WOMEN'S DEMAND FOR REPRODUCTIVE CONTROL:

Understanding and Addressing Gender Barriers

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where insight and action connect

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EXECUTIVE SUMMARY

Over the last two decades, access to high-quality reproductive health services has become a centerpiece of the global movement for women's empowerment. While progress has been made in research, programming, and policy, millions of women each year still experience unintended pregnancies, and millions more have unmet need for family planning. One of the persistent gaps in knowledge is the role of gender barriers that women face in defining and achieving their reproductive intentions.

To begin to fill that gap, this paper provides a gender analysis of women's demand for reproductive control. This analysis illuminates how the social construction of gender affects fertility preferences, unmet need, and the barriers that women face to using contraception and safe abortion. It also helps to bridge important dichotomies in the population, family planning, and reproductive health fields.

The findings and recommendations in this paper are based on a literature review and a complementary programmatic review. The term "personal reproductive control" encapsulates the key issues under discussion: women's ability to effectively define their childbearing intentions and subsequently utilize safe and effective contraception and abortion services in line with these intentions. Building on that definition, a new conceptual framework presented here illustrates that women's demand for reproductive control is comprised of an interconnected continuum of three levels of demand. Additionally, the framework highlights the barriers that women face to reaching each level of demand. Understanding these levels of demand and the associated gender barriers can greatly facilitate effective programmatic action.

- **Level 1:** Women's *desire to limit or space* their childbearing
  Gender barriers to reaching level 1 demand: Women derive social and economic status by conforming to cultural expectations about womanhood and motherhood.

- **Level 2:** Women's *desire to exercise* reproductive control
  Gender barriers to reaching level 2 demand: Women fear the potential social and health consequences of using family planning or abortion.

- **Level 3:** Women's *ability to effectively exercise* reproductive control
  Gender barriers to reaching level 3 demand: Women are constrained by social and family power dynamics from acting on their desire at all or can only do so sub-optimally.

The programmatic review summarizes the field-based interventions that address women's needs, desires and barriers to exercising reproductive control, in light of these three levels. The eight types of interventions reviewed and discussed include those that center on: mass media, interpersonal communication, development initiatives for adolescents, male and family involvement, social marketing, vouchers and referrals, community-based service provision, and training of providers.

Overall, a review of interventions in the field of family planning and reproductive health indicates that both demand and supply side interventions have been utilized to address gender barriers to increased demand for reproductive control. Many of these interventions do not address gender barriers per se, but do include them amongst a larger set of constraints to be overcome in improving reproductive health more broadly. In many cases, intervention approaches have only tacitly rather than proactively addressed goals and strategies from a gender perspective. Most importantly, programmatic success is rarely measured in terms of reduction of gender barriers or through measures of demand that reflect a shift in gender norms. Nonetheless, these examples offer some important strategies from addressing particular barriers to women's demand for reproductive control. Further refining them to address the specific level of demand most relevant to a particular setting or subgroup of women has the potential to make family planning interventions more effective and impactful.

The demand framework proposed here poses important questions for researchers in the gender, population and reproductive health field. To maximize the benefit of this framework in exploring the nuances of women's demand for reproductive control, we recommend five areas that researchers in this field could further explore:

1. The feasibility of using social and behavior change communication (SBCC) campaigns to redefine ideals of womanhood and motherhood rather than just ideal family size or timing for bearing children;

2. Development of universal knowledge measures that better capture women's correct and complete understanding of family planning methods;

3. Identification of a threshold level of contraceptive prevalence at which use of modern methods becomes a social norm within a culture, and the extent to which this point may differ across cultural contexts;

4. Estimation of the impact of disempowerment, particularly as related to financial dependence and reproductive coercion, on women's ability to access and use family planning options; and

5. Reconceiving "male involvement" to recognize the nuances of men's roles in family planning decisions and norm-setting in order to pinpoint how and when to include them in efforts to help women achieve their reproductive intentions.

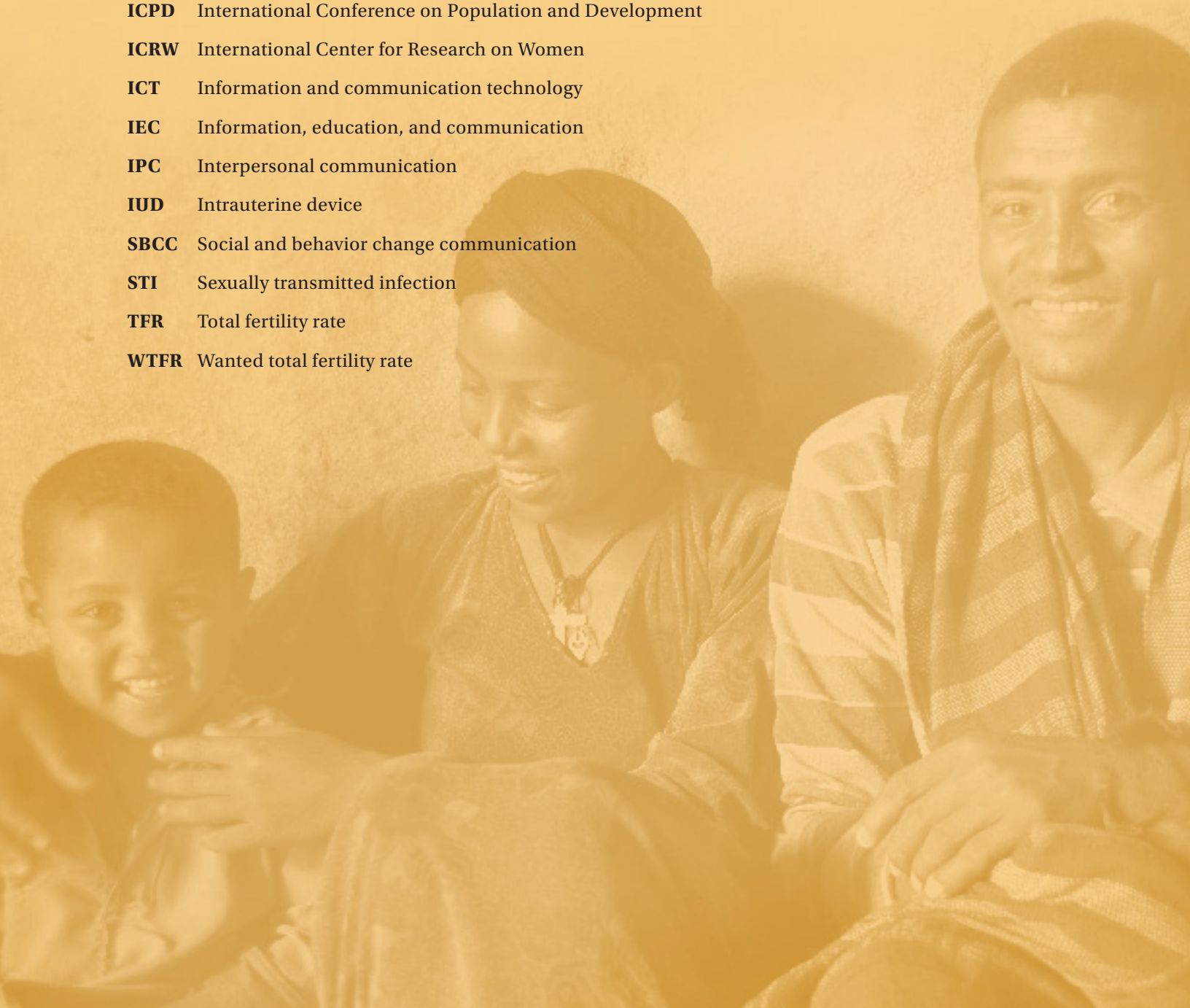
When research, programs and policies recognize and address socially constructed gender norms that lead to disempowerment and disadvantage, the population and reproductive health field will more effectively stimulate demand at all three levels. When women's ability to exercise personal reproductive control is enhanced, their empowerment will be more quickly and fully realized.

TABLE OF CONTENTS

I. INTRODUCTION 1
II. BACKGROUND AND RATIONALE 3
Change in Fertility and Contraceptive Use Rates 3
Change in Policies and Programs 5
Role of Research Reviews 5
III. METHODS 7
IV. WOMEN'S DEMAND FOR REPRODUCTIVE CONTROL: A FRAMEWORK 9
V. GENDER BARRIERS TO THE THREE LEVELS OF DEMAND 12
Level 1 Demand and Gender Barriers 12
Preference for or pressure to have large families 13
Preference for or pressure to have sons 15
Need or pressure to prove fertility soon after marriage and/or puberty 15
Level 2 Demand and Gender Barriers 17
Limited knowledge and understanding of methods and reproduction 18
Cultural opposition to contraception and abortion 19
Fear of social stigma and disapproval 20
Level 3 Demand and Gender Barriers 21
Disempowerment in the family and community 22
Limitations on mobility and resources 22
Limited communication, decision-making and active opposition 23
Disempowerment in relation to providers 25
Disempowerment as consumers in the marketplace and the health system 26
VI. PROGRAMMATIC APPROACHES TO OVERCOMING GENDER BARRIERS 29
Mapping Interventions to Strategies and Goals for Reducing Gender barriers 30
Interventions and Gender Barriers: What do we know? 34
Mass Media Awareness Campaigns 34
Interpersonal Communication 37
Development Initiatives for Adolescents 39
Male and Family Involvement 41
Social Marketing 43
Vouchers and Referrals 45
Community-Based Services and Mobile Outreach 47
Training and Education of Providers 51
Summary 54
VII. CONCLUSION 56
VIII. REFERENCES 59

LIST OF FREQUENTLY USED ACRONYMS

CBD	Community-based distribution
CPR	Contraceptive prevalence rate
CSM	Contraceptive social marketing
DHS	Demographic and Health Survey
EC	Emergency contraception
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
ICRW	International Center for Research on Women
ICT	Information and communication technology
IEC	Information, education, and communication
IPC	Interpersonal communication
IUD	Intrauterine device
SBCC	Social and behavior change communication
STI	Sexually transmitted infection
TFR	Total fertility rate
WTFR	Wanted total fertility rate



I. INTRODUCTION

Women across the globe face myriad barriers to autonomously defining and achieving their reproductive intentions. Such constraints, influenced by gendered roles and relationships, have enormous direct and indirect consequences for women's health, well-being, and life options. They also hinder the achievement of broader development goals including gender equality, economic opportunity, fertility reduction, and social inclusion.

Motivated in part by international agreements such as the Millennium Development Goals and the International Conference on Population and Development (ICPD) in Cairo, progress has been made by the field of international development during the last two decades in the incorporation of women's empowerment as a priority.[1,2,3] However, even as some social and health outcomes have improved for women, significant gaps remain in the achievement of reproductive health, rights, and gender equality.[4,5] In particular, women's need for family planning continues to outstrip their ability to access and use safe and effective methods, with recent estimates of global unmet need exceeding 200 million women.[6,7,8] Furthermore, a range of legal, cultural, provider-related, and financial constraints continue to hinder women's ability to seek and utilize options for safe abortion across a large number of countries.[9,10]

In the last two decades, research and program efforts have contributed to a better understanding of the barriers women face in defining and achieving their reproductive intentions, as well as to defining improved strategies for addressing these barriers.[11,12] However, there is no existing synthesis of these insights from a gender perspective. The question remains: where do we stand today in understanding and responding to what women in developing countries want and need in order to exercise control over their reproductive lives?

In this paper, we address this question by applying a gender lens in reviewing research and programs focusing on fertility preferences, unmet need, and barriers to women's use of contraception and safe abortion. Through our analysis, we attempt to show how the focus on gender barriers can bridge important dichotomies in the population, family planning, and reproductive health fields. In particular, we suggest that traditional dichotomies such as supply versus demand, family planning versus reproductive health, or personal choice versus fertility control may have served out their purpose. Going forward, the pathway to addressing the realities of women's reproductive lives, as well as the broader social and economic contexts within which they live, requires transcending such boundaries.

In order to provide a common framework for discussing and conceiving of women's demand for contraception and abortion, this paper:

1. Uses the term "reproductive control" to frame the key issue under discussion, applying it from the perspective of the individual woman, rather than from the perspective of the state or society at large. As used in this paper, exercising reproductive control refers to women's ability to effectively define their childbearing intentions and, subsequently utilize safe and effective contraception and abortion services in line with these intentions. While embedded in the broader concept of reproductive health, the term is narrower and more specific, referring to the specific domain of decision-making on childbearing. It deliberately incorporates the term "control" to emphasize the importance of women's agency in this domain.[13]

2. Offers a conceptualization of the "demand" for reproductive control, providing a nuanced and layered understanding of how the gender dynamics underlying women's social and personal lives define not only how many children they want and when they want them, but also whether they want to use reproductive control options—contraception and abortion—and are able to do so effectively.

3. Discusses the strategies that family planning and reproductive health programs have utilized in their repertoire of programs to promote and provide safe and effective reproductive control options in line with women's demand. We discuss the extent to which these interventions have deliberately or tacitly addressed the gender barriers that constrain women's demand for reproductive control, and assess the promise they hold for the future.

II. BACKGROUND AND RATIONALE

Whether regarded from a health and human rights, or demographic perspective, the last two decades have shown mixed progress on women's ability to decide on the number and timing of the children they have. Certainly, a much larger proportion of women in the world are having smaller families and practicing family planning because that is what they desire. However, a combination of gendered social norms, political obstacles, resource limitations, and programmatic challenges continue to constrain large numbers of women in the developing world from exercising personal reproductive control.

Change in Fertility and Contraceptive Use Rates

Macro level trends in fertility and contraceptive prevalence rates (CPR) depict this mixed picture. In the past 20 years, fertility rates across the globe have continued to decline even as demographers have noted stalling or stagnation of declines in some parts of the world.[14]

From 1990 to 2008, total fertility rates (TFR) declined most sharply in the Middle East and North Africa, from 5.0 to 2.9. In Latin America and the Caribbean (LAC) and Asia, where rates were already lower, overall TFR is now close to replacement levels, going from 3.2 to 2.2 in LAC and from 3.2 to 2.3 in Asia in the 1990-2008 period. However, in Sub-Saharan Africa, fertility levels continue to be much higher in general, with the average TFR declining from 6.3 in 1990 to 5.1 in 2008.[15] In many West African countries, TFRs continue to be very high, as for example, 6.4 in Mali or 7.1 in Niger.[16] The persistence of higher fertility rates and accompanying high maternal and child mortality in parts of Africa is attributed to a combination of entrenched preference for larger families, persistent gender inequality, slow progress on socio-economic growth, poor health conditions, lack of political will, and a lack of family planning services.[14,17,18]

In addition to regional variations, important differences remain in the fertility levels of women within specific countries, with poorer, rural, less educated, and more marginalized women continuing to have higher fertility rates.[14,19] For example, an analysis of Demographic and Health Survey (DHS) data from 44 countries found large disparities in the total fertility rate for women in the poorest versus the richest quintiles (6.1 and 3.2 births per woman, respectively), with a parallel disparity and in the proportions using modern contraceptives (18% and 36% respectively).[17]

In fact, CPR mirrors this mixed picture across the board. In Asia, where countries like India, Indonesia, and Bangladesh have experienced declining birth rates, contraceptive prevalence has risen from 52% in the early 1990s to nearly 65% in the early 2000s.[20] With higher birth rates, Sub-Saharan Africa is also the region of the world where CPR is lowest. Still, even in Africa, contraceptive use among married women has risen from about 15% in the early 1990s to 25% today, with a much greater increase in East and Southern as opposed to West Africa.[21] Again, research suggests that inadequate investment in family planning programs, low education levels, and low social standing of women are contributing factors to low levels of family planning adoption in many of these settings.[22,23,24,25]

Because more women across the world want smaller families, unmet need for contraception remains relatively high despite rising contraceptive use rates. This is especially true in Sub-Saharan Africa and the Caribbean where in 2009, 25% and 20% of women were estimated to have unmet need, respectively. Comparatively only 7.5% of women in South America were estimated to have unmet need.[8] Despite lower percentages, however, larger population sizes in South and Central Asia mean that the number of women with unmet need is highest in that region, comprising 36% of all women with unmet need globally.[26] Notably, many in the population and reproductive health field consider these figures to be underestimates because they do not include women who are using contraception but are not using it effectively or who are dissatisfied users.[27] As a result, a proportion of women with unmet need are resorting to safe and unsafe abortions for preventing unwanted births, with mixed success in achieving their reproductive intentions.[28,29]

An important emerging issue of demographic, health, and social concern during this period has been the reproductive behavior of youth, and especially the ability of young women to exercise reproductive control. As the largest cohort of young people in history enters childbearing years, its reproductive behavior will determine the growth and size of the world's population for decades to come. Equally important, the sexual and childbearing experiences of this large cohort of young women will have an enormous impact on their health, schooling, employment prospects and overall transition to adulthood.[30,31,32] In many countries, the proportion of adolescent women using contraceptives has increased substantially over the last two decades. In fact, prevalence among adolescents has increased faster than among older women, indicating that younger women aspire to have more control over their sexual and childbearing experiences at earlier ages than did older cohorts of women.[30] At the same time, a number of studies document that in many countries, adolescent girls and young women continue to remain an especially disempowered group, with little autonomy over critical life choices such as the timing of sex, marriage, and childbearing.[33,34,35,36]

Change in Policies and Programs

In terms of policy and programs, key elements of the reproductive health agenda forged in Cairo in 1994, emphasizing not just adolescent needs, but women's empowerment, quality of care, and individual rights, show signs of mixed progress at best. In many settings, there has been substantial progress on the policy, legislation, and advocacy fronts, as well as on community participation and engagement. For example, a 2003 UNFPA global survey found that most countries have established or broadened reproductive health policies and programs, with 46 out of 151 countries having enacted new laws and legislation since 1994 to expand access to reproductive health care.[37] More countries are implementing advocacy and communication campaigns to promote reproductive rights, and many have achieved considerable progress in broadening local participation in reproductive health policymaking and educating community members about these policies.[12,38]

Progress on implementing the Cairo Program of Action through programs on the ground is less clear. Reproductive health programs attempting to address women and their needs from an individual perspective continue to struggle with the challenges of infrastructure, capacity, and resources. Updated policies, guidelines, and curricula are often difficult to align with effective service provision in the absence of changing systems and mindsets.[5,20,37,39] Certainly, there is momentum toward fewer vertical and more integrated programs addressing a broader range of women's reproductive health needs, including not only family planning, but also pre- and post-natal care, HIV/AIDS, and post-abortion care. But many difficulties beleaguer efforts to make infrastructure, services, and providers more woman-friendly. In particular, understanding and addressing structural and normative factors that inhibit women from using contraception and abortion continues to be a substantial challenge. A broader programmatic scope also means greater diffusion of limited resources. Almost uniformly, countries are grappling with the issues of setting priorities, financing, and implementing reproductive health interventions.[39,40,41]

Role of Research Reviews

Given the challenges of the macro-level policy and resource environment, reproductive health and family planning advocates have tended to collate and synthesize research largely for advocacy purposes. For example, the concept of unmet need has been central to family planning efforts for half a century. The investment the field has made over the last two decades in measuring unmet need cross-nationally and over time through the DHS program is indicative of how central a concept it continues to be for seeking sustained policy commitment to family planning and reproductive health efforts.[7,26] Since unmet need became a Millennium Development Indicator in 2008, there has been even greater scrutiny over how it is measured and calculated. In fact, in January 2012, DHS released a suggested revision to the longstanding definition of unmet need, which actually produces higher estimates of unmet need in the majority of

countries.[42] Similarly the definition of demand for contraception in terms of family size preferences has historically been central for justifying policy commitment to and resource investment in family planning and ensuring that this demand is met by an adequate supply through service provision.[43]

While this link of research to ***policy*** is necessary and important, we argue that it has limitations, not only because the policy environment remains polarized and challenging, but also because good policies alone do not always translate into effective action. It is equally important, and potentially more effective to undertake and synthesize research for the purpose of enhancing and refining ***programs*** that are being implemented on the ground. This type of analysis is beginning to emerge with an accumulating body of more rigorously evaluated interventions, and even more so with a recent systematic review, which serves to provide recommendations to program efforts from a strategic perspective rather than just assessing the effectiveness of specific components.[12]

Our research synthesis aims to add to and inform this body of work. We propose to not just document, but also better understand concepts such as demand and unmet need from the perspective of women, focusing on the social and contextual factors that shape their preferences and actions. As the research on broader trends suggests, it is generally the most disempowered women and those living in the most disadvantaged settings who have the highest fertility rates, lowest contraceptive prevalence, and lowest access to quality services. Gender biases are an inherent part of this disempowerment and disadvantage, and only by recognizing and addressing these barriers, can programs on the ground effectively facilitate these women's ability to exercise reproductive control.

