the gender system is like moving a sandbar: A single wave seems ineffectual, but a repeating pattern of waves transforms it. (Ridgeway and Correll 2000, 114)

Thus, although implementing a single recommended practice at a single institution is likely to be insufficient to fundamentally upend gender discrimination in a given PSE setting, implementing a well-designed, multifaceted institutional strategy can significantly change existing gender inequalities and improve institutional performance. Expanding this to numerous institutions would transform the pipeline even further. To do this, it is imperative that PSE institutions take action.

It is also imperative for PSE stakeholders to operationalize national and international commitments to equal rights to education and to the occupation of one's choice. Public and institutional policies must embrace the right to education without any distinction, exclusion, or restriction made on the basis of gender roles—a principle that most countries committed to when they ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)[2]. Such policies must also be backed by laws that are applied to and enforced in the health and education sectors.

Eliminating gender discrimination in the health (and education) sectors requires an extensive, sustained effort by numerous stakeholders. This report has identified potential mechanisms for health PSE and other educational institutions to contribute to these efforts. As more institutions, governments, and other actors get involved, greater opportunity will exist not only to understand what strategies and interventions work best to counter gender discrimination, but also to create broad ownership in developing a health workforce whose members are treated equally, fairly, and with respect.

[2] The CEDAW agreement was adopted in 1979 by the United Nations General Assembly and entered into force in 1981. Almost all countries have ratified CEDAW—187 out of 193 countries. Only six countries have not ratified CEDAW, including the United States, Sudan, Somalia, Iran, and two small Pacific Island nations (Palau and Tonga).

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APPENDIX A: METHODOLOGY

Systematic Review

Per the original activity design, Capacity*Plus* undertook a systematic review in January 2011 to determine what evidence existed on interventions that addressed the topic of gender discrimination in preservice education contexts. Capacity*Plus* staff collected documented examples of interventions that address the topic through a comprehensive search of peer-reviewed and non-peer-reviewed (gray) literature, as well as through outreach to and consultation with stakeholders. While the overall review centers on health PSE systems, these forms of gender discrimination also exist in the overall educational sector. Moreover, exploratory searches indicated that although some information on health PSE institutions was available, a substantial number of higher education institutions (both with and without health PSE branches) had implemented interventions to address these topics. The review would therefore be greatly strengthened if general education institutions were also included. Consequently, the search was broadened to include other types of educational institutions at the primary, secondary, and especially tertiary levels in addition to medical, nursing, and other health PSE schools. Examples from both high- and low-resource settings were included in the review.

Project staff searched for documents from the last 20 years that described interventions addressing this topic, evaluations of the interventions, and any other data on or description of the interventions' effects on student and faculty experiences. Capacity*Plus* staff supplemented these searches by contacting stakeholders for suggestions of relevant institutions, programs, and interventions. This included USAID advisors in the health, education, and gender sectors; project staff, partners, and other implementing organizations; academic and organizational researchers working on health, education, and gender equality topics; and authors of documents from the literature search. In addition, Capacity*Plus* sought intervention examples by posting requests for information on communities of practice focused on HRH, education, and gender issues, including: Afro-Nets; the Global Alliance for Nursing and Midwifery (GANM); Health Information and Publications Network (HIP-Net); Health Workforce Education and Training (HWFET); Healthcare Information For All by 2015 (HIFA2015); Human Resources for Health (HRH) Exchange; the Interagency Gender Working Group (IGWG); and the International Council of Nurses (ICN)'s Nursing Education Network.

Databases and Websites Searched

- African Index Medicus
- Global Health Workforce Alliance
- Good Search
- Google
- Google Scholar
- HRH Global Resource Center
- NC LIVE
- Trip Database
- PubMed Central
- USAID Development Experience Clearinghouse
- World Health Organization

Key Search Terms

- Gender discrimination
- Education
- Training
- Education quality
- Medical education
- Nursing education
- Medical student
- Nursing student
- University
- Tertiary
- Student-parents
- Faculty
- Sexual harassment
- Pregnancy
- Pregnant learner
- Family responsibilities
- Family life
- Attrition rates
- Graduation rates

These search methods produced 379 documents describing background information, context and descriptions of gender discrimination in educational settings, and interventions. Document types included journal articles, presentations, conference papers, technical and program reports, program policies and strategies, information from institutional websites, and news articles and briefs. Seventy-nine articles were excluded because they were related to but did not specifically address the selected topic; because they did not provide specific examples of gender discrimination in an educational setting or of interventions actually implemented to address the problem; or because they mentioned interventions or institutions for which additional information could not be found.

Compilation of Interventions

Interventions were grouped first by subtopic (sexual harassment; pregnancy and family responsibilities; and other) and then by type of intervention within the subtopic. Although there are variations in how interventions are implemented in different institutions, interventions with similar fundamental structures and purposes were grouped together. For example, while child care may have been offered only to faculty and staff in one institution and offered to students, faculty, and staff in another institution, both would be grouped under "child care" as a single, distinct intervention. Some interventions were only mentioned in passing in the documents, and were not included in the compilation because no additional information was available.

From this process, 52 distinct interventions were identified across the three subtopics. Using a standard template developed by Capacity*Plus*, a summary was created for each intervention that incorporated the information from the systematic review, including: institution name(s), location, and educational level; target audience of intervention; background data; intervention features; results of either formal evaluations or informal assessments; and cost-effectiveness and sustainability considerations. For interventions that were implemented in more than one institution, the summaries provide information for each institution. To maximize efficiency, the summaries did not include every institution that implements a specific intervention, but identified selected institutions in a variety of resource settings for which substantial information was available. For example, many higher educational institutions offer maternity leave to employees; however, it would have been inefficient and repetitive to describe its implementation in all institutions that offer it. As the summaries were being compiled, Capacity*Plus* staff contacted institutions and implementing organizations to request more information when there were major gaps in the information available or when the intervention featured an approach less common among existing interventions. Abbreviated versions of these summaries, which contain references for all of the information provided, can be found in appendix C.

Expert Review

Capacity*Plus* staff contacted a wide array of gender and workforce experts to serve as potential expert reviewers. A panel of experts in gender and in human resources for health (HRH), including USAID gender and health systems advisors, IntraHealth International advisors in gender and preservice education (PSE), and a university-based gender expert, reviewed the compilation of 52 interventions using a standard review form focused on characteristics of *gender transformative* interventions (see inset). While information on the results and effects of interventions was available for some interventions, most interventions lacked the assessments and evaluations necessary to determine their effectiveness, feasibility, and sustainability. Thus, although the original conception of the activity was to identify promising practices based on the existing evidence, the scope of the review was changed to accommodate the overall insufficiency of evidence and the need to assess interventions using gender-related criteria. Rather than ask reviewers to assess whether interventions should be tested or scaled up, reviewers assessed the interventions' potential to counter gender inequalities and discrimination using the criteria described below. The subsection of interventions to counter sexual harassment (Sexual Harassment) was reviewed by two reviewers; the subsection of interventions to counter pregnancy and family responsibilities discrimination (Pregnancy/Family Responsibilities) was reviewed by three reviewers; and the subsection of interventions that address general gender equality issues (General Gender) was reviewed by four reviewers. Despite the small number of reviewers, the quantitative rankings and development of the recommendations described in the Results section of this report drew on the experts' unique combination of expertise in gender and in HRH.

Gender transformative approaches actively strive to examine, question, and change rigid gender norms and imbalance of power as a means of reaching health as well as gender equity objectives (Interagency Gender Working Group 2012). **Gender transformative interventions** are interventions considered likely to counter *de facto* (i.e., existing) or *de jure* (i.e., according to law) discrimination and to promote gender equality, given the documented descriptions, lessons learned about the barriers/challenges to the interventions' implementation, and results.

Using the compiled summaries, reviewers considered whether each intervention had the following six characteristics, which were identified as essential for addressing discrimination related to sexual harassment, pregnancy, and family responsibilities. Reviewers marked "Yes" or "No" for each of the following characteristics:

- Provide information/education about discrimination or rights
- Challenge and change common discriminatory gender beliefs or norms
- Change or attempt to change an imbalance of power or otherwise level the playing field
- Take measures to end impunity for perpetrators of sexual harassment and other forms of gender discrimination
- Introduce, make use of, or further the (existing) legal protections for women

- Transform family, school, and/or work arrangements so that women are not economically or socially penalized/disadvantaged for caregiving.

Reviewers also had the opportunity to provide comments on the overall intervention or on specific gender transformative characteristics.
Reviewers of the General Gender subsection noted that one practice, *gender counseling*, had insufficient evidence available to assess its gender transformative potential. This practice was removed from the analysis, for a final compilation of 51 interventions.

Analysis of Reviewer Ratings

As agreed to by the reviewers, each reviewer was assigned a weight for each topic, based on the reviewer's expertise in the area of gender and HRH and on how many reviewers submitted ratings for each of the three topics. For each topic, the assigned weights totaled 100%. For example, there were two reviewers for the Sexual Harassment subsection. Each practice received 60% of its rating from one of the reviewers, a gender and HRH expert, and 40% from the other reviewer, an HRH expert.