Thus, a research synthesis focusing on gender, the demand for reproductive control, and programmatic implications is important not only for better understanding the needs and aspirations of millions of women in developing countries, but also as a strategic advocacy tool for garnering support and resources. Patterns of practical, effective, and replicable intervention strategies may be the surest way of ensuring that advocacy for resource allocation and rights reaches results-oriented donors and policy makers.

III. METHODS

In order to consolidate and assess the insights gained from the body of work that has been undertaken on gender and reproductive control from divergent perspectives including those with an intentional gender focus, we conducted a review of the literature prioritizing research and programs spanning the last 20 years. Our aim in reviewing the research literature was to document the areas in which the population and reproductive health field has gained a better understanding of what women want in terms of personal reproductive control and the barriers that they face in achieving their intentions. We undertook a complementary programmatic review to assess the strategies employed by initiatives on the ground to address women's needs, desires and barriers to exercising reproductive control. Here, in order to assess the implications for individual women's lives, we deliberately limited our attention to field-based programmatic interventions rather than macro-level policy changes.

The guiding questions for our review were:

- What are the major trends and gender-based barriers to women's use of contraception and abortion?
- What social and gender constraints shape women's reproductive preferences and ability to act on intentions?
- What are the key solutions that have been identified and employed to address these constraints? How well and how widely have these been implemented?

Our review is illustrative rather than comprehensive, and it focuses on the intersection of family planning, abortion, gender, and reproductive health issues, drawing on three principal sources:

1. Review of over 263 articles from the literature in peer reviewed publications.

2. Review of over 65 programmatic documents and evaluations from the "grey" literature.

3. Technical consultation with 20 international experts in the field of population, family planning and reproductive health.

While this was not intended to be a systematic review, our methods included keyword searches of databases of grey and published literature in: PubMed, JSTOR, USAID's Development Experience Clearinghouse, Google, Google Scholar, and EBSCO Host. In order to contextualize the findings within the period since the ICPD 1994, the search was primarily limited to articles and studies published in the mid-nineties and beyond. As we identified the main gender barriers to women's use of contraception and abortion, we specifically looked for interventions addressing those barriers (such as social norms, male involvement, or provider training). The search generated articles and studies from over 52 countries. The intervention strategies identified through our search were then categorized through iterative inductive coding by the types of barriers they targeted and the type of strategies they employed.

Through this analysis, we first defined and classified women's "demand" for reproductive control and the barriers determining this demand at each level of our classification. We vetted our definition and classification through a day-long technical consultation with thought leaders in the field of family planning and reproductive health. In addition to presentations and discussions, consultation participants mapped the relevant programs and research initiatives carried out by their organizations to identify and address the gender barriers that hinder women from reaching each level of demand as defined here.

After the consultation, we again revisited both the literature and our conceptualization in order to address important gaps, and further deepen and refine our analysis. These processes helped us to consolidate and focus on the most relevant themes emerging from the range of research and programs we have covered in our review for this paper.

IV. WOMEN'S DEMAND FOR REPRODUCTIVE CONTROL: A FRAMEWORK

The body of research included in our review shows an increasing trend towards the exploration of a broader range of barriers that women face in planning their childbearing. These include an array of barriers to autonomously defining their reproductive intentions, as well as accessing and using contraception. For example, there has been a surge in research on the causes of unmet need, and analyses of contraceptive use and abortion access have begun shifting away from measuring levels of knowledge to assessing rates and reasons for method failure, discontinuation, or lack of service access. There is a growing recognition that a better understanding of individuals' reproductive aspirations and the barriers to realizing those aspirations is a prerequisite to improving policies and programs.[18,44,45]

An emerging conclusion from this research is that childbearing preferences and the practice of contraception and abortion reflect not only individual attitudes and experiences, but also social relations. Moreover, studies find that lack of access to services is cited less often as a reason for unmet need than other barriers, such as lack of knowledge, social opposition and health concerns.[11] These findings suggest that a traditional supply versus demand perspective of the factors determining women's childbearing behaviors may not be the most effective formulation for considering if, when, and how women exercise reproductive control. As traditionally framed, supply entails the policy environment, service infrastructure, and commodities, while demand comprises factors related to the individual user and her social, cultural, and economic context.[46,47] This division is generally juxtaposed with the idea that fertility preferences are expressive of demand while the practice of family planning is the satisfaction of that demand through provision of supply.[43] In fact, smaller desired family size is often the "demand side" justification for advocating for "increased supply" of family planning services.

Research is showing, however, that for individual women, aspirations, intentions, and the ability to act are often overlapping decision-points all of which have a strong basis in personal and social circumstances and power relations.[48,49] Thus, demand for contraception and abortion is not just about women's desire to limit or space childbearing; it is also about wanting and being

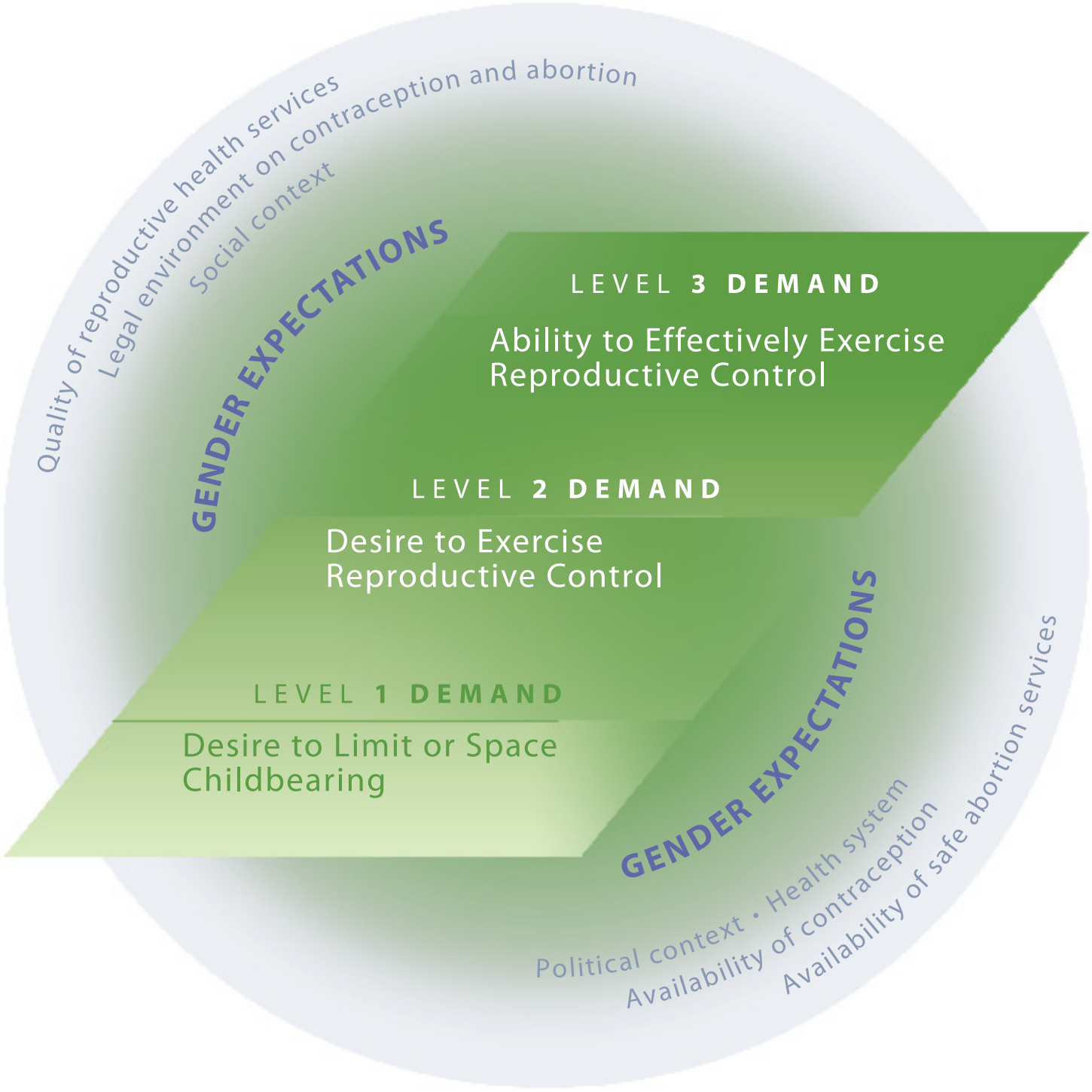
able to use these means of reproductive control. To the extent that we consider the concept of demand limited only to childbearing desires, and consider women's achievement only a supply side issue, we miss the critical intervening factors in a woman's life that either hamper or facilitate the translation of those desires into action. Research also indicates that as women's role in reproduction is usually fundamental to social and power relations, gender barriers are a core aspect shaping each stage of these preferences and intervening social and structural factors.[50,51]

While the nuances to women's demand are limitless, we offer three key anchor points for understanding demand through a gender lens. Below, we present a conceptualization of women's demand for reproductive control, embedded in the broader social, economic, and political conditions that shape reproductive preferences and behavior, but emphasizing in particular, the gender norms and expectations influencing these decisions.

As illustrated in Figure 1, we conceive of women's demand for reproductive control at three levels that are interconnected as a continuum. The first level is comprised of women's ***desire to limit or space childbearing***. This level coincides with the traditional definition of demand in terms of childbearing preferences, although our classification explicitly incorporates not just the number of children desired, but also the timing, as well as preference for one sex over another. The second level of demand consists of women's ***desire to exercise reproductive control***, which may or may not automatically follow the desire to limit or space childbearing. For example, women may not connect pregnancy prevention with specific contraceptives, may not know enough about options to consider using them, or may not be comfortable with or accept the idea of using contraception or abortion. The third level of demand is women's ***ability to effectively exercise reproductive control***, where demand is shaped by women's active efforts to seek and use contraceptive or abortion services. While this level in particular interacts with supply side factors, women's personal and social circumstances are critical in shaping the intensity, continuity and efficacy of their motivation and steps in seeking out reproductive control options. As such, they must be considered from the perspective of women's demand. Generally, achieving one level of demand tends to be a precondition for reaching the next level, although bypassing of a level or movement from a higher to lower demand level can also occur. Women do not necessarily progress from one level to another over time, but may experience different levels of demand throughout their life course.

As our focal point, we depict gender norms and expectations as key proximate drivers of demand for reproductive control. As Figure 1 reflects, we recognize and acknowledge that gender inequalities are embedded in a set of broader contextual factors, including social, economic, and political conditions that shape childbearing desires and options for not just women, but couples and societies more broadly. These broader factors also include the policy environment and supply side factors such as the legality, availability and quality of contraceptive and abortion services or the health system and infrastructure that deliver such services.

Figure 1


Quality of reproductive health services
Legal environment on contraception and abortion
Social context
GENDER EXPECTATIONS
LEVEL 3 DEMAND
Ability to Effectively Exercise Reproductive Control
LEVEL 2 DEMAND
Desire to Exercise Reproductive Control
LEVEL 1 DEMAND
Desire to Limit or Space Childbearing
GENDER EXPECTATIONS
Political context • Health system
Availability of contraception
Availability of safe abortion services

V. GENDER BARRIERS TO THE THREE LEVELS OF DEMAND

Our review of research indicates that gender barriers are a significant subset of all demand-side barriers. They consist largely of constraints influenced by gendered roles, norms, expectations, and relationships that shape a woman's childbearing preferences and her desire and ability to use contraception or abortion. Below, we discuss the insights from recent research regarding the gender barriers shaping each of the three levels of demand depicted in Figure 1.

LEVEL 1 Demand and Gender Barriers

At this initial level, a woman's demand for reproductive control reflects whether she considers limiting or spacing her births to be desirable, possible, or in her best interest. This calculus is the product of a number of powerful and mutually reinforcing influences, among them, whether women perceive fertility to be within the realm of conscious choice and their control.[52] Here we consider the extent to which cultural expectations about motherhood as an essential and required role for women can constrict women's sense of choice and control. As Table 1 below indicates, there are three main pathways through which gender norms and expectations translate into this constriction for women: pressure for large families, son preference, and pressure to prove fertility.

Table 1

LEVEL 1	Desire to Limit or Space Childbearing
	Gender Barriers to Reaching Level 1 Demand: *Women derive social and economic status by conforming to cultural expectations about womanhood and motherhood* • Women have a preference for or feel pressured to have large families • Women have a preference for or feel pressured to have sons • Women feel the need or pressure to prove fertility soon after marriage and/or puberty

Preference for or pressure to have large families

An extensive body of literature documents the demographic, social, economic and cultural factors motivating both men and women to want large families, including high mortality rates, wealth flows from the younger to the older generation, need for security and insurance against risk and old age, and the status, rituals, and prestige associated with large families.[53,54] Studies have shown that in high fertility settings, both men and women tend to want large families, although their reasons may differ.[55] For women, gendered norms and institutions shape demand mainly by emphasizing the central importance of motherhood, and in particular, by ensuring that their social and economic status—even survival—is derived from bearing many children. Where motherhood holds such central importance, women are keenly aware of the cultural dictates regarding what is expected of them in terms of childbearing. Their value in marriage, treatment and security in their marital homes, and risk of divorce or abandonment can all be heavily dependent on meeting prescribed expectations.[56,57] Gender norms may also require men to prove their virility and manhood by fathering a large number of children, with accompanying social sanctions in the form of stigma and ridicule in the case of failure to do so.[18] Thus, both on their own, and because of pressure from husbands, families, and society, women set the metric for their childbearing in accordance with these social expectations.

DHS data indicate that desired family size is now between 2 and 4 children in much of Asia, North Africa, Latin America and the Caribbean, indicating that in many places barriers to desiring fewer children have been substantially overcome through a combination of socio-economic, policy and programmatic change that has prevailed over the last few decades. Wanted total fertility rates (WTFRs) in more than half of the surveyed countries in Asia and North Africa are below replacement level. It is also noteworthy that in many countries where fertility declines had begun in the 1980's, the past two to three decades have shown a trend toward universalization of lower ideal family size. For example, in Brazil the proportion of women with 2-3 children who wanted no more children went from 86% in 1986 to 98% by 2006, and in Bangladesh, this proportion increased from 80% to 89% between 1993/4 and 2007. Other data suggest that less educated women in Asia are increasingly desirous of having smaller families. Thus the historical differentials by education in family size desires, and subsequently, fertility have also shrunk.[58] There is little in-depth research on how gender dynamics and shifts in family size desires have interacted in the large number of countries where over the last half century, men and women have shifted to wanting significantly fewer children than their predecessors only a generation earlier. However, emerging evidence indicates that the acceptability of smaller families requires redefining motherhood in terms of quality rather than quantity of children, but this is an area that could benefit considerably from further research.[59]

In contrast to many parts of the world, desired family size continues to be higher in Africa, and especially in countries like Chad and Niger, where women report wanting over 9 children on average.[58] At the opposite extreme from Asia and Latin America, 7 of the 17 countries in Western and Central Africa have WTFRs above 5.0. [58] There is considerable documentation indicating that in West Africa—and to a lesser extent in East Africa—having many children continues to be critical to a woman's identity, as well as her social, and economic standing. This normative prescription remains an important contributing factor to continued high desired family sizes in Africa.[60,61] A critical analysis that is lacking is whether gender relations in Africa present a unique scenario, or whether the persistence of these norms is due to the lack of social, economic, and programmatic factors that were responsible for a normative shift in other settings despite similar constraints of gender inequality.

This question is also important for several Middle Eastern and Asian—mostly Islamic—settings where desired family size has been stagnant at around 3 to 4 children for the last two decades. There is evidence that motherhood is a defining feature for women's identity in countries such as Egypt (desired family size at 2.9 since the early 1990s), Jordan (desired family size at 4.2 since the mid-1990s), and Pakistan (desired family size at 4.1 since early 1990s).[62] Further research is needed to better understand the cultural, religious, economic and political factors that contribute to the persistence of a minimum of number of children being essential to defining motherhood in these settings.

There are some signs of an emerging shift in the gender dynamics around childbearing desires in several African and Middle Eastern countries, although it is not yet clear what these may signify for the actualization of these preferences. Most interestingly, there is now a large gap in desired family size for men and women in some African settings. For example, the 2005 DHS data show that in Guinea, the average desired number of children was 5.9 for women compared to 8.8 for men, and similarly, in Senegal, women wanted only 5.7 children on average, compared to 8.3 for men.[58] These very large differences are historically unusual since most research has tended to find relatively low levels of discordance in male and female preferences, especially in high fertility settings.[54,55,63] A gender gap in family size preferences, albeit a smaller one than in sub-Saharan Africa, is also emerging among younger cohorts in Middle Eastern settings with stalled fertility levels, such as Egypt and Jordan. Both young men and women desire fewer children than older cohorts, but unlike the past, young women's desired family size is now smaller than men's. Storey et al. (2008)[64] find that young women in Jordan wanted 3.2 children on average compared to 3.7 for young men, and Harbour (2011)[65] finds that in Egypt 67% of young women wanted three or more children compared to 83% of men. It will be important for researchers to understand how these differentials are resolved, both in terms of the direction of the resolution and the mechanisms through which it occurs.

Preference for or pressure to have sons

As with the pressure and preference to have a certain number of children, women are also influenced by social norms regarding the sex composition of the family they desire.[18,54,63] There is extensive documentation of the reasons for strong son preference in East Asia, South Asia, and to a lesser extent in North Africa. These include the economic advantages, social status, and ritualistic importance that sons present for their families.[44,66] Studies also document the extreme pressure that daughters-in-law in Asian countries such as India, China, and Pakistan, have historically faced to produce sons. Given the importance of sons for inheritance, family continuity, and economic success, women's failure to bear a minimum number of sons frequently threatens their social, financial, and physical well-being.[67,68]

In recent years, the implications of son preference for reproductive control that have garnered the most attention have been those related to sex selection in settings with low and declining fertility levels such as China and parts of India. There is significant accumulated evidence indicating that the combination of low fertility, availability of technology, and son preference actually intensifies the motivation to use reproductive control for ensuring the birth of at least one son.[69] However, there is equally important research documenting the implications of son preference in higher fertility settings. In very high fertility settings, the additional impact of son preference may be minimal since desire for reproductive control is already lacking, although the two motivations often comingle. For example, in Nigeria where a man's perceived virility is measured by the number of sons he produces, son preference is a contributory factor to very high fertility desires and very low demand for reproductive control.[66,70]

The impact of son preference on reducing the demand for reproductive control is thought to be greatest in societies transitioning from high to low fertility since women who have reached their desired family size may not stop having children if they have not reached their desired number of sons.[71] And in fact, several studies document higher parity progression after the birth of daughters as compared to sons in countries where sons are preferred. With data from the early 1990's, at the peak of India's fertility transition, Arnold et al. (1998)[72] found that women were not only more likely to continue childbearing after the birth of a daughter as compared to the birth of son, but that the subsequent birth interval was shorter as well. In a recent analysis of 159 DHS surveys from 65 countries, Filmer et al. (2008)[73] find that Central Asia and South Asia show the strongest pattern of continued childbearing due to son preference, followed by a smaller, but still significant, effect in Middle East and North Africa, and a yet smaller effect in East Asia .

Need or pressure to prove fertility soon after marriage and/or puberty

In emphasizing the importance of motherhood for women, gender norms can influence not just the desired number and sex composition of children, but also their timing, and in particular, the timing of initiating childbearing. Historically, marriage

systems in many countries—but especially Asia and Africa—have been set up to not just maximize fertility, but also to ensure early childbearing. Marriage took place at puberty or even earlier, and a young bride's status and security in her marital home were determined by whether or not she bore children soon after consummation. While this pattern has shifted significantly in East Asian countries with much later marriage and childbearing, it is still common in West Africa, South Asia, and parts of East and North Africa. For example, countries such as India, Nepal, Mali, Senegal, Yemen, and Uganda continue to have significant to very high rates of early marriage and early childbearing.[74,75,76]

In these and other countries, women and men continue to face strong social pressure to prove their fertility as soon as possible after marriage. Young women face very real concerns of divorce, harassment, stigma, and the possibility of husbands or in-laws considering a second wife as the best option should they fail to bear a child within 2-3 years after marriage. For example, in India, Barua et al. (2009)[77] find that women who are unable to conceive are humiliated, and may expose their husbands to "ridicule and innuendos". In other settings, such as South Africa, young women may use pre-marital pregnancies to prove fertility and thus increase their marriageability, both of which are important requirements for social and economic survival and mobility.[78,79]

Thus, despite the fact that across most countries, younger cohorts want fewer children than older cohorts, and that both age at marriage and age at childbearing have also been increasing over the last two decades, desired childbearing during adolescence continues to be common in several countries in Africa and South Asia. For example, in a five country study in Africa using DHS data, Ringheim and Gribble (2010)[80] show that at least 40% of 18 year-old women had already become mothers or were pregnant. In countries such as Mozambique and Mali, this percentage was 60%, and most pregnancies in these settings were reported as intended. Research indicates that strong injunctive norms against delaying a first birth after marriage continue to operate and have been difficult to dislodge in countries with high rates of adolescent childbearing. For example, efforts to delay first births in the Indian states of Bihar and Jharkhand have met with little success given all that is at stake for a young bride.[81] Reflecting similar norms, in Jordan, only 12% of ever-married women were found to approve of family planning use before the first birth, despite generally strong support for contraceptive use overall.[64]

LEVEL 2 Demand and Gender Barriers

Gender barriers continue to present a constraint to a significant proportion of women in the developing world from reaching demand at level 1, and crossing the important threshold where childbearing is within the domain of conscious personal choice. However, as a result of multiple reasons, including socio-economic changes and the desire for "quality" children who will be successful in modern economies, the vast majority of women in the developing world has crossed this threshold and wants to exercise reproductive control to have smaller families with healthier timing and spacing of pregnancies. And yet, a significant proportion of these women do not utilize reproductive control options, or do so sub-optimally, resulting in fairly high rates of unwanted pregnancies and births. The UNFPA estimates that 4 in 10 of the 186 million pregnancies that occur in developing countries each year are unintended.[82]

Research on the causes of unwanted pregnancies and births, unmet need, and why uptake of specific programmatic or technological approaches has not increased as expected sheds light on many of the gender barriers women face in reaching demand for reproductive control at levels 2 and 3. A number of studies using DHS, qualitative, quantitative and ethnographic data have come to a similar conclusion; the main contributing factors to women not using contraception despite the desire to postpone or stop births include lack of knowledge, misinformation, fear of side effects, infertility and health consequences, and concern about social and familial disapproval.[45,83]

In analyzing these reasons from a gender perspective, we attempt to disentangle those barriers that are more normative and structural in nature and reduce women's motivation to seek contraception and abortion (demand at level 2) from those that are more relational in terms of power dynamics, and so prevent women from acting effectively even when they are motivated (demand at level 3). At times, of course, this line is difficult to draw as the demand for reproductive control is indeed more of a continuum rather than discrete steps. However, we believe that this analytical distinction helps to shed light on the needs of different categories of women and points to potentially different courses of action in addressing these gender barriers and helping women to realize their demand at level 2 and at level 3.

At the second level of demand, a woman not only wants to prevent or delay pregnancy, but consciously considers modern methods of contraception and abortion as viable ways of achieving her intentions. Demand at this level is very much about a woman's mindset and the active connection it makes between her childbearing goals and specific method options being suitable for her purposes. As Table 2 illustrates, women's demand at level 2, or her desire to exercise reproductive control, is often hindered by gender barriers on three fronts.

Table 2

LEVEL 2 **Desire to Exercise Reproductive Control**

Gender Barriers to Reaching Level 2 Demand: *Women fear the potential social and health consequences of using family planning or abortion*

- Limited knowledge and understanding of methods and reproduction
- Cultural opposition to contraception and abortion (based on religious beliefs or fear of infertility and side effects)
- Fear of social stigma and disapproval

Limited knowledge and understanding of methods and reproduction

Research over the last fifteen years has repeatedly documented that women cite lack of knowledge and information as one of the major reasons for their non-use of contraception.[84] Paradoxically, studies also indicate that "knowledge" of contraception as defined in most surveys—ability to name at least one form of family planning—has improved dramatically in recent decades, and is nearly universal in most countries. Recent cross-country analyses of the DHS show that 85%-100% of women know of family planning methods and that knowledge is a declining reason for women's non-use of contraception over time.[26,85]

Country-specific research suggests that in reporting lack of knowledge as a reason for non-use, women mean much more than the ability to name one or two methods of contraception, and that better measures of knowledge may be required to accurately capture cross-national patterns and trends over time. For women, knowledge often means: an understanding of how a method works; its potential side effects; how the duration and mechanism of a method makes it appropriate for their needs; where or through whom it can be obtained and at what cost; and what is required of them for consistent and correct use. Data indicate that in most settings, women are not aware of multiple method choices and the tradeoffs between them. In fact, there are few settings—including industrialized countries— in which women are well informed on all these aspects.[45,86] By lack of knowledge, women also seem to be indicating that they are missing an understanding of how exactly sex, reproduction, and contraception interconnect and how their bodies work. Lacking such an understanding, women—and especially adolescent girls—may not be effectively assessing their risk of getting pregnant when they have occasional or infrequent sex or when they rely on periodic abstinence without appropriate knowledge of the fertile period.[26]

Gender norms and systems underlie women's limited understanding of sex, reproduction and reproductive control options. Sexual double standards in many cultures mean that it is considered inappropriate for women to learn too much about matters related to sexuality. Thus, the way that knowledge is disseminated and transferred through communities often excludes women, or limits them to women's networks that may be equally ignorant or misinformed.[87,88] This is especially true for adolescent girls, who are likely to be deprived of meaningful information on reproduction and contraception through a combination of efforts to preserve their "innocence," and ineffective learning through their limited networks.[89]

For women in South Asian, Middle Eastern and African settings, moreover, gender disparities in formal schooling continue to be a fundamental structural factor in limiting effective learning about sex and contraception. In countries like Yemen, Pakistan, Benin, and Eritrea, not only are overall literacy rates for women considerably lower than for men, enrollment and retention of adolescent girls in primary and secondary schools continues to lag behind the rates for boys.[90] For example, the Ishraq program in Egypt found 26% of girls to be out of school during adolescence.[88]

Cultural opposition to contraception and abortion

In many societies where the use of contraception is not widespread, resistance to modern contraception is common and takes the form of outright opposition for religious, cultural, and health reasons.[7] Many of these reasons have a strong element of gendered expectations built into them, and in fact, the challenge to existing gender constructs is usually one of the underlying reasons for the strong cultural opposition. For example, much qualitative research in Africa has documented deep-seated resistance to the use of modern contraception, and there are a number of Islamic countries –including Pakistan, Tanzania, and Egypt—where similar findings prevail.[57,60,91] In Catholic Latin America, a similar cultural barrier exists against abortion even as historical opposition to contraception has become less prominent with rising CPR.[21,92] A central tenet to religious and cultural dictates that consider contraception or abortion to be wrong is that reproductive control options interfere with natural or God-given processes, including a woman's expected role in bearing children.[93]

Very often, in women's daily lives this type of broader prohibition against violating nature gets translated as fear of modern contraception or abortion because of their perceived invasiveness. The most common fear is that hormonal contraceptives will result in infertility. As we have already noted, this is a very serious concern for women and their families, since in many societies the consequences of a woman not being able to bear children are likely to be devastating. An increasing number of studies document this concern in Sub-Saharan Africa, South Asia, and the Middle East. A study in Mali found that many women fear that the pill and intrauterine devices (IUDs) could make them sterile[94], while in Nigeria, adolescents refrain from using contraception

because they fear it could have adverse effects on future fertility.[95] A systematic review of 12 qualitative studies in seven countries found fear of infertility to be one of the most commonly cited reasons for non-use of contraception.[96]

Many women cite fear of side effects as a reason for their non-use of modern methods of contraception; these include weight gain, headaches, and nausea, among others.[97] Similarly, the amenorrhea associated with several modern methods not only violates nature, but creates suspicion among family and community members, leading to poor treatment or ostracization of the woman experiencing it. As one study noted, "where amenorrhea in young women is perceived as evil, any contraceptive likely to induce this complication will be rejected not only for fear of pregnancy but also for this cultural reason".[18]

Fear of social stigma and disapproval

In the cultural domain, a related gender barrier to women's desire to exercise reproductive control is their fear of being stigmatized as sinful, sexually promiscuous, or irresponsible.[98] Since most societies practice varying degrees of a sexual double standard, this type of barrier is much more widespread than the lack of knowledge or the fear of violating nature. Studies focusing on specific methods have provided us with some understanding of why women shy away from modern contraceptives and the associated social perceptions that these methods raise about their sexuality. The most commonly studied method in this regard is the condom, and its well-known association with casual, promiscuous, or transactional sex, leading both men and women in more permanent relationships to not consider condom use as an option.[99,100] In Lebanon, Kulczycki (2004)[101] finds that fewer than 7% of married women use condoms because they see them as a method for extramarital and transactional sex. A study in Angola found that among 15-24 year olds, being married or in a cohabitating relationship was negatively associated with condom use.[102]

While there is now considerable research on sexuality and stigma related to HIV/AIDS, research on sexuality and stigma related to the practice of contraception and abortion is still in its infancy.[103] The social stigma for women associated with abortion is well known from anecdotal documentation, but only recently has it begun to be examined more systematically. Kumar et al. (2009)[103] find that across cultural contexts, women seeking abortions are frequently characterized as "sinful, selfish, dirty, irresponsible, heartless or murderous". Recent literature is also beginning to document women's fear of being stigmatized as promiscuous and irresponsible by providers of emergency contraception.[98] These labels tend to be especially repressive in dampening motivation for using contraception or safe abortion among adolescent girls because of their high degree of sensitivity to social sanctions. For example, studies in Nepal, the Dominican Republic, and India have found that adolescents are reluctant to go to clinics and pharmacies to obtain contraceptives because recognition by the providers or others in their social circle would negatively label them as sexually active.[33,104,105]

Research has tended not to focus specifically on the gender aspect of level 2 barriers, considering it to be part and parcel of large cultural and structural constraints that prevent contraception or abortion from being viable options for reproductive control. However, a gender lens might be key to further research on questions in this area. For example, is there a threshold level of family planning use at which contraception becomes culturally acceptable in a society, and does this threshold differ by the rigidity of a society's gender system? Moreover, it is noteworthy that while knowledge and cultural barriers to level 2 demand are most frequently characteristic of societies with low prevalence levels, the double standard and stigma related barriers are more common across a wider range of societies.

LEVEL 3 Demand and Gender Barriers

Despite the challenges at levels 1 and 2 of demand, increasing proportions of women across the world are crossing the threshold of these cultural and structural barriers to an understanding and approval of reproductive control options. DHS surveys show that there have been substantial increases in women intending to use contraception beyond the next year. For example, in Kenya, this proportion has increased from 8.4% in 1998 to 55% in 2008; in Egypt from 19% 1995 to 63.7% in 2008; and in Bolivia from 9.5% in 1998 and 52.7% in 2008.[62] However, even as normative and structural barriers to the acceptability of contraception as a way of preventing unwanted pregnancies become less salient for women in several settings, "relational" barriers gain greater prominence. When women want to use contraception or abortion to achieve their childbearing intentions, gendered power relations on a number of fronts undermine their ability to act on this desire. As shown in Table 3, these include power dynamics in the family and community, as well as in women's interactions with service providers. They also include women's limited power as consumers in the reproductive health marketplace.

Table 3

LEVEL 3	Ability to Effectively Exercise Reproductive Control
	Gender Barriers to Reaching Level 3 Demand: *Women are constrained by social and family power dynamics from acting on their desire at all or can only do so sub-optimally*
	• Disempowerment in the family and community – Limitations on mobility and resources – Limited communication, decision-making, and active opposition • Disempowerment in relation to service providers • Disempowerment as consumers in the marketplace and the health system

Disempowerment in the family and community

A wide range of research has documented that there is a strong link between a woman's level of empowerment in the domestic and social spheres and her ability to make and act on reproductive decisions.[23,106,107] Women's disempowerment in the family and community is often manifest in a number of ways: limited mobility or lack of access to public spaces; lack of resources; lack of decision-making authority and limited communication with powerful family members; and active interference, threats, or violence.[57,107] All of these factors play a role in women's ability to actively and effectively seek reproductive control options.

Limitations on mobility and resources

Limitations on women's mobility and taboos against their appearance in public spaces have been documented largely for South Asian, Middle Eastern, and Central Asian settings. A significant body of literature indicates the extent to which restrictions on women's mobility in India, Pakistan, and Bangladesh are connected to their limited access to contraception and abortion services.[107,108,109] For example, studies from Bangladesh, where women's mobility remains constrained, were contributory to Bangladesh's strategy of structuring the family planning program with door to door contraceptive delivery.[110,111] There is evidence from research from Pakistan and Tajikistan that the practice of *purdah* or seclusion, norms against women's presence in public spaces, or other restrictions on their mobility can pose a direct barrier to women seeking reproductive health services.[111,112]

What research has yet to do is estimate the degree to which the limitation in women's mobility in different forms presents barriers in other settings. For example, there is increasing documentation that across the developing world, and especially in Africa and parts of Asia, women are significantly more disadvantaged than men in accessing transportation, and that their mobility is limited by their "carrying" burden and time poverty due to heavy labor demands.[113] There are few estimates of the relative contribution of this type of mobility constraint to women's active demand for accessing contraception and abortion.

Similarly, although there is a broad understanding that women's limited control over household income and assets often presents a constraint to women achieving their goals, the research on this posing a constraint to women's ability to access reproductive control options is more limited.[114,115] Women in many settings do not have financial autonomy and ready access to or control over cash of their own to purchase contraceptive supplies or services.[33,116] Some studies in recent years have documented the importance and necessity for women to obtain financial and decision-making support from husbands, partners, parents or other elders in order to access safe abortion services, with the alternative being reliance on unsafe and/or unreliable options.[57] Whether financial dependence pushes women toward less effective or suboptimal contraceptive options is less often investigated.