For each of the 51 practices, reviewers' ratings for all six characteristics were entered into a Microsoft Excel database, with 0 representing a "No" and 1 representing a "Yes". A weighted average was then derived. Interventions are considered to have a characteristic when the weighted average for that characteristic was above 0.5 (marked in Appendix B as ✓). Interventions were considered not to have a characteristic when the weighted average for that characteristic was below 0.5 (marked in appendix B as a blank box). Interventions were considered to possibly have a characteristic if the weighted average was 0.5 (marked as ½ in appendix B), but the documentation is unclear.

To streamline the analysis and development of recommendations for these practices, critical criteria for each subtopic were selected from among the six characteristics that the reviewers had considered for each intervention (Newman 1998). Critical criteria are defined as those characteristics that are so important that practices lacking these critical criteria should not be considered for recommendation, even though other characteristics may have been checked. For this activity, critical criteria serve as minimum standards for countering gender discrimination (in the selected three topics) in PSE settings. Criteria were selected for their gender transformative potential. The Results section of this report discusses the key findings and recommendations in the context of these critical criteria.

For the Sexual Harassment subtopic, the critical criteria were:

- Take measures to end impunity for perpetrators of sexual harassment and other forms of gender discrimination
- Introduce, make use of, or further the (existing) legal protections for women.

How the critical criteria were developed: Gender power imbalances and discriminatory gender stereotypes and norms that suggest that women can be approached sexually, regardless of the

setting, figure prominently in the occurrence of sexual harassment in school and at work. These clearly need to be addressed in interventions to counter sexual harassment. However, the above two criteria were selected as being critical because reviewers believed that interventions could only counter sexual harassment if they are backed by legal sanctions and clear consequences—both of which target a culture of impunity with respect to sexual violence.
For the Pregnancy/Family Responsibilities subtopic, the critical criteria were:

- Transform family, school, and/or work arrangements so that women are not economically or socially penalized/disadvantaged for caregiving
- Change or attempt to change an imbalance of power or otherwise level the playing field
- Challenge and change common discriminatory gender beliefs or norms.

How the critical criteria were developed: Discriminatory gender beliefs and norms and power imbalances figure prominently in women's educational, occupational, and employment disadvantages relative to men. The gendered division of labor and women's greater responsibility for domestic and reproductive labor are central to women's unequal chances of choosing an occupation, developing the requisite skills and knowledge, being fairly paid, enjoying fair treatment and access, and advancing in a career. Offering policies and programs may not be enough, because as Bender (1989) suggests, gender equality requires that both genders be treated as the norm. It follows, then, that health profession educational settings and workplaces must be restructured to integrate family and work in order to reflect the value of caregiving for women and men (Williams 1989). Hence, interventions to counter discrimination based on pregnancy and family caregiving status must transform family, school, and/or work arrangements so that women are not economically or socially penalized or disadvantaged for caregiving.

Critical criteria were <u>not</u> selected for the General Gender subtopic, as this subtopic was not centered on a specific issue.

Rankings

Rankings for each of the three subsections were derived in four rounds in order to incorporate the relative weighting of the critical criteria. In the first round, practices that reviewers rated as having the top critical characteristic were placed in the top-ranked cluster. These practices were then ranked according to whether they were rated as having the second priority critical characteristic, the third priority critical characteristic, or any noncritical characteristic, respectively. Thus, a practice that was rated as having the first two critical characteristics would rank higher than a practice that was rated as having the first and third critical characteristics. The remaining rounds of ranking followed the same procedure, with the second round forming a second-ranked cluster of practices that were not rated as having the first critical characteristic but were rated as having the second priority critical characteristic, and so forth.

In some cases, a practice may have had fewer noncritical characteristics than did another practice, but the reviewers' comments indicated that the practice had more substantial gender

transformative potential. In such cases, a practice may be ranked higher than another with more noncritical characteristics.

The complete list of ranked interventions can be found in appendix B.

Development of Recommendations

In January 2012, Capacity*Plus* convened two meetings of the expert panel to discuss the results of the ratings and rankings. During these meetings, the expert panel refined its application of the gender transformative characteristics, developed recommendations on specific interventions or bundles of interventions for PSE administrators and other decision-makers to consider implementing, and developed cross-cutting recommendations on the topic and the review process. These key findings and recommendations are presented in the Results section of this report.

As described in the Results section, the "basic bundles" interventions were recommended because the available documentation suggested that multiple complementary interventions had greater gender transformative potential than a single intervention implemented alone. The recommendations for the "basic bundles" drew from the rankings and the documentation on the interventions' operational challenges and assessments, as well as on the critical criteria that served as a framework for analysis. For example, in the Sexual Harassment subsection, the grievance procedure was ranked No. 7 (out of 18 interventions in the subsection). However, it is included in the "basic bundle" for the subsection because in some instances, it has shown the potential to strengthen legal protections (the top critical criterion in the subsection), and because many of the documented challenges could be addressed by implementing it in conjunction with other interventions included in the "basic bundle", such as awareness-raising activities.