Limited communication, decision-making and active opposition

Limitations on women's ability to make autonomous decisions about accessing and using contraception and abortion are well recognized in the literature. Research from Africa documents that decisions about childbearing and the use of contraception and abortion are frequently the purview of not just men and senior family members, but community leaders as well.[57] For example, a study from Tanzania shows that decisions about family planning, are made not by women or their husbands, but by village elders.[60] In South Asia, the role of not just husbands, but mothers-in-law is also well documented.[7] Urban women in Pakistan are more likely to use family planning if their mothers-in-law have discussed it with them as an option for their families.[117] Similarly, research in Jordan revealed that women face significant pressure from their husbands' mothers to bear children, and that young brides are especially vulnerable to such pressure as their status in their husbands' families is not stable until they prove fertility.[118] To the extent that women's childbearing desires or fertility preferences may differ from these more powerful household or community members, they are constrained from accessing and using contraception or abortion services as they desire, or can only do so suboptimally at considerable personal and social cost.

Within this body of work, lack of communication with and opposition from husbands has received the most attention, spurring an entire intervention area on "male involvement." In many settings, lack of communication tends to be due to social constructs of male dominance or the idea that sexuality is a taboo subject for even private discussion between spouses. Equally, studies suggest that in societies where extended family relations dominate over conjugal relations, the lack of spousal communication can cause women to overestimate their husbands' desire for more children or their opposition to family planning, thus creating a barrier to using specific methods.[10,119,120] Studies also show that spousal communication and support may be essential for women whose husbands serve as important intermediaries for actually getting and using specific methods or services. For example, Malhotra et al. (2003)[121] find that in India, women who communicated with their husbands about unwanted pregnancies were much more likely to attempt an abortion through a safe and effective method than women who did not.

Spousal communication about family size and contraceptive use can be an effective pathway for ensuring women's ability to practice contraception or abortion, but there is no systematic analysis of the types of settings or subpopulations where communication alone can overcome the barriers to women's demand for access and use. In many situations, lack of communication is reflective of larger power dynamics that indicate deeper and more fundamental differences in women's desires and interests compared to the desires and interests of their partners and family members.[48,49,122] There is less research fully investigating the limitations of male involvement and communication as a strategy

when the central issue is real rather than perceived differences. And in fact a large body of research documents that there may be good reasons why women do not communicate their desire to use reproductive control options with husbands or other powerful family members. In many cases, women fear active opposition, interference and even violence anticipating the difference in their views and those of husbands, in-laws, etc. Husband's opposition as a major reason for non-use of family planning has been identified by several in-depth studies, in a wide range of country contexts, including India, the Philippines, Guatemala, Nepal, Egypt, and Pakistan.[7] Similarly, DHS data across numerous countries found that one of the main reasons offered by those who had never used contraception for not intending to use a method in the future was husband's objections to contraception.[123]

It is a sign of high demand among women that they often exercise reproductive control surreptitiously due to fear of opposition by husbands, partners, or family members. For example, in Nepal women who found it difficult to communicate their intention with husbands were much more likely to use or attempt to use contraception covertly.[124] Studies suggest that attempts by men and family members to control, limit, or sabotage women's efforts to realize their reproductive intentions is a major reason why women select "invisible" female controlled methods like injectables and IUDs, since these cannot be easily detected by their partners and can thus be used covertly.[125,126] One study estimated that covert contraceptive use accounts for between 6 and 20 percent of all current contraceptive use in Zambia[127] and another found that about 7.5% of women in Ethiopia use contraception in secret and 26% use contraception without their partners' full knowledge.[128]

On the other hand, where women need to or want to rely on male controlled methods—because of the need for dual protection, or desire for non-hormonal options, for example—men's active opposition presents a bigger challenge.[129,130] There is substantial documentation about men's reluctance to use condoms, especially with wives and steady partners, due to the perception that pregnancy prevention is acceptable for casual sex, but not otherwise.[131,132] For example, in Madagascar, men's resistance to condom use and women's fear of repercussions if they were to use female controlled methods covertly, meant that women were not using any contraception despite the desire to do so.[45]

That the fear of interference and violence in acting contrary to the wishes of husbands, partners, and family members is very real for many women and has been documented in studies across a variety of settings. For example, women participating in the Navrongo family planning program in Ghana faced significant active opposition and violence from men and extended family members for their use of family planning.[133] Physical abuse and reprisals for contraceptive use pose a substantial threat to women in the Ghanaian culture because of deeply embedded expectations that women will bear children in exchange for bridewealth and that contraceptive use may signify their being unfaithful.[110,134] In a study in Jordan, the authors

find that 20% of women in their sample reported some form of interference with their attempts to avoid pregnancy, with husbands and family members exercising either refusal or sabotage to prevent women from using contraception effectively.[135] Research also suggests that women who are in relationships with a history of physical abuse are less likely to use contraception or access abortion services in the case of unwanted pregnancies.[108,136]

Disempowerment in relation to providers

While in many respects the delivery of contraception and abortion services is a supply side issue, the imbalance of power relationships between providers and their female customers is an important demand side barrier affecting women's ability to exercise reproductive control. This imbalance of power is gendered in two important ways. First, is the providers' perception and treatment of women as minors who require permission or decisions by others in order to make reproductive choices. Second is the providers' tendency to connect service delivery options with their personal judgment of women's morality, especially in the sphere of sexuality. The barriers thus imposed on women's ability to reach level 3 demand for reproductive control can be intentional or unintentional.

Intentionally imposed barriers may include requirements of spousal or parental consent to obtain family planning or abortion services, which limit women's ability to act on their own behalf. [57] Studies, for example, show that providers may require spousal consent for IUD insertion, tubectomies, and especially abortions, in many cases even when the law does not specify any such requirement. Interviews with 97 providers in Ghana revealed that half of the providers restricted clients' access to contraception due to the need of spousal consent.[137] Especially for women who are seeking such services covertly, the provider requirement is a strong demotivator.

Unintentionally, providers may be guided by their own cultural biases about what is appropriate for women and thus emphasize or eliminate reproductive control options without regard to their alignment with women's needs or desires. For example, studies show that providers may not offer oral contraceptives as an option to non-parous women because of the cultural association of hormonal contraception with subsequent infertility. Research in Nicaragua shows that providers do not provide three-month injectables to adolescents seeking family planning, despite this being an option that might be more appropriate and suited to their needs.[138] Conversely, other studies indicate that in countries such as India, providers—and the health system—have limited women's family planning options to sterilization in the belief that women cannot be relied on to practice temporary methods effectively.[139,140] A study in India found that more than 80% of doctors across six cities restricted clients' access to sterilization if they had low parity, were unmarried, young, or lacking consent of the spouse.[141] In Pakistan, Kenya, and Nigeria women were denied access to hormonal contraception on the basis of age, number of children, and marital status.[142]

There is also increasing documentation of providers confining service availability to women based on their judgment of women's morality and sexual behavior. A number of studies on adolescent reproductive health document that providers are reluctant to offer services to young women because of concerns about promoting promiscuity. Restriction of services to young women, or those the providers consider to have been irresponsible or morally corrupt, is especially common for abortion and emergency contraception. For example, despite the legality of abortion in South Africa, due to moral and religious reasons, providers refused to participate in or provide any part of abortion-related care—depriving women seeking this service of the option.[143] Similarly, recent research suggests that providers classify users of emergency contraception as "good" or "bad" users: women who use it frequently or in place of regular contraception are considered irresponsible, and, therefore, "bad" users.[144,145]

Disempowerment as consumers in the marketplace and the health system

A related but rarely recognized gender barrier to women's effective access to and use of contraception is the history and progression of the family planning field itself, which has seen women in developing countries primarily as beneficiaries, rather than as consumers. As increasingly large proportions of women in the world adopt smaller family preferences and actively seek reproductive control options, the demand for family planning is becoming so overwhelming that market forces should be aligning contraceptive technology and health systems delivery with women's expressed needs. The fact that market forces have been extremely slow to forge such an alignment is in part due to the lack of women's—and especially poor and marginalized women's—standing as consumers in the marketplace and the health system. Because the system has historically operated paternalistically, to benefit women rather than to cater to them, and because poor women have yet to collate and demonstrate their purchasing power, the technology and delivery of contraception has not kept pace with women's demand.[47]

This alignment has been slow in coming despite the fact that women across the developing world have been sending unmistakable signals of what they want and need in terms of contraceptive options for many years. Health concerns, side effects, inconvenience, and lack of suitability for personal situations are the main reasons that both women and family planning fieldworkers have been citing for women's non-adoption or discontinuation of various methods.[62,146,147] For most products and services, this type of feedback is exactly what marketing focus groups are aimed at yielding, and product refinement, research and development, and delivery systems regear to address these types of key barriers to demand. Of course, there has been product and service refinement in contraception and abortion options as well, but the pace and degree of innovation and adjustment has been slow in light of the massive surge in demand.

The paternalistic, "beneficiary" view of women—and their small role in the development and delivery of contraceptive technologies—has limited their consumer power on a set of products and

services so intimately connected to their lives.[17] One standard response to concerns about side effects has been that "women are making it up." Research in the last decade has provided more rigorous confirmation that health concerns are strongly felt and are not simply a convenient "excuse" on the part of the women to mask their disinterest or irresponsibility.[7] This realization has often been met with the attitude that women should expect to suffer some side effects and discomfort, that it is par for the course. Such a response shows little understanding of the implications of side effects and health problems for women's daily lives which may include much more than discomfort. For example, health consequences in terms of loss of labor productivity or interference with spousal sexual relations may be both financially and personally costly to women. In setting a low price point, the supply-side approach to this demand side barrier often fails to take into account this social, personal and economic cost that women bear when they practice specific methods with which they are not entirely satisfied.[148]

This relational imbalance of power between consumer and supplier is a major reason that contraceptive discontinuation and failure rates continue to be so high. In many countries one fourth (24.6% in Egypt and 26.3% in Indonesia) to one half (47.5% in the Dominican Republic and 56.5% in Bangladesh) of contraceptive users discontinue for one reason or another.[62] Research suggests that discontinuation and method failure contribute substantially to the total fertility rate, unwanted pregnancies, and induced abortions. In a study of 15 countries, Blanc, Curtis, and Croft (2002)[149] estimated that TFR would decrease by 20 to 48% in the absence of discontinuation, and that half of all unwanted pregnancies were attributable to discontinuation or contraceptive failure. It is noteworthy, moreover, that in a number of countries, the proportion of women who cite "other reasons"—besides desire to conceive, method failure, and side effects—for discontinuation continues to be very high, in many cases, higher than all the identifiable reasons combined. This suggests that researchers are yet to fully understand what causes women to give up on existing contraceptive options.

A similar murkiness exists about reasons for method failure. Rates of contraceptive failure continue to be significant, again indicating that existing options are not meeting the needs of women who are motivated to prevent pregnancies. In general, odds of failure were significantly lower for modern method users than for traditional methods. However, the very fact that significant proportions of women still use traditional methods when more modern and reliable options are available—and use them more consistently— is also indicative of the market's failure to understand demand.[86] A study in 12 countries of central Asia and eastern Europe found that the majority of abortions, a major method of birth control in these contexts, were sought by women using traditional methods and those with unmet need, indicating that traditional method users face increased likelihood of experiencing contraceptive failure.[150] The precise motivations for women, particularly

urban educated women, continuing to choose traditional methods despite widespread availability of modern methods is not well understood.

The most noteworthy aspect of gender barriers to demand for reproductive control at level 3 is how much more universal these barriers are across a range of developing (and developed) countries. As such, they may be especially critical in determining not only the societies where women exercise reproductive control, but which women exercise reproductive control in any society, even when service options are available. In the last two decades since the commitments to improving reproductive health were made in Cairo, the field has witnessed significant changes in these barriers, with those at the 2nd and 3rd levels increasingly becoming more common in a wider range of countries than barriers at the first level.

VI. PROGRAMMATIC APPROACHES TO OVERCOMING GENDER BARRIERS

Understanding the level of demand and related gender barriers for specific settings and subgroups of women can greatly facilitate effective programmatic action, making it more strategic, cost-effective, and impactful. A broad range of programs currently being implemented to improve women's access to and use of family planning and abortion services can be considered as contributing to improving demand for reproductive control. However, it is not clear to what degree they are intentionally addressing gender barriers per se. In our analysis below we review the programmatic literature to assess the extent to which the specific gender barriers discussed above are, or could potentially be, addressed by several of the interventions commonly deployed by the field of family planning and reproductive health.

Table 4

Programmatic Interventions for Increasing Reproductive Control

DEMAND SIDE	Mass media awareness campaigns
	Interpersonal communication (IPC)
	Development initiatives for adolescents
MIXED	Male & family involvement
	Social marketing
	Vouchers and referrals
SUPPLY	Community-based services and mobile outreach
	Training and education of providers

MAPPING **INTERVENTIONS** TO **STRATEGIES** AND **GOALS** FOR REDUCING GENDER BARRIERS

The literature suggests that a range of both demand and supply side interventions are currently being employed to increase demand for family planning and reproductive health services. Our review revealed eight intervention areas that can be considered relevant for increasing demand for reproductive control. As Table 4 shows, three of these interventions emerge largely from the demand side: direct awareness-raising through mass media, or through interpersonal communication of some type, as well as broader development initiatives for adolescents which increase demand more indirectly. Demand can also be increased through interventions such as male involvement, social marketing, and vouchers or referrals, which tend to be interventions that combine demand and supply side approaches by blending social or economic motivational factors with service delivery. Lastly, there are the supply side interventions which aim to increase demand through service improvement. These include better delivery mechanisms and better provider interactions.

It should be noted that there is a vast range of ***policy*** level interventions as well that can address gender barriers to demand for reproductive control, including legislation (e.g. legalizing abortion), regulations (e.g. approval standards for contraceptives), incentives (e.g. cash transfers), subsidies (e.g. contraceptive pricing), technology development (e.g. research on new contraceptive methods), health system reform, and even other development priorities such as infrastructure or education investments. However, in this paper we limit our review to ***programmatic*** interventions that directly connect with women on the ground in developing countries.

The literature suggests a few important trends with regard to programmatic interventions that are important to keep in mind when understanding their relevance to gender barriers and the three levels of demand we have outlined. First, while interventions have proliferated since the mid-1990s, many programs are poorly or sporadically documented, and comparability for others suffers from lack of shared definitions of concepts that many interventions are trying to promote, for example “quality” or “equity” in service delivery. Second, with a significant increase in integrated programming, standard evaluation approaches have not always been adequate for establishing impact, especially for distinct components of interventions.[151] For example, a recent systematic review of 63 evaluated programs finds that a wide range of rigor and methodologies has been employed in evaluating family planning programs. Interestingly, the systematic review identified twice as many interventions on the demand side that were evaluated (42), compared to those on the supply side (21). However, the level of rigor was greater for evaluations of supply side interventions.[12] This suggests that while more common, demand side interventions may be especially difficult to evaluate using current methods and indicators. In fact, evaluations have focused on only a limited number of impact measures from a demand perspective, the most common being increased contraceptive use, reduced unmet need, improved knowledge and/or attitudes, and increased discussion around

sexuality and family planning.[12] These measures cover only a small proportion of outcomes of interest raised when considering gender barriers to reproductive control.

In Table 5, we consider how this set of interventions may contribute to addressing the specific gender barriers at the three levels of demand in our framework by first mapping them to the strategies and goal they would have to incorporate at each level of demand. The primary goal of interventions in addressing gender barriers that prevent women from reaching demand at level 1 would be to change social and gender norms so as to **promote reproductive control as a conscious choice for women**. In particular, programs aim to change gender norms surrounding motherhood and what it means to be a woman and they may try to do so using three main strategies. The first strategy includes modeling aspirational attitudes not just about smaller families and valuing girls and boys equally, but also about the preference for women's roles as mothers who raise smaller, healthier, more successful families. A second strategy is **seeding generational change in norms and attitudes** about reproductive decision-making by focusing on adolescents, especially in preparing both boys and girls to acquire the above aspirations and attitudes early in life. A related and third strategy is to focus on adolescents by **addressing structural drivers** such as early marriage and lack of education, thus preempting the norms and conditions that support early childbearing. Since demand at level 1 corresponds most closely to the traditional definition of demand, not surprisingly, most of the relevant interventions for achieving this goal and strategies are demand-side interventions. They include mass media campaigns, IPC programs, adolescent-focused development initiatives, and to a lesser degree, initiatives to increase male and family involvement.

Table 5:

Goal, Strategies, and Interventions to Address Gender Barriers at the Three Levels of Demand*

LEVEL 1

Goal: Change gender norms to promote reproductive control as a conscious choice for women

Strategies

- Model aspirational attitudes and behavior among women, men, communities
- Seed generational change in norms and attitudes among adolescents
- Address structural drivers such as lack of education and early marriage

Interventions

LEVEL 2

Goal: Increase understanding and acceptance of reproductive control options

Strategies

- Raise awareness about reproductive control options and method selection
- Dispel negative myths about methods (e.g. side effects, infertility)
- Reduce stigma and create positive norms around reproductive control options

Interventions

LEVEL 3

Goal: Create an enabling environment for use of reproductive control options

Strategies

- Improve service availability and access
- Encourage support of reproductive control options from family gate keepers
- Enhance providers' ability to cater to women's need for specific products, services, and quality of car

Interventions

* Intervention icons correspond to the list in Table 4.
Interventions in parentheses are those that are applied less frequently to achieve goals at the given level

The goal of programs in reducing gender barriers at level 2 of demand is to increase the understanding and acceptability of safe contraceptive and abortion options for women. This goal involves improving knowledge and information regarding sex, childbearing, contraception and abortion, but it also involves creating attitudinal and normative change regarding women's sexuality and the acceptability of reproductive control options. Thus, interventions at this level involve **awareness raising** about methods and options more specifically, as well as messaging and communication to **dispel negative myths** about methods and **reduce the stigma** surrounding women's and girls' use of specific methods. Because knowledge creation and norm change are so important, most of the demand-side interventions relevant for addressing level 1 barriers are also relevant for level 2 barriers. Mass media and IPC campaigns and development initiatives aimed at adolescents are thus often in the mix. However, since the goal is to overcome opposition to contraception and abortion per se rather than just shift childbearing desires and related norms, several mixed and supply side interventions also have relevance. For example, male and family involvement and social marketing are frequently a part of intervention strategies addressing barriers at level 2, and supply side interventions such as community-based delivery and provider training are also employed.

At level 3 of demand, programs can overcome gender barriers primarily by creating an enabling environment that empowers women to more confidently and effectively make and implement reproductive decisions, and optimize their use of reproductive control options. This can be accomplished by **improving service availability and access** and addressing many of the resource, transportation, and mobility constraints women face. It can also be accomplished by **encouraging family gatekeepers**—husbands, in-laws etc.—**to be supportive** of women's needs and choices, especially in actually accessing family planning and abortion services. An additional strategy would be to **enhance providers' ability to cater to women's need** for specific products, services, and quality of care. Since this range of barriers to demand is most intimately connected with the supply side, not surprisingly, most of the intervention options for achieving these strategies are supply side or mixed in nature. Most commonly, this includes male involvement, social marketing, vouchers and referrals, and community-based and mobile services. The demand-side intervention of most relevance is IPC, with mass media also being used, but less often.

INTERVENTIONS AND GENDER BARRIERS: WHAT DO WE KNOW?

Since frequently these interventions address barriers at more than one level of demand, below we consider each type of intervention in turn and discuss what the literature tells us about its role in overcoming the gender barriers for the levels of demand for which it has relevance. This undertaking is made challenging by the fact that few programs explicitly and intentionally address gender barriers, although many consider them as at least one key aspect of their program design.

Mass Media Awareness Campaigns

Interventions to raise awareness convey information and messaging on reproductive health through a mix of mass media channels--broadcast television and radio, print media, or information communication technology (ICT). The literature suggests that awareness raising interventions, often termed Social and Behavior Change Communication (SBCC) campaigns, have evolved over time to recognize that to generate demand, they may need to target social and gender norms. Drawing from a variety of social change theories, these interventions attempt to include elements that explicitly motivate behavior change through specific actions, including communication with partners or family members, actively seeking family planning information, and initiating or sustaining contraceptive use.[38,152] Often these approaches help to provide avenues for talking about issues that are taboo in socially conservative contexts.

Awareness-raising initiatives aim to achieve multiple outcomes related to not just reproductive control, but reproductive health and rights more broadly. Among populations with high levels of wanted fertility, such interventions may address socio-cultural norms that support large families and the concept of individuals and couples being able to control their own fertility, by communicating messages that advocate the benefits of smaller families or spacing births.[38] However, in conveying this message it is not clear whether such interventions also advocate for a new image of motherhood and thus bring a deliberate gender perspective into their design.

UGANDA: Radio drama series addressing barriers at Level 1

The "Neighbors" radio mini-drama series used an edutainment approach to stimulate dialogue about norms that promote large family size, proving fertility, and son preference. The series centered on two men, one who has only a few children due to family planning, and the other who has a large family. Between 2007 and 2009 "Neighbors" reached more than 1.6 million people through the drama, and the radio and print materials that complemented it, with messages about the strains that having many children can place on limited family resources, and the social, economic, and health benefits of family planning and couple communication. As a result of exposure to these messages: more than 60% of men who had heard the campaign materials stated that they had decided to have a small family; 21% of women and 7% of men said they had visited a clinic for family planning. However, the project was not able to measure whether these gains translated into smaller family size in the long term.[153]

Communication campaigns have evolved since the early days of family planning programs in the 1960's and 1970's when their primary role was demand generation at level 1 by addressing desired family size. While still common in locations with high fertility rates and low contraceptive prevalence, they frequently also address demand at levels 2 and 3, targeting the reasons underlying unmet need.[38] Such programs cater to settings with low educational and health levels and also aim to address conservative cultural taboos around menstruation, contraception and reproduction.[154] A review of USAID family planning communication campaigns found 11 programs in West Africa, 9 in Sub-Saharan Africa, 7 in Southeast Asia, 4 in Latin America/Caribbean, 4 in Central Asia, and 3 in the Middle East/North Africa.[155] At levels 2 and 3, the communication messages promote the idea of using contraceptive methods, attempt to dispel myths about specific methods, highlight the benefits of certain methods, promote family members' support and acceptance of contraceptive use, and provide education about family planning or abortion services and how to access them.[155,156] These messages certainly address several of the gender barriers we discussed for reaching demand at levels 2 and 3, although they are often not specifically designed with an explicit gender perspective.

Research shows that for the most part, mass media and IPC interventions are successful in improving knowledge, changing attitudes, and to some extent, also changing behavior. A large body of research shows relatively consistent success in stimulating changes in knowledge about family planning,

EGYPT: Multi-channeled communication program addressing barriers at Levels 1, 2, and 3

The Mabrouk ("Congratulations") program used a multi-pronged communication strategy—including television, radio, variety show, information booklets, and group wedding celebrations—to inform newlyweds about family planning, pregnancy, safe delivery, and postpartum care. The program also conveyed messages on key decisions regarding having children, spousal communication, and appropriate birth spacing. It especially aimed to address social taboos around communication and discussion about reproductive health issues and the stigma related to contraceptive use among young people. A cornerstone event was a group wedding for more than 150 couples in 2004. While this strategy did not target changing norms to promote delaying the first birth, Mabrouk has been successful in increasing contraceptive use among young couples with one child from 20% in 1995 to 50% in 2005.[38]

attitudes about birth spacing, and ideal family size.[12, 38,157,158,159] For example, a meta-analysis of [39] family planning campaigns implemented between 1986 and 2001 found that exposure to campaigns greatly increased knowledge of contraceptive methods, interpersonal and partner communication, approval of family planning, and intentions to and actual use of contraceptives.[155] Another analysis of entertainment and education programs also found that exposure to dramas on radio and TV was associated with increased contact with family planning providers, greater use of family planning and decreased desired family size.[152]

However, in measuring outcomes, evaluations of these interventions tend to focus on short term attitudinal and behavior change rather than longer term normative shifts—especially shifts in gender norms. Measures of longer term ideational change or the processes through which women internalize, share, and negotiate this type of change are generally lacking. For example, there has been little evaluation research on how new ideas introduced through communication initiatives diffuse through male and female networks, or whether certain threshold levels are required for new gender norms to solidify. Similarly, there are no existing studies that assess whether the multiple activities and aims overlapping the three levels of demand lead to reinforcement or dilution of messages, and whether this then supports or hinders the consolidation of attitudinal change into a longer term shift in norms.

The role of new information and communication technologies also poses interesting questions about the potential of these emerging media for more customized messages that can address specific gender barriers at all three levels. Thus far, initiatives such the USAID funded Mobile for Reproductive Health (m4RH) program that is being implemented in Kenya and Tanzania are attempting to largely address the knowledge and mobility barriers that women face in these countries.[160] Mobile phones serve as effective conduits for bringing family planning information and messages directly to women on an individualized basis. More creative messaging and the potential of using ICTs to spread them through women's social networks to address level 1 and 2 barriers has yet to be tested and realized.

Interpersonal Communication

There is a wide array of interventions based upon interpersonal communication at the individual and community level, which are frequently peer, instructor/facilitator, or community-led and implemented. Recent reviews of family planning programs indicate that while mass media communication approaches target a range of audiences, IPC approaches most frequently target young people in the early stages of their reproductive lives.[12] IPC programs use peer or instructor-led education to convey messages about delaying marriage and childbirth, as well as information about sexual health, reproduction, and contraceptive methods, including how they work, what side effects can be expected, etc.

As such, youth-oriented IPC programs are especially focused on addressing barriers at levels 1 and 2 of demand. For example, essential to these messages is conveying information about the harmful effects of pregnancy and birth at young ages and correcting misinformation about side-effects from contraception.[79] They may also address barriers to demand at level 3 by imparting negotiation and communication skills that help empower young women and men in their interactions with each other, peers, family members, and providers. In fact, most youth-oriented IPCs explicitly aim to address gender issues not just through skill building, but also messages that question traditional masculine and feminine roles, specific content aimed separately at boys vs girls, and advocacy for girls' rights and health. These interventions aim to seed attitudinal and normative change in the younger generation, both because young people—girls especially—are among the most disadvantaged with regard to information and access, and also because they are the users and decision-makers of the future.

NEPAL: Adolescent IPC program addressing barriers at Levels 1 and 2

The Building Demand for Reproductive Health Awareness (BuDRH) program worked to shape attitudes and behaviors among unmarried adolescents through peer education. The program provided information and messages on optimal birth spacing, as well as knowledge on delaying marriage, ways to avoid pregnancy, and contraceptive methods. After one year, among those who were exposed to the program, there was in increase in the percentage of respondents who thought family size should be determined by the husband and the wife from 73% to 80%. There was also an increase in knowledge of oral contraceptives from 83% to 99%, and an increase in knowledge of the benefits of spacing births from 84% to 92%. By changing these attitudes among adolescents, the program hopes to stimulate a new, more accepting norm that leads to increased family planning use when they become sexually active.[34]

Implemented as part of school-based or out of school programs and often using participatory and community-based approaches, the number of IPC programs has expanded in moderate and high fertility settings, such as Kenya, Tanzania, and India. [79,156] However, because of the retail rather than wholesale nature of interpersonal communication as compared to mass media, IPC interventions tend to reach comparatively smaller numbers and have yet to be implemented at large scale. Another major challenge for youth-oriented IPC programs is whether they can demonstrate a long term effect on the attitudes and behavior of young people. As with mass media interventions, generally IPC-based programs show positive results on immediate outcomes. For example, the TeenSTAR program in Chile showed a significantly reduced risk for adolescent pregnancy,[162] while the Kenya Adolescent Reproductive Health Project showed increased approval of contraception and a reduction in teen pregnancy.[163] Only recently has attention been given to developing longitudinal studies that can assess whether IPC messages and information are retained over the longer term and reflected in adult life outcomes for adolescents.

CAMEROON: IPC and community-based program addressing barriers at Levels 1, 2, and 3

The Horizon Jeunes program used peer education, youth clubs, and a mass media campaign to address limited knowledge and understanding of fertility control options and fear of infertility and side effects. The program aimed to teach adolescents about how to prevent unwanted pregnancies and the benefits of delayed onset of sexual activity through a variety of community-based activities, including condom demonstrations at night clubs and soccer games and theatrical performances. This intervention intended to sensitize youth on healthy reproductive behaviors while also creating a norm of contraceptive use in the community. A preliminary evaluation found that after 13 months, there was an increase in knowledge of birth control methods: among women knowledge of the pill increased from 23% to 60% and knowledge of condoms increased from 40% to 74%. Among female youth, reported use of oral contraceptives increased from and 7% to 22%, use of condoms from 2% to 52%. Among male youth, the perception of the risk of unwanted pregnancy increased from 10% to 45%.[161]

Development Initiatives for Adolescents

The increased focus on adolescents in the last 15-20 years has also meant that the family planning community has begun looking to broader development initiatives for addressing the structural drivers underlying many gender barriers to the demand for reproductive control. Like IPC programs with an adolescent focus, these initiatives are also seen as seeding change, but more indirectly through educational and social investments in young people, especially girls. For example, by keeping girls in school or delaying their age of marriage, programs aim to indirectly change norms and practice around the timing and number of children, thus reducing gender barriers to reaching level 1 demand. Relevant development initiatives include education, life skills, and mentoring programs for girls (and sometimes boys) as well as some programs that provide economic support and incentives to girls and their families for keeping them in school or unmarried. These programs aim to equip girls with skills and knowledge, provide them with a supportive environment to delay marriage and childbearing, and enable them to make their own choices and advocate for themselves while at the same time changing social and community perceptions of what is acceptable for young girls.[75] As such, these programs also aim to reduce gender barriers to reaching demand at level 2.

Adolescent-focused development initiatives are particularly relevant in regions with early marriages, strong social pressures for young women to give birth soon after marriage, and entrenched social norms surrounding family size and timing.

INDIA: Adolescent Development Initiative addressing barriers at Levels 1 and 2

Development Initiative to Support Healthy Adolescents, or DISHA ("direction") was a multi-sectoral program that aimed to increase reproductive health knowledge, delay the age of first pregnancy, and delay marriage among girls. Designed and implemented by ICRW and six local partners, the program 1) provided information and messaging to young people and community members on family planning, reproductive health, and adolescent life issues; 2) provided training, education and skills to young people, especially girls; and 3) strengthened youth-friendly delivery of contraceptive services. Program evaluation showed attitudinal shifts, increased empowerment for girls, delay in marriages, and higher rates of contraceptive use among those exposed to the program as compared to those who were not. The program had a difficult time implementing all elements of the intervention and it is not clear if the skill and livelihood components were in place long enough to have an effect.[164]

Programs to delay child marriage have gained momentum in South Asia, especially in India and Bangladesh, and to a lesser extent in Africa and the Middle East, for example in Ethiopia and Egypt. However, for the most part, these programs remain relatively small; in a scan of 23 evaluated programs by the International Center for Research on Women (ICRW), only 6 programs had reached over 60,000 girls.[75]

Of course, scale can most readily be achieved through extensive government and international programmatic support for girls' education. Lloyd (2009)[165] finds that there are substantial programmatic investments in education in regions with historically low levels of schools, documenting the largest number of educational programs in Africa (222), followed by Asia (75). At the same time, while there is a massive literature demonstrating the strong relationship between female education and fertility outcomes, there is little research documenting whether specific programmatic interventions in the education sector not only keep girls in school or improve their learning, but also reduce gender barriers or increase reproductive control. Research on cash incentives for keeping girls in school for example, is only beginning to document that there may be the added impact of reducing teen pregnancy or delaying marriage, but that the results are not always consistent and that the pathways to these outcomes are complex.[166,167] Conversely, while there is emerging literature suggesting that economic and livelihood interventions for girls would strengthen their ability to delay marriage and childbearing while also improving their bargaining position to negotiate contraceptive use, there is little evidence documenting this process or resulting outcomes.[168] The impact of development initiatives on social norm change can be particularly difficult to measure due to their indirect relationship and the necessary time lag to measure such change. For example, child marriage prevention programs have been shown to change both attitudes and behavior regarding the timing of marriage, but few are able to then measure the subsequent reproductive behavior or longer term impact on societal norms.[75]

Male and Family Involvement

Due to the fact that family gate keepers often play a large role in regulating women's access to contraceptive services, communication initiatives and service delivery points are used to encourage positive involvement by male partners and husbands or other family decision-makers by increasing their understanding of the importance and benefits of contraceptive use. These interventions recognize the powerful influence of gender roles and social norms that dictate what appropriate behavior is for women, as well as the amount of autonomy and influence they leverage within their intimate relationships. As such, they generally target gender barriers to demand at levels 2 and 3. Specific interventions may involve spousal or partner counseling and education sessions, or community-based communication campaigns or edutainment efforts targeted specifically at these audiences and conveying messages on the benefits of contraceptives and smaller families. Such communication programs, which include a focus on male audiences, often also target level 1 demand. Male and family involvement initiatives are primarily and explicitly aimed at addressing gender barriers to reproductive control.

Programs that encourage positive male and family involvement take place in contexts of both high and low fertility, but are generally implemented in contexts where there is evidence of high unmet need for family planning. Such programs are important in conservative regions in which women have little autonomy within marital relationships. In settings such as South Asia where influence

HONDURAS/EL SALVADOR: Educating husbands to address barriers at Levels 2 and 3

The Institute for Reproductive Health (IRH) implemented programs in Honduras and El Salvador that specifically targeted men as decision makers about family planning. The programs offered sexual and reproductive health education sessions to men at their work sites in water and sanitation and agricultural committees. The messages and materials intentionally challenged gender norms and presented the benefits of family planning. In Honduras, family planning use increased from 37% to 55% throughout the program duration. The project area in El Salvador also experienced a significant increase in use of family planning.[169,170]

by extended families is common, programs have targeted mothers-in-law and husbands. Interventions to encourage male involvement in particular have increased as implementers of family planning and reproductive health programs have learned that in order for men to share in the responsibility of reproductive health decision-making, they need more information and access to services. However, this focus goes as far back as the 1980's when a number of creative male involvement initiatives were tried in Africa, including workplace-based interventions, fathers' clubs, and outreach at sports and other events.[171] Many social marketing campaigns have also had an orientation toward male involvement.

Evaluation results from male and family involvement programs present a mixed picture, however. A systematic review of 24 male involvement programs found that interpersonal communication strategies increased men's knowledge of contraception and that mass media programs targeting men's participation in family planning significantly increased condom use.[171] Similarly, a study in Ethiopia shows that efforts by community service providers to increase discussion among couples on family planning led to increased use of contraceptive methods.[173] At the same time, a study by FHI in Bangladesh shows that educating and counseling husbands on the benefits of Norplant led to only modest reductions in method discontinuation by their wives and no marked improvement in method satisfaction compared to other couples.[172] Research in Zimbabwe also cautions on how messages regarding male involvement may be interpreted by men: exposure to edutainment messages increased men's intentions and actual use of family planning, but was also associated with an increase in men's perceptions that husbands should be the sole decision-makers on family planning practice.[174] The campaign's reliance on traditional masculine images may have reinforced stereotypes about male decision-making and blurred messages about the value of joint decision-making. Increasingly, therefore, programs focusing on men and other family members need to consider not just "involvement," but the power dynamics in their relationship to women seeking reproductive control.