APPENDIX B: INTERVENTIONS BY SUBTOPIC AND RANK

✓ = Practice was rated as having the characteristic

½ = Ratings were split 50% as having the characteristic / 50% as not having the characteristic

Note: All references reviewed for each practice in the table below are listed in the corresponding intervention summaries in appendix C (a separate document).

Rank	Practice Name	Provide information/ education about discrimination or rights	Challenge/change common discriminatory gender beliefs or norms	Change imbalance of power/level the playing field	Act to end impunity	Introduce/use/further legal protections for women	Transform family, school, and/or work arrangements
Sexual Harassment							
1	Legislation			✓	✓	✓	N/A
2	Radio and theatre messaging	✓	✓		✓	✓	N/A
3	Policy	✓	½		✓	✓	N/A
4	Sexual harassment/ sexual violence prevention workshops	✓			✓	✓	N/A
5	Female guardians	✓			✓		N/A
6	Teacher training	½	½		½	✓	N/A
7	Grievance procedure				½	½	N/A
8	Hotline					✓	N/A
9	Awareness-raising campaign	✓				✓	N/A
10	Zero tolerance policy					✓	N/A
11	Participatory assessment	✓	✓	✓			N/A
12	Institutional network	✓		✓			N/A
13	Peer education	✓		✓			N/A
14	Counseling	✓					N/A

Rank	Practice Name	Provide information/ education about discrimination or rights	Challenge/change common discriminatory gender beliefs or norms	Change imbalance of power/level the playing field	Act to end impunity	Introduce/use/further legal protections for women	Transform family, school, and/or work arrangements
15	Conflict resolution policy						N/A
15	Conflict resolution workshops						N/A
15	Memory work						N/A
15	Role playing						N/A
Pregnancy and Family Responsibilities							
1	Student clubs	✓	✓	✓		✓	✓
2	Child care legislation		✓	✓		✓	✓
2	Parental leave		✓	✓		✓	✓
2	Pregnancy/maternity leave		✓	✓		✓	✓
2	Pregnancy/maternity leave replacement funding		✓	✓		✓	✓
2	Radio and theatre messaging on pregnancy and housework	✓	✓	✓			✓
2	Remote learning rooms		✓	✓		✓	✓
8	Discounting caregiving résumé gaps		✓	✓			✓
9	Child care/preschool		✓	✓			✓
9	Child care financial assistance		✓	✓			✓
9	Community forums and outreach		✓	✓			✓

Rank	Practice Name	Provide information/ education about discrimination or rights	Challenge/change common discriminatory gender beliefs or norms	Change imbalance of power/level the playing field	Act to end impunity	Introduce/use/further legal protections for women	Transform family, school, and/or work arrangements
9	Emergency child care		✓	✓			✓
9	Flexible tenure		✓	✓			✓
9	Flexible working hours		✓	✓			✓
9	Pregnant learner continuation policy		✓	✓			✓
16	Male parental involvement		✓	✓			✓
17	Lactation breaks			✓		✓	✓
17	Lactation spaces			✓		✓	✓
19	Flexible training program			✓			✓
20	Reduced duties leave			✓			✓
20	Student-parent support groups			✓			✓
22	Student-parent policy advocacy	✓	✓				✓
23	Flexible class scheduling						✓
24	Remedial classes/ extension training						✓
25	Litigation		✓	✓		✓	
26	Counseling		✓	✓			
27	Conflict resolution workshops (for students with family obligations)						

Rank	Practice Name	Provide information/ education about discrimination or rights	Challenge/change common discriminatory gender beliefs or norms	Change imbalance of power/level the playing field	Act to end impunity	Introduce/use/further legal protections for women	Transform family, school, and/or work arrangements
General Gender							
N/A	Equal opportunity employment unit	✓		✓		✓	✓
N/A	Faculty career and leadership development		✓	✓			✓
N/A	Gender awareness and sensitization workshops	✓	✓				
N/A	Gender center/gender mainstreaming	✓	✓	✓		✓	✓
N/A	Mentoring/female role models		✓	✓			✓
N/A	Student gender clubs	✓	✓	✓			

CapacityPlus is the USAID-funded global project uniquely focused on the health workforce needed to achieve the Millennium Development Goals. Placing health workers at the center of every effort, CapacityPlus helps countries achieve significant progress in addressing the health worker crisis while also having global impact through alliances with multilateral organizations.

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