BANGLADESH: Counseling husbands to address barriers at Levels 2 and 3

A pilot study testing the impact of using couples' counseling to increase uptake of Norplant was conducted by Family Health International (FHI) in Bangladesh from 1988-1991. Women who were seeking injectables at reproductive health clinics were randomly chosen to be in the husband-counseled group or husband not counseled group. These sessions provided information on how Norplant works, the duration of its effectiveness, advantages and disadvantages of the method, availability and the follow-up requirements of the method. Women in the husband-counseled group were less likely (32%) to discontinue Norplant use than those in the husband-not-counseled group (42%). However, there was no difference between the two groups in the couples' satisfaction with Norplant.[172]

Social Marketing

Contraceptive social marketing (CSM) combines demand and supply side features and has been an important intervention strategy for increasing both the acceptability of certain contraceptives—mostly condoms and the pill—as well as their use. Because it is an approach that seeks to apply the lessons of commercial marketing and brand creation to socially beneficial goods and behavior change promotion, it has enormous potential for addressing gender barriers to demand for reproductive control, especially at levels 2 and 3. Not only does CSM have the marketing power of making contraception more socially acceptable, it also has the advantage of market analysis as a tool for more effectively catering to women as consumers of family planning. By subsidizing socially marketed contraceptives, CSM can make them more affordable for resource poor women. Moreover, by combining the reach of the private sector with the social goals of the public sector, it can cater to the large number of women who either cannot get or do not like public services, but cannot afford private sector costs.[175]

Social marketing initiatives use a combination of contraceptive delivery (supply) and message dissemination (demand) to make their product more appealing. CSM campaigns often conduct market research to better understand their target audience and then use a combination of advertising, public relations, special events, sponsorships, and personal communication to reach their targeted clients. They use community, mass, and electronic media, and edutainment

SOUTH AFRICA: Social marketing program to address barriers at Levels 1 and 2

The Society for Family Health conducted a social marketing campaign in Soweto to educate adolescents about the risks of early pregnancy and sexually transmitted infections (STI). A participatory approach was used to involve adolescents in creating radio, TV, and print media messages, and delivering educational materials and interpersonal communications. A cornerstone of this project was the six-part documentary promoting condoms and safe sex entitled the "Rubber Revolution". After one year, there was a significant increase in the proportion of respondents who identified pregnancy as an undesirable consequence of sexual activity (73% to 95%) and who considered condoms one of the best ways to prevent pregnancy (40% to 67%). While these results show an increase in knowledge and understanding of pregnancy prevention, there was no increase in actual use of condoms. It is also not clear how sustainable the change was in knowledge and attitudes.[179]

to not just convince clients to use their product, but to make it the desirable option, and thus the norm.[175] Edutainment approaches in particular make messages accessible and appealing to target audiences. Social marketing efforts often deliberately focus on gender issues in their messages and marketing, but gender constraints are just one among several marketing issues that they consider.

CSM campaigns began in India with the sale of the "Nirodh" condom in the late 1960's, and during the next two decades expanded to the other countries in South Asia. However, with the spread of family planning and fertility declines, and especially with the focus on the HIV/AIDS epidemic in the 1990's and beyond, the CSM approach has expanded to other regions, especially East Asia and Africa. Social marketing is relevant in countries with conservative attitudes toward sex and contraception or with underdeveloped and underfunded health infrastructures as for example Ethiopia, Uganda, and Pakistan. But it is also successful in creating public-private partnerships and expanded services in high prevalence countries where contraceptive delivery is diversifying beyond the government infrastructure, as for example Bangladesh, Vietnam, South Africa, or India.[175,176] In the 1978-1987 decade there were 11 countries which had CSM programs, whereas in the 1998-2007 decade these programs were present in 67 countries.[177] In 2010, social marketing programs provided contraceptives to approximately 25% of couples using modern methods in the developing world, dispensing over 2.4 billion condoms, 162 million oral contraceptives, and 26 million injectables annually.[178]

Social marketing approaches have demonstrated mixed success in reducing gender barriers to demand for reproductive control. One area of differentiation is male versus female controlled methods: while the track record of CSM campaigns in increasing condom use and making condom purchase and use more socially acceptable is quite strong, it is less consistent in increasing the acceptability and use of hormonal methods such as the oral pill. For example, in 1997, social marketing programs in 55 countries sold 937 million condoms and 54.5 million cycles of pills. In that same year, social marketing campaigns contributed to a 20% increase in condom sales, but only a 5% increase in pill sales.[180] One reason for this is that many condom promotion programs, during the 1990's in particular, benefitted from research and attention to issues such as male ideals of masculinity, male sexuality, and male-female interaction and communication. In contrast, programs to promote the pill have not always incorporated in-depth research analysis on similar issues and have at times been driven more by sales target rather than market and social research.[179,181]

Another challenge in measuring success for CSM campaigns is that they mostly track indicators such as message exposure, sales, and couple years of protection and therefore, can provide only limited information on attitudinal and normative shifts or the reasons underlying them. Studies that have measured attitudinal and behavior change have found mixed results. A review of adolescent contraceptive social marketing campaigns in Cameroon, Botswana, South Africa, and Guinea from 1994 to 1998, found increases in women's perceptions of benefits of and barriers to protective

behavior, as well as increased contraceptive use, but a smaller effect on men.[182] A social marketing campaign in South Africa produced significant change in perceptions about unwanted pregnancies and the desirability of condoms, but did not increase in condom use.[179] It remains to be seen if the newer generation of social marketing initiatives can more directly target and measure a reduction in gender barriers to demand at levels 2 and 3.

Vouchers and Referrals

Voucher programs as a means of motivating women and men to use contraception go as far back as the 1960's when countries such as Taiwan and Korea launched family planning programs. These programs have re-emerged in recent years with the increased emphasis on equity in health care delivery, and their primary motivation is to reach poor, rural, and marginalized populations. Voucher programs are a part of consumer-led or demand-side financing (DSF), where donor or government funds are used to stimulate demand for services by directly connecting the benefit to the intended beneficiary.[183] Although reducing gender barriers is not the major driving factor behind voucher programs, they can provide women with encouragement to seek the contraceptive services they need, both by subsidizing costs and facilitating access by providing direct and relevant information such as the names and locations of specific clinics which provide contraceptive services. [12,183] Referral programs may or may not provide discounted rates, but similar to voucher programs, they tend to promote a variety of contraceptive methods as well as access to the precise and relevant services most

NICARAGUA: Vouchers for services and methods to address barriers at Level 2

The Central American Health Institute (ICAS) took aim at low levels of family planning knowledge and use among adolescents through a voucher program in Nicaragua. Each voucher entitled the adolescent to a free consultation and a follow-up visit for counseling, contraception, treatment of STIs or reproductive tract infections, pregnancy testing, and/or antenatal care at any of the contracted clinics. Overall, contraception use doubled among girls who were sexually active but not pregnant. Among girls who were not yet mothers, contraceptive use increased from 24% to 57% and among mothers it increased from 47% to 82%.[35]

directly suited to women's specific situation and needs.

However, this is a new and emerging strategy for developing countries that are currently facing the challenges of unmet need, and there are few voucher programs dedicated to family planning per se. Rather, they have emerged mostly to improve maternal and broader reproductive health services, but with the frequent inclusion of family planning. It is not as yet clear if and how precisely they are addressing resource, decision-making and transportation barriers that women face in reaching level 3 demand for reproductive control. A 2011 systematic review of voucher programs found only 6 recent or current evaluated programs with a family planning and/or reproductive health focus, spread cross China, Kenya, India, Indonesia, and Nicaragua. Of these, two were launched since 2005. [183]

Some voucher programs have been initiated but have yet to be evaluated. For example, Marie Stopes International (MSI) is currently implementing reproductive health voucher programs in Pakistan, Uganda, and Sierra Leone.[116] In addition to subsidizing services for those most in need, the programs aim to ignite competition among providers through a training and accreditation process, and thus benefit women consumers by improving quality. Additional features that could address gender barriers include door-to-door distribution, information on appropriate method selection, counseling, and referral services that let the client choose provider options suited to her needs. In order to gain a better sense of how voucher programs are working, the Population Council recently initiated the "RH Vouchers" voucher and accreditation program, which evaluates, tracks, and documents the impact of demand side financing programs, specifically voucher programs. The goal of the project is to determine the impact of vouchers on knowledge, targeting, quality, utilization, cost and health status.[184]

Pure referral programs without price subsidies have often been tried as components of youth programs, especially to facilitate young people's access to reproductive health services beyond their first choice providers such as pharmacies or traditional healers. For example, in Cambodia, Kenya, Nicaragua, and Vietnam, PATH's RxGen program uses a pharmacy-based referral system in combination with provider training to provide youth with information and motivation to seek the next level service at nearby clinics or service delivery centers. Evaluation results show improvements in provider knowledge, delivery, and client use of emergency contraception services.[185] Although limited in number and evaluations, voucher programs also show consistent increases in uptake of methods among those who received reproductive health vouchers.[183,186,187] Studies that examine whether such programs are successful in overcoming specific gender barriers related to cost, mobility, and decision-making would be especially worthwhile.

Community-Based Services and Mobile Outreach

Service outreach efforts seek to bring family planning (and sometimes abortion) education and services closer to the client, thus facilitating access for women who may be constrained from going to clinics because of infrastructural, transportation, mobility, resource, cultural, or familial barriers. [112,152] Generally, outreach programs are implemented in contexts with low or moderate contraceptive prevalence, where there is evidence of high unmet need for family planning. Since their main focus is to make contraception and abortion services more acceptable and accessible, outreach efforts address barriers to demand at levels 2 and 3. Most outreach efforts aim to overcome a number of disadvantages faced by poor and/or rural populations, with gender barriers being only one among several constraints addressed.

Community-based distribution (CBD) programs for family planning are an outreach effort with a long history, having originated in Latin America in the 1960's, spreading to Asia in the 1970's and 1980's and to Africa in the 1980's and 1990's. CBD approaches cover a range of interventions, some that share traits with social marketing, as for example the utilization of edutainment or retail outlets for marketing contraceptives. Like voucher programs, community-based delivery of family planning also tends to be combined with the delivery of other health services, such as maternity care, malaria treatment, oral rehydration therapy, or sexual health advice.[152,188,189] Historically, CBD programs have focused on short-term methods

PAKISTAN: Mobile outreach addressing barriers at Levels 2 and 3

The Lady Health Worker (LHW) program in Pakistan used a mobile outreach strategy to address barriers of restricted mobility, limited access to information, and limited or one-way communication with providers. The LHWs traveled door to door to educate women about maternal, child, and reproductive health and encouraged women to use contraception. Within a decade, women in communities that were served by LHWs were 1.5 times more likely to use modern, reversible methods of family planning than women in communities which were not served by the program.[195]

such as condoms and the oral pill, but in recent years, the trend is toward delivering longer term methods such as IUDs or implants.[159]

In some countries, door to door service has formed an important part of community-based efforts. For example, home delivery of contraceptives—mostly condoms and oral pills—was a critical success factor in Bangladesh's family planning program during the 1980's and 1990's.[190,191] Given similar challenges associated with the culture of women's seclusion, the Lady Health Workers (LHW) program was initiated in Pakistan. Other countries have recognized the value of the home delivery approach as a way of connecting with local populations. In India, the Ministry of health has undertaken an effort to mobilize 800,000 Accredited Social Health Activists (ASHA) workers to directly deliver a package of health services, including spacing methods. These are aimed especially at rural women in poor states like Uttar Pradesh and Bihar, where both women's position and family planning efforts lag behind the rest of the country.[192, 193] In Africa, efforts are underway in countries like Kenya, Ethiopia, and Uganda to fill the gap in trained health professionals by mobilizing health extension workers to provide long-acting temporary methods such as injectables and hormonal implants.[189,194]

While results on contraceptive uptake are often positive, the door to door approach has high financial, management, and training costs associated with it. The Bangladesh experience suggests, however, that possibly because it connects directly and intimately with women, this approach can substantially increase demand at levels 2 and 3, helping to provide women with the necessary support for fundamentally changing norms regarding the acceptability and use of family planning. This shift can then eventually make a transfer to alternative, less costly and less intensive delivery mechanisms more feasible.[191]

Another outreach approach is the mobile delivery of services, usually involving the transportation of a team of trained providers from a higher-level facility to local communities with limited or no family planning or health services. Countries where health infrastructure is lacking often use mobile services at facilities such as schools, health posts or other community structures to deliver contraceptive and safe abortion services. Because of the costs involved and the challenge of providing such services on a regular basis, many mobile outreach interventions have focused on long acting and permanent methods such as implants, IUDs and sterilization. For example, in India, mobile camps have been a standard venue for female sterilizations since the 1970's, the dominant family planning method in the country.[193] Similarly, in Malawi, through Banja la Mtsogolog (BLM)'s Community Outreach Initiative, BLM trained providers to travel to rural government facilities to provide clinical reproductive health and family planning services. In 2004, BLM's outreach provided 42% of all permanent family planning methods in Malawi. [152]

Most recently, programs have begun using mobile phones and internet technologies to

disseminate information directly to contraceptive users, targeting messages to individual needs and providing both general information about contraceptive methods, as well as logistical and practical information on services.[160,196] Rapidly increasing mobile phone connectivity in otherwise infrastructure poor areas allows these programs to use SMS messages to quickly and directly disseminate customized information to women.[197] However, mobile health ("mhealth") delivery is a new and growing field, and the full scope of its ability to successfully bring family planning and reproductive health information to large number of women living in remote, rural areas or to change attitudes, has yet to be assessed.[196]

Overall, cross sectional utilization data suggests that outreach strategies play an important role in expanding access to modern contraceptives. For instance, Marie Stopes International uses outreach in 18 countries and now provides over 70% of all long acting and permanent methods via mobile outreach. In Tanzania, 60% of MSI clients also received services via outreach.[198] In Nepal, the 2006 DHS data show that government mobile clinics were the source of contraception for 21.6% of all users of modern methods, more than one third of female sterilization, and almost half of male sterilization.[152]

And yet, it is not clear if the CBD and mobile outreach programs rolled out in Sub-Saharan Africa and parts of Asia in the last few years are incorporating the same careful approach to hypothesis testing and evidence gathering as was the case for initial efforts in the 1960's and

GHANA: Community-based outreach addressing barriers at Levels 1, 2 and 3

The Navrongo Community Health and Family Planning Project (CHFP) implemented a community-based outreach program in sparsely populated rural areas to overcome barriers of low access to family planning and reproductive health services. The project used community nurses to provide general health services as well as oral contraceptives, condoms, and injectables through door-to-door visits. It also used community health volunteers and health aides to provide basic health care services, RH education, outreach to men, and contraceptive supplies. The study found that preferences to limit childbearing, knowledge of contraceptive methods, and knowledge of where to obtain contraceptives increased as a result of exposure to project activities. Additionally, within 3 years villages with both the community nurses and health aides experienced a 15% fertility decline relative to comparison communities. [134]

1970's, and where in this mix gender barriers are placed. The only two rigorous evaluations of the impact of CBDs on fertility were undertaken at Matlab in Bangladesh and Navrongo in Ghana.[152] These evaluations indicate that while outreach activities mitigated some gender constraints, they also reinforced others, as for example confirming women's seclusion in Bangladesh, or women in Ghana experiencing high rates of violence when using family planning.[134,199,200]

Evidence from more recent research is limited. A recent WHO systematic review of 20 community outreach programs in nine countries (Afghanistan, Bangladesh, Bolivia, Ethiopia, Guatemala, Haiti, Madagascar, Peru, and Uganda) finds that community-based programs were promoting safe, effective, and acceptable use of injectables.[201]

Pathfinder's review of its community-based reproductive health services over the last 25 years also documents enhanced access, knowledge, and cultural acceptance of reproductive health, and specifically, contraceptive use.[202] The rigor of the evidence is weak, however, and the focus on gender issues as the potential mechanism for change is less clear. In particular, some researchers have suggested that social acceptability may represent a more important determinant of the impact of CBD programs than geographic accessibility.[182,203] Future research needs to examine more precisely the role that intervention strategies involving social factors such as male outreach, community mobilization, women's networks, etc. may be playing in the success of outreach interventions.

Training and Education of Providers

Improving the interaction between providers and clients has been recognized as a critical component of quality of care, and for this purpose, a number of interventions to better train and educate providers have been developed. A core part of provider education has been technical training aimed at improving knowledge and skills regarding specific contraceptive methods, helping to deepen understanding about how methods work, the types of women they suit best, and the precise nature of common side effects. Studies suggest that these basics are important not only for the large numbers of low or semi-skilled health providers such as nurse midwives, community health workers, pharmacists, or traditional healers, but often for highly trained medical professionals such as doctors and nurses as well. For example, in India, Jhpiego and the government of Rajasthan have begun training doctors in medical colleges and hospital facilities on post-partum IUDs in order to increase their acceptability and desirability as a spacing method in a setting where female sterilization has been the predominant offering of the family planning program.[204] Similarly, the Kenyan Ministry of Public Health and Sanitation, Population Council and Population Services International (PSI) conducted a program to mainstream emergency contraception (EC). Through a media campaign, training of providers and pharmacists, and provision of educational materials to patients and providers, the program successfully increased awareness of EC among women, public and private providers, and pharmacists.[205] Although not targeted directly at

KENYA: Provider-focused campaign addressing barriers at Levels 2 and 3

The Population Council worked with the Kenyan Ministry of Health and Population Services International to mainstream emergency contraception (EC) into family planning and reproductive health service provision. The program aimed to dispel myths and misconceptions about the medical consequences of EC and to reduce provider bias related to its provision as part of the spectrum of contraceptive options. Evaluation of this initiative showed that public awareness of emergency contraception doubled and sales in private sector outlets such as pharmacies more than tripled by the end of 2008. In post-intervention surveys, respondents showed a greater level of knowledge about the mechanism by which emergency contraception prevents pregnancy and more accurate understanding of the potential side effects; almost none of the respondents reported believing that emergency contraception caused abortion or sterility.[205]

women, such interventions lay a critical foundation for addressing gender barriers to demand at levels 2 and 3.

In order to address these barriers even more directly, provider training increasingly includes the non-technical aspects of client-provider interactions as well. Seeking to increase provider commitment to quality of care, such training components address social and cultural perceptions, emphasizing the importance of reproductive health more generally and addressing provider preconceptions, biases, and attitudes. Training programs increasingly stress the importance of counseling clients to ascertain and cater to their unique needs and the importance of providers not letting personal beliefs or biases interfere.[206] Many types of job aides (e.g. checklists, flip-charts, decision-making algorithms, information education communication (IEC) materials for clients and providers) have been developed to help providers improve the quality of these interactions and to guide them through the key steps towards helping clients to make informed choices about contraception. The two most well known, rigorously evaluated, and effective job aides include the Balanced Counseling Strategy (BCS), developed by the Population Council as part of the FRONTIERS program, and the Decision-Making Tool (DMT) developed by the WHO.[152,207]

Coinciding with research indicating that level 3 barriers to demand are prevalent across a wide variety of settings, provider-focused interventions are implemented across a range of country contexts. For example, USAID's PRIME II project provided training to family planning providers in 25 countries in six regions (Asia, East and Southern Africa, Europe and Eurasia, Latin America and the Caribbean, the Middle East and North Africa, and West and Central Africa) from 1999-2004. The program focused on developing a consumer perspective among providers in terms of the quality, timeliness, and perceived value of family planning, post-abortion care, and broader reproductive health services.[208] Studies in a number of countries, including Nigeria, Ghana, Uganda, India, Indonesia, Philippines, Brazil, and Pakistan support the effectiveness of structured training interventions on a range of indicators of client-provider interaction. This includes measures such as increased method options offered, more complete information provided, more informed choices made by clients, better follow-up over time, and greater satisfaction expressed by clients.[152] A recent systematic review of family planning programs also finds that supply side interventions such as provider training programs have generally been more rigorously evaluated than demand side programs, and that for the most part, findings are positive, at least on short-term attitudinal and behavior outcomes.[12]

As promising as current provider training interventions are for reducing level 2, and especially level 3 barriers to demand for reproductive control, they present a number of important limitations. One common concern is the potential long term and behavioral impact of such interventions. For example, the systematic review of evaluated family planning programs shows that only six of the ten programs increased

actual contraceptive use or reduced unmet need even as most changed provider attitudes and interactions in the short term. Similarly, evidence as to whether improved quality of care reduces contraceptive discontinuation is mixed, with some studies demonstrating that better client-provider interaction is associated with reduced discontinuation, and others indicating no effect. To date, there have been no longitudinal studies to evaluate the impact of improving provider attitudes and quality of care on women's ability to achieve their fertility intentions in terms of avoiding unintended pregnancies. Moreover, the evidence around attitudinal change among providers is mixed, with training more easily able to improve technical competencies than to change deep-rooted biases and prejudices against certain clients because of their age, marital status, ethnicity or other characteristics.[152]

This raises the question of the duration and depth of change induced by provider training interventions, and the potential of such interventions to propel systemic change that can create and sustain demand for reproductive control among women in the long term. Research suggests, for example, that training targeted to improve the quality of care for family planning services must be supported by appropriate supervision and sustained 'readiness' of health systems to support quality of care improvements initiated by one-off training sessions.[152] Moreover, as is the case for demand side interventions, it is not clear if a threshold in terms of the number of providers trained is needed for public and private sector health systems to acquire a more

MOROCCO: Distance learning program addressing barriers at Levels 2 and 3

In order to enhance the quality and accuracy of family planning services, the National Institute of Health Administration (INAS) in Morocco implemented a Distance Learning (DL) program for Certified Health Assistants, State Certified Nurses, and birth attendants. The DL program distributed educational materials, and used periodic meetings and on-site follow-up by facilitators to assess skills acquisition. The DL curriculum included modules on: family planning counseling, service delivery related to IUDs, oral pill service delivery, voluntary surgical contraception (VSC) service delivery, and infection prevention. Those who participated in the DL program had a significant increase in knowledge of family planning methods and scored significantly higher in performance of family planning counseling tasks than those who did not participate in the DL program (68% versus 20%).[209]

SUMMARY

consumer-oriented perspective in internalizing and addressing the gender barriers women face in accessing and using contraception and abortion services. Equally important, it is not clear if educating providers alone is sufficient for addressing the power imbalance between health service providers and the female clients they serve. At least some research indicates that in addition to provider education, women's ability to understand their rights and role as informed consumers is equally important for addressing this power imbalance. Several studies have found that addressing clients' perspectives on quality and needed information and counseling leads to improved client satisfaction, continued and sustained use of services, and improved health outcomes.[210,211,212] People who are better informed about basic reproductive health and know their rights tend to seek high quality services and demand accountability from service providers.[213] Darroch et al (2011)[148] suggest that future research should look at how women's knowledge of contraceptive methods affects their reasons for nonuse, as well as their support for some methods over others.

This review of interventions in the field of family planning and reproductive health indicates that both demand and supply side interventions have been utilized to address gender barriers to increased demand for reproductive control. Many of these interventions do not address gender barriers per se, but do consider them to be one amongst a larger set of constraints to be overcome in improving reproductive health more broadly. The interventions that most deliberately and specifically target gender barriers include development and IPC initiatives aimed at adolescents, male involvement efforts, and provider training programs. Unfortunately, despite their promise, these are also the interventions for which avenues to scale-up have been least realized. Our review also suggests that in many cases, intervention approaches have only tacitly rather than proactively thought through goals and strategies from a gender perspective, as outlined in our Table 5. As a result, while there is the intention to address gender barriers, the precise pathway and mechanism are not clear.

Better specification of both the gender barriers and pathways in terms of a "theory of change" would not only make these intervention approaches more impactful, but could also make them more cost-effective and strategic in terms of sequencing, such that demand at level 1 is generated before interventions to address barriers to demand at levels 2 and 3 are launched. This is especially true for messages included in communication initiatives that may at times be too comprehensive and premature in what they are trying to achieve. Moreover, an explicit attention to gender issues and the theory of change involved would be critical to realizing the full potential of interventions in the areas of social marketing, vouchers, male involvement, and outreach efforts. Without a thorough and full understanding of exactly how the gender related change may work, it is easy for these interventions to become simple exercises in number counts and target achievement. Alternatively, they may be counter productive in the results they achieve. Attention to the theory of change could also help programs be more strategic and contextually relevant by disentangling intervention components for addressing gender barriers to reaching demand at level 2 versus level 3.

Based on our literature review and a number of recent reviews of programmatic evaluations, it is clear that many interventions show positive results on overcoming gender barriers to demand in terms of changed attitudes, and at times, even in terms of changed behavior. However, most interventions have yet to be tested for positive impact over the longer term, or in terms of systematic and normative change. A major limitation is posed by existing evaluation approaches and the indicators of success they utilize. To date, evaluations have tended to shy away from measures of social change and have attempted to assess success in terms of outcomes achieved from specific programs rather than strategies realized from sets of programs. Going forward, it would be important to develop and focus on measures of longer term change in social norms and institutions that currently prevent women from exercising reproductive control.

VII. CONCLUSION

Ever increasing numbers and proportions of women in the world desire to control the number and timing of children they bear: they seek to exercise reproductive control. Family planning programs and practitioners seeking to facilitate women's ability to exercise reproductive control have made strides in the past two decades to better understand and cater to women's needs. As a result, a much larger proportion of women in the world are able to act on their desires to space or limit their births through access to and knowledge of a wider range of reproductive control options. However, this progress has been mixed and uneven across social and cultural contexts, and among other factors, powerful gendered barriers play a significant role in constraining women's ability to exercise personal reproductive control.

In this paper, we have argued that in order to truly facilitate women's ability to exercise reproductive control and meet women's demand, the population and reproductive health field must reconceive the concept of demand itself and understand it as a product of layered gendered influences imposed upon women by the societies and families in which they live. By applying this gender lens to the traditional questions of supply and demand for family planning, we are able to develop a more nuanced concept of and response to women's demand for reproductive control.

Through this framing, we offer a new conceptualization of women's demand for reproductive control comprised of an interconnected continuum of three levels of demand: 1) women's desire to limit or space their childbearing ; 2) women's desire to exercise reproductive control; and 3) women's ability to effectively exercise reproductive control. At each of these three levels, women are faced with barriers imposed by their social context and assigned gender roles. Women may be prevented from reaching level 1 demand because they derive social and economic status by conforming to cultural expectations about womanhood and motherhood, i.e., they do not view decisions about the number and timing of births to be within the realm of conscious choice.

Even those who are able to conceive of childbearing as a conscious choice may be constrained from reaching level 2 demand because they fear the

potential social and health consequences of using family planning or abortion. These barriers are imposed through limited understanding of methods, cultural opposition to their use, and fear of powerful social stigma associated with use of methods, particularly abortion and emergency contraception. Women who are able to overcome these barriers may still be constrained by social and family power dynamics from acting on their desire at all or can only do so sub-optimally because of limitations on their mobility, resources, communication, and decision-making abilities. Level 3 demand is also impeded by women's disempowerment in relation to service providers and within the health marketplace.

Framed through a gender lens, our broadened and nuanced definition of women's demand for reproductive control offers several potential benefits as the population and reproductive health field adjusts to the challenges of the 21st century. In particular, it offers a route for overcoming some important dichotomoties that have plagued the field, as for example, the issue of prioritizing fertility declines or reproductive rights. Given that smaller families and lower fertility levels are today the reality and the desire for the vast majority of women in the world, a focus on women's demand and need for reproductive control makes the dichotomy less relevant than ever before. Similarly, a focus on gender barriers to women's demand also helps to bridge the divide between prioritizing policy, advocacy and programmatic action. Research suggests that in the last two decades, strategic action and resources have achieved better success at the policy rather than at the programmatic level. Attention to women's demand might be an effective strategy for achieving programmatic success on the ground while also elevating women's status as consumers of reproductive health care, and thus influencing policy from the bottom up.

Our review suggests that many programs are already incorporating a gender perspective, both in considering demand and in addressing critical barriers to reproductive control. In some cases, the attention to gender barriers is deliberate—as for example interventions that aim to diminish gender imbalances in decision making and communication about contraception and abortion. In other cases, gender barriers are addressed more implicitly, as for example educational and communication initiatives providing information about contraceptive methods and messages about ideal family size and optimal birth spacing. Our findings suggest, however, that the design and execution of interventions is less often strategic in considering which level of demand is operational in a given setting or for the particular subset of women being targeted.

More often than not, intervention approaches tend to address more than one level of demand without a clear determination regarding whether this broader emphasis is suited and likely to be impactful in a given context. A better understanding of the level of demand most relevant in a particular setting could be key to making interventions more targeted and cost effective. Such a strategic assessment would also be helpful in highlighting the strengths and limitations of specific programmatic approaches.

In particular, while many interventions aim to change social and gender norms, few measure success in these terms. If normative change is a critical factor in realizing women's demand for reproductive control, then it is especially important to assess whether the current basket of intervention approaches has the potential to foster such change.

The demand framework we propose also poses important questions for researchers in the gender, population and reproductive health field. To maximize the benefit of this framework in exploring the nuances of women's demand for reproductive control, we recommend five areas that researchers in this field could further explore:

1. The feasibility of using SBCC campaigns to redefine ideals of womanhood and motherhood rather than just ideal family size or timing for bearing children;

2. Development of universal knowledge measures that better capture women's correct and complete understanding family planning methods;

3. Identification of a threshold level of CPR at which contraceptive use becomes a social norm within a culture, and the extent to which this point may differ across cultural contexts;

4. Estimation of the impact of disempowerment, particularly as related to financial dependence and reproductive coercion, on women's ability to access and use family planning options; and

5. Reconceiving "male involvement" to recognize the nuances of men's roles in family planning decisions and norm-setting in order to pinpoint how and when to include them in efforts to help women achieve their reproductive intentions.

In order to optimize resources and create more demand-driven provision of services, the population and reproductive health field should work to influence policy makers within their field, as well as leverage partnerships with other sectors. Field-based assessment of intervention programs from a gender-based demand perspective can be one of the most effective tools for influencing policy action and resource allocation. Moreover, insights that carry the voice and experience of women and practitioners on the ground have the potential to reach a wider audience than policymakers in the reproductive health and family planning arena. For example, private sector actors who are increasingly supplying family planning and reproductive health products and services may be especially interested in insights on women's needs from a business perspective. Similarly, constituents in the education community, and especially those committed to girls' education and school-based programs are likely to be interested in the specific pathways through which schooling interventions can facilitate women's reproductive control. Furthermore, in recent years there is increasing interest among the public and private sector actors in supporting initiatives that improve women's employment and income earning opportunities. The centrality of ensuring women's reproductive control is also likely to resonate with this broader constituency for women's empowerment.

VIII. REFERENCES

1. AbouZahr, C. (2003). Safe Motherhood: A Brief History of the Global Movement 1947-2002. *British Medical Bulletin, 67*, 13-25.
2. Bernstein, E. (2009). Progress towards the Millennium Development Goals: a long trek for reproductive health. *Journal of Obstetric and Gynecology, Canada*, 31, 945-955.
3. Hessini, L. (2005). Global Progress in Abortion Advocacy and Policy: An Assessment of the Decade since ICPD. *Reproductive Health Matters*, 13, 88-100.
4. Ross, J., Stover, J., & Willard, A. (2005). *Profiles for Family Planning and Reproductive Health Programs*. Glastonbury, CT: The Futures Group.
5. Tantchou, J., Wilson, E., & Futures Group., *Post-Cairo reproductive health policies and programs: a study of five francophone African countries*. POLICY Project (2000).
6. Ashford, L. (2003). Unmet need for family planning: recent trends and their implications for programs. *Policy Brief*. Washington: MEASURE Communication, Population Reference Bureau, 1-8.
7. Casterline, J. & Sinding, S. (2000). Unmet Need for Family Planning in Developing Countries and Implications for Population Policy. *Report, 135*. New York, NY: Population Council.
8. Guttmacher Institute (2010). *Facts on Satisfying the Need for Contraception in Developing Countries*. Guttmacher Institute: Washington, DC.
9. Bhandari, G., Premarajan, K., Jha, N., Yadav, B., & Nagesh, S. (2006). Prevalence and determinants of unmet need for family planning in a district of eastern region of Nepal. *Kathmandu University of Medicine Journal, 4*, 203-210.
10. Wolff, B., Blanc, A., & Ssekamatte-Ssebuliba, J. (2000). The Role of Couple Negotiation in Unmet Need for Contraception and the Decision to Stop Childbearing in Uganda. *Studies in Family Planning, 31*, 124-137.
11. Campbell, M., Sahin-Hodoglugil, N., & Potts, M. (2006). Barriers to Fertility Regulation: A Review of the Literature. *Studies in Family Planning*, 37, 87-98.
12. Mwaikambo, L., Speizer, I., Schurmann, A., Morgan, G., & Fikree, F. (2011). What Works in Family Planning Interventions: A Systematic Review. *Studies in Family Planning, 42*, 67-82.
13. Malhotra, A. & Schuler, S. (2005). Women's Empowerment as a Variable in International Development. In D.Narayan (Ed.), *Measuring Empowerment: Cross-Disciplinary Perspectives*, 71-88. Washington, D.C.: The World Bank.
14. Bongaarts, J. (2008). Fertility transitions in developing countries: Progress or stagnation? *Studies in Family Planning, 39*, 105-110.
15. United Nations (2012). UN Data: *A World of Information*. [Online]. Available: **http://data.un.org/.**
16. The World Bank (2012). *The World Bank: Data 2011*. [Online]. Available: **http://data.worldbank.org/.**
17. Gillespie, D. (2004). Whatever Happened to Family Planning and, for That Matter, Reproductive Health? *International Family Planning Perspectives, 30*, 34-38.
18. Konje, J. & Ladipo, O. (1999). Barriers to Uptake and Use of Modern Methods of Contraception in Developing Countries. *International Journal of Gynecology & Obstetrics, 65*, 287-294.
19. Malawi. National Statistical Office & Macro, O. R. C. (2004). *Malawi Demographic and Health Survey 2004*. National Statistical Office.
20. Germain, A. & Kidwell, J. (2005). The unfinished agenda for reproductive health: priorities for the next 10 years. *International Family Planning Perspectives, 31*, 90-93.
21. Cleland, J., Ndugwa, R., & Zulu, E. (2011). Family planning in sub-Saharan Africa: progress or stagnation? *Bulletin of the World Health Organization, 89*, 137-143.
22. Chuhan-Pole, P. & Angwafo, M. (2011). *Yes Africa Can: Success Stories from a Dynamic Continent*. World Bank.
23. Govindasamy, P. & Malhotra, A. (1996). Women's position and family planning in Egypt. *Studies in Family Planning*, 328-340.

24. Population Reference Bureau (2008). *Family Planning Worldwide 2008 Data Sheet*. Population Reference Bureau.
25. Population Reference Bureau (2000). *Is Education the Best Contraceptive?* Washington, DC: Population Reference Bureau.
26. Sedgh, G., Hussain, R., Bankole, A., & Singh, S. (2007). Women with an unmet need for contraception in developing countries and their reasons for not using a method. *Occasional Report, 37*, 5-40.
27. Tsui, A., Donald-Mosley, R., & Burke, A. (2010). Family planning and the burden of unintended pregnancies. *Epidemiologic Reviews, 32*, 152-174.
28. Govindasamy, P., Boadi, E., Macro, I., & National Population Council, G. (2000). *A decade of unmet need for contraception in Ghana: programmatic and policy implications*. Macro International Inc.
29. Guttmacher Institute (2011). *Facts on Induced Abortion Worldwide Washington*, DC: Guttmacher Institute.
30. Blanc, A., Tsui, A., Croft, T., & Trevitt, J. (2009). Patterns and trends in adolescents' contraceptive use and discontinuation in developing countries and comparisons with adult women. *International Perspectives on Sexual and Reproductive Health*, 63-71.
31. Temin, M. & Levine, R. (2009). *Start with a Girl: A New Agenda for Global Health*. Washington, D.C.: Center for Global Development.
32. Levine, R., Lloyd, C., Greene, M., & Grown, C. (2008). *Girls Count: A Global investment and Action Agenda*. Washington DC: Center for Global Development.
33. Miller, S., Tejada, A., Murgueytio, P., & Population, C. (2002). *Strategic assessment of reproductive health in the Dominican Republic*. Population Council.
34. Tamang, J., Tamang, A., & Yadav, K. (2005). *Building Demand for RH Awareness among Adolescent Girls in Conflict Affected Districts of Nepal (BuD RH): Mid-term Evaluation*. Kathmandu, Nepal: Center for Research on Environment Health and Population Activities (CREHPA).
35. Meuwissen, L., Gorter, A., Segura, Z., Kester, A., & Knottnerus, J. (2006). Uncovering and responding to needs for sexual and reproductive health care among poor urban female adolescents in Nicaragua. *Tropical Medicine and International Health, 11*, 1858-1867.
36. McCleary-Sills, J., Douglas, Z., Rwehumbiza, A., Hamisi, A., & Mabala, R. (2011). *Vijana Tunaweza Newala: Findings from a Participatory Research and Action Project in Tanzania*. Washington, DC: International Center for Research on Women.
37. UNFPA (2004). *UNFPA State of the World Population 2004: The Cairo Consensus at Ten: Population, Reproductive Health and Global Effort to End Poverty.* New York: UNFPA.
38. Salem, R., Bernstein, J., Sullivan, T., & Lande, R. (2008). *Communication for Better Health*. Baltimore, MD: Johns Hopkins Bloomberg School of Public Health.
39. Hardee, K. et al. (1998). *Post-Cairo reproductive health policies and programs: a comparative study of eight countries*. Macro International, Inc., Policy Project.
40. Obermeyer, C. (1999). The cultural context of reproductive health: implications for monitoring the Cairo agenda. *International Family Planning Perspectives, 25*, 50-55.
41. Abrejo, A., Shaikh, B., & Saleem, S. (2008). ICPD to MDGs: Missing links and common grounds. *Reproductive Health, 5*.
42. Bradley, S., Croft, T., & Fishel, J. (2012). Revising Unmet Need for Family Planning. *DHS Analytical Studies 25*.
43. Feyisetan, B. & Casterline, J. (2000). Fertility Preferences and Contraceptive Change in Developing Countries. *International Family Planning Perspectives, 26*, 100-109.
44. Kamau, R. et al. (1996). Barriers to Contraceptive Use in Kenya. *East Africa Medical Journal, 73*, 651-659.
45. Randrianasolo, B. et al. (2008). Barriers to the Use of Modern Contraceptives and Implications for Woman-Controlled Prevention of Sexually Transmitted Infections in Madagascar. *Journal of Biosocial Science, 40*, 879-893.

46. Bongaarts, J. (1993). The Supply-Demand Framework for the Determinants of Fertility: An Alternative Implementation. *Population Studies, 47*, 437-456.
47. Ensor, T. & Cooper, S. (2004). Overcoming Barriers to Health Service Access: Influencing the Demand Side. *Health Policy and Planning, 19*, 69-79.
48. Kimuna, S. & Adamchak, D. (2001). Gender Relations: Husband-Wife Fertility and Family Planning Decisions in Kenya. *Journal of Biosocial Science, 3*3, 13-23.
49. Gipson, J. & Hindin, M. (2007). 'Marriage Means Having Children and Forming Your Family, So What is the Need of Discussion?' Communication and Negotiation of Childbearing Preferences among Bangladeshi Couples. *Culture, Health and Sexuality, 9*, 185-198.
50. Folbre, N. (1983). Of patriarchy born: The political economy of fertility decisions. *Feminist Studies, 9*, 261-284.
51. Mason, K. (1993). The impact of women's position on demographic change during the course of development. In F.Frederici, K.O. Mason, & S. Sogner (Eds.), *Women's position and demographic change*, 19-42. Oxford, UK: Clarendon Press.
52. Coale, A. (1973). *The demographic transition reconsidered*.
53. Caldwell, J. (1982). *Theory of Fertility Decline*. London, UK: Academic.
54. Mason, K. & Taj, A. (1987). Differences between Women's and Men's Reproductive Goals in Developing Countries. *Population and Development Review, 13*, 611-638.
55. Mason, K. & Smith, H. (2000). Husbands' Versus Wives' Fertility Goals and Use of Contraception: The Influence of Gender Context in Five Asian Countries. *Demography, 37*, 299-311.
56. Hyoung, C. (1997). Fertility Control, Reproductive Rights, and Women's Empowerment in Korea. *Asian Journal of Women's Studies, 3*, 103-132.
57. Braam, T. & Hessini, L. (2004). Dynamics Perpetuating Unsafe Abortion in Africa: A Feminist Perspective. *African Journal of Reproductive Health, 8*, 43-51.
58. Westoff, C. (2010). Desired Number of Children 2008-2009. *DHS Comparative Reports 25*.
59. Malhotra, A., Pande, R., & Namy, S. (forthcoming) *Fertility Declines and Shifts in Gender Equality in India: A Comparative Analysis of Punjab and Tamil Nadu*. ICRW.
60. Keele, J., Forste, R., & Flake, D. (2005). Hearing Native Voices: Contraceptive Use in Matemwe Village, East Africa. *African Journal of Reproductive Health, 9*, 32-41.
61. Kodzi, I., Casterline, J., & Aglobitse, P. (2010). The Time Dynamics of Individual Fertility Preferences among Rural Ghanaian Women. *Studies in Family Planning, 41*, 45-54.
62. Macro International Inc. (2011). MEASURE DHS STATCompiler. MEASURE DHS. [Online]. Available: **http://www.measuredhs.com**.
63. Fuse, K. (2010). Variations in attitudinal gender preferences for children across 50 less-developed countries. *Demographic Research, 23*, 1031-1048.
64. Storey, D. et al. (2008). *Communication Partnership for Family Health Midterm Survey 2008*. Baltimore, MD, Amman, Jordan.: Johns Hopkins Bloomberg School of Public Health Center for Communication Programs, Jordan Health Communication Partnership.
65. Harbour, C. (2011). Normative Influence and Desired Family Size among Young People in Rural Egypt. *Studies in Family Planning, 42*, 107-116.
66. Isiugo-Abanihe, U. (1994). Reproductive motivation and family-size preferences among Nigerian men. *Studies in Family Planning*, 149-161.
67. Hussain, R., Fikree, F., & Berendes, H. (2000). The Role of Son Preference in Reproductive Behaviour in Pakistan. *Bulletin of the World Health Organization, 78*, 379-388.
68. Westley, S., Choe, M., & Center, E. (2007). *How does son preference affect populations in Asia?* East-West Center.
69. Das Gupta, M. et al. (2003). Why is Son Preference so Persistent in East and South Asia? A Cross-Country Study of China, India and the Republic of Korea. *Journal of Development Studies, 40*, 153-187.

70. Barker, G. (2003). *Reflections on the Roles, Responsibilities, and Realities of married Adolescent Males and Adolescent Fathers*. Presented at WHO/UNFPA/Population Council Technical Consultation on Married Adolescents, Geneva.
71. Mutharayappa, R., Choe, M., Arnold, F., & Roy, T. (1997). Is Son Preference Slowing Down India's Transition to Low Fertility? *National Family Health Survey Bulletin, 4*, 1-4.
72. Arnold, F., Choe, M., & Roy, T. (1998). Son Preference, the Family Building Process and Child Mortality in India. *Population Studies, 52*, 301-315.
73. Filmer, D., Friedman, J., Schady, N., & World, B. (2008). *Development, modernization, and son preference in fertility decisions*. World Bank.
74. Mathur, S., Greene, M., & Malhotra, A. (2003). *Too Young to Wed: The Lives, Rights, and Health of Young Married Girls*. Washington, D.C.: ICRW.
75. Malhotra, A., Warner, A., McGonagle, A., & Lee-Rife, S (2011). *Solutions to End Child Marriage What the Evidence Shows*. Washington, DC: ICRW.
76. McIntyre, P. (2006). *Married adolescents: no place of safety*. Geneva: World Health Organization.
77. Barua, A., Apte, H., Pande, R., & Walia, S. (2009). *Infertility Concerns among Young Couples in Rural India*.
78. Wood, K., Maepa, J., & Jewkes, R. (1997). *Adolescent sex and contraceptive experiences: perspectives of teenagers and clinic nurses in the Northern Province*. Pretoria: Centre for Epidemiological Research in South Africa (Women's Health).
79. Bearinger, L., Sieving, R., Ferguson, J., & Sharma, V. (2007). Global perspectives on the sexual and reproductive health of adolescents: patterns, prevention, and potential. *The Lancet, 369*, 1220-1231.
80. Ringheim, K. & Gribble, J. (2010). *Improving the Reproductive Health of Sub-Saharan Africa's Youth: A Route to Achieve the Millennium Development Goals* Washington, DC: Population Reference Bureau.
81. Rahman, M. & Daniel, E. (2010). *A Reproductive Health Communication Model That Helps Improve Young Women's Reproductive Life and Reduce Population Growth: The Case of PRACHAR from Bihar, India*. Pathfinder.
82. UNFPA (2012). *Fact Sheet: Population Growth and Poverty: Population and Poverty: Are Smaller Families a Route to Prosperity?* [Online]. Available: **http://www.unfpa.org/public/home/factsheets/pid/3856**.
83. Bongaarts, J. & Bruce, J. (1995). The Causes of Unmet Need for Contraception and the Social Content of Services. *Studies in Family Planning, 26*, 57-75.
84. Westoff, C. & Bankole, A. (1995). *Unmet Need: 1990-1994, DHS Comparative Studies, No. 16*. Calverton, MD: Macro International.
85. Khan, S., Mishra, V., Arnold, F., & Abderrahim, N. (2007). Contraceptive Trends in Developing Countries. *Report 16*. Calverton, Maryland: Macro International Inc.
86. Bradley, S., Schwandt, H., & Khan, S. (2008). *Levels, trends, and reasons for contraceptive discontinuation*. Macro International Inc.
87. Robey, B., Ross, J., & Bhushan, I. (1996). Meeting unmet need: new strategies. *Population Reports, Series J: Family planning programs, 1*.
88. Ringler, K. (2009). A Review of the Ishraq Program's Quasi-Experimental Impact Evaluation. *MPP Professional Paper*.
89. Wood, K. & Jewkes, R. (2006). Blood blockages and scolding nurses: barriers to adolescent contraceptive use in South Africa. *Reproductive Health Matters, 14*, 109-118.
90. UNESCO (2011). *Global Education Digest: Comparing Education Statistics across the World*. Montreal, Canada: The UNESCO Institute for Statistics.
91. Mahmood, N. & Ringheim, K. (1996). Factors Affecting Contraceptive Use in Pakistan. *The Pakistan Development Review, 35*, 1-22.
92. Yam, E., Dries-Daffner, I., & Garcia, S. (2006). Abortion Opinion Research in Latin America and the Caribbean: A Review of the Literature. *Studies in Family Planning, 37*, 225-240.

93. Srikanthan, A. & Reid, R. (2008). Religious and cultural influences on contraception. *JOGC-TORONTO-, 30*, 129.
94. Castle, S. (2003). Factors Influencing Young Malians' Reluctance to Use Hormonal Contraceptives. *Studies in Family Planning, 34*, 186-199.
95. Otoide, V., Oronsaye, F., & Okonofua, F. (2001). Why Nigerian Adolescents Seek Abortion Rather than Contraception: Evidence from Focus-Group Discussions. *International Family Planning Perspectives, 27*, 77-81.
96. Williamson, L., Parkes, A., Wright, D., Petticrew, M., & Hart, G. (2009). Limits to modern contraceptive use among young women in developing countries: a systematic review of qualitative research. *Report 6*, 3.
97. Najafi, F., Rahman, H., & Juni, M. (2011). Barriers to Modern Contraceptive Practices among Selected Married Women in a Public University in Malaysia. *Global Journal of Health Sciences 3*, 50-55.
98. Fairhurst, K., Ziebland, S., Wyke, S., Seaman, P., & Glasier, A. (2004). Emergency Contraception: Why Can't You give it Away? Qualitative Findings from an Evaluation of Advance Provision of Emergency Contraception. *Contraception, 70*, 25-29.
99. Loxley, W. (1996). Sluts or Sleazy Little Animals?: Young People's Difficulties with Carrying and Using Condoms. *Journal of Community & Applied Social Psychology, 6*, 293-298.
100. Hillier, L., Harrison, L., & Warr, D. (1998). When you carry condoms all the boys think you want it: negotiating competing discourses about safe sex. *Journal of Adolescence, 21*, 15-29.
101. Kulczycki, A. (2004). The Sociocultural Context of Condom Use within Marriage in Rural Lebanon. *Studies in Family Planning, 35*, 246-260.
102. Prata, N., Vahidnia, F., & Fraser, A. (2005). Gender and relationship differences in condom use among 15-24-year-olds in Angola. *International Family Planning Perspectives*, 192-199.
103. Kumar, A., Hessini, L., & Mitchell, E. (2009) *Conceptualizing abortion stigma. Culture, Health, & Sexuality*. Routledge: Taylor & Francis Group.
104. Mathur, S., Mehta, M., & Malhotra, A. (2004). *Youth Reproductive Health in Nepal: Is Participation the Answer?* Washington, DC: ICRW; EngenderHealth.
105. Pande, R., Kurz, K., Walia, S., MacQuarrie, K., & Jain, S. (2006). *Improving the Reproductive Health of Married and Unmarried Youth in India: Delaying Age at Marriage in Rural Maharashtra, India*. Washington, DC: ICRW.
106. Kishor, S. (2000). Empowerment of women in Egypt and links to the survival and health of their infants. *Women's empowerment and demographic processes: Moving beyond Cairo*, 119-158.
107. Jejeebhoy, S. & Sathar, Z. (2001). Women's Autonomy in India and Pakistan: The Influence of Religion and Region. *Population and Development Review, 27*, 687-712.
108. Edmeades, J., Lee-Rife, S., & Malhotra, A. (2010). Women and Reproductive Control: The Nexus between Abortion and Contraceptive Use in Madhya Pradesh, India. *Studies in Family Planning, 41*, 75-88.
109. Schuler, S., Hashemi, S., & Riley, A. (1997). The Influence of Women's Changing Roles and Status in Bangladesh's Fertility Transition: Evidence from a Study of Credit Programs and Contraceptive Use. *World Development, 25*, 563-575.
110. Bawah, A., Akwongo, P., Simmons, R., & Phillips, J. (1999). Women's Fears and Men's Anxieties: The Impact of Family Planning on Gender Relations in Northern Ghana. *Studies in Family Planning, 30*, 54-66.
111. Simmons, R., Baqee, L., Koenig, M., & Phillips, J. (1988). The Importance of Female Family Planning Workers in Rural Bangladesh. *Studies in Family Planning, 19*, 29-38.
112. Pierce, E. & Shaver, T. (2003). *CARE International in Tajikistan: Final Evaluation Report-Varzob Reproductive Health Improvement Project*. USAID & CARE.

113. Blackden, C. & Wodon, Q. (2006). *Gender, time use, and poverty in sub-Saharan Africa*. 73. World Bank Publications.
114. Malhotra, A., Schuler, S., & Boender, C. (2002). *Measuring Women's Empowerment as a Variable in International Development*. Washington, DC: World Bank.
115. Parruzolo, S., Mehra, R., Kes, A., & Ashbaugh, C. (2010). *Targeting Poverty and Gender Inequality to Improve Maternal Health*. ICRW.
116. Boler, T. & Harris, L. (2010). *Reproductive Health Vouchers*.
117. Masood Kadir, M., Fikree, F., Khan, A., & Sajan, F. (2003). Do mothers-in-law matter? Family dynamics and fertility decision-making in urban squatter settlements of Karachi, Pakistan. *Journal of Biosocial Science, 35*, 545-558.
118. Libbus, K. & Kridli, S. (1997). Contraceptive decision making in a sample of Jordanian Muslim women: Delineating salient beliefs. *Health Care for Women International, 18*, 85-94.
119. Casterline, J., Sathar, Z., & ul Haque, M. (2001). Obstacles to Contraceptive Use in Pakistan: A Study in Punjab. *Studies in Family Planning, 32*, 95-110.
120. Kamal, N. (2000). The Influence of Husbands on Contraceptive Use by Bangladeshi Women. *Health Policy and Planning, 15*, 43-51.
121. Malhotra, A., Nyblade, L., Parasuraman, S., MacQuarrie, K., Kashyam, N., & Walia, S. (2003). *Realizing Reproductive Choice and Rights: Abortion and Contraception in India*. Washington, DC: ICRW.
122. Speizer, I., Whittle, L., & Carter, M. (2005). Gender relations and reproductive decision making in Honduras. *International Family Planning Perspectives*, 131-139.
123. Westoff, C. (2001). *Unmet need at the end of the century*. 1. Calverton, MD: ORC Macro, MEASURE DHS.
124. Storey, D., Boulay, M., Karki, Y., Heckert, K., & Karmacha, D. (1999). Impact of the integrated radio communication project in Nepal, 1994-1997. *Journal of Health Communication, 4*, 271-294.
125. Castle, S., Konate, M., Ulin, P., & Martin, S. (1999). A Qualitative Study of Clandestine Contraceptive Use in Urban Mali. *Studies in Family Planning, 30*, 231-248.
126. Ashraf, N., Field, E., & Lee, J. (2009). *Household Bargaining and Excess Fertility: An Experimental Study in Zambia*. JPAL.
127. Biddlecom, A. & Fapohunda, B. (1998). Covert Contraceptive Use: Prevalence, Motivations, and Consequences. *Studies in Family Planning, 29*, 360-372.
128. Tensou, B. & Hindin, M. (2010). *Covert contraceptive use and discordant fertility preferences among Ethiopian Couples*. Presented at PAA 2010.
129. MacPhail, C. & Campbell, C. (2001). 'I Think Condoms are Good, but Aai, I Hate Those Things': Condom Use among Adolescents and Young People in a Southern African Township. *Social Science and Medicine, 52*, 1613-1627.
130. Khan, S., Hudson-Rodd, N., Saggers, S., Bhuyan, M., & Bhuyia, A. (2004). Safer Sex or Pleasurable Sex? Rethinking Condom Use in the AIDS Era. *Sexual Health, 1*, 217-225.
131. Maharaj, P. & Cleland, J. (2005). Integration of sexual and reproductive health services in KwaZulu-Natal, South Africa. *Health Policy and Planning, 20*, 310-318.
132. Catania, J. et al. (1989). *Predictors of condom use and multiple partnered sex among sexually active adolescent women: Implications for AIDS related health interventions*. Taylor & Francis.
133. Debpuur, C. et al. (2002). The impact of the Navrongo Project on contraceptive knowledge and use, reproductive preferences, and fertility. *Studies in Family Planning, 33*, 141-164.
134. Schuler, S. (1999). Gender and Community Participation in Reproductive Health Projects: Contrasting Models from Peru and Ghana. *Reproductive Health Matters, 7*, 144-157.
135. Clark, C. et al. (2008). Intimate Partner Violence and Interference with Women's Efforts to Avoid Pregnancy in Jordan. *Studies in Family Planning, 39*, 123-132.

136. Williams, C., Larsen, U., & McCloskey, L. (2008). Intimate partner violence and women's contraceptive use. *Violence Against Women, 14*, 1382-1396.
137. Stanback, J. & Twum-Baah, K. (2001). Why do family planning providers restrict access to services? An examination in Ghana. *International Family Planning Perspectives*, 37-41.
138. YouthNet. *Assessment of Youth Reproductive Health Programs in Nicaragua*. 2003.
139. Barge, S. & Ramachandar, L. (1999). Provider-client interactions in primary health care: A case study from Madhya Pradesh. *Improving Quality of Care in India's Family Welfare Programme: The Challenge Ahead*, 92-116.
140. Visaria, L. (2000). From contraceptive targets to informed choice: The Indian experience. *Women's Reproductive Health in India*, 331-382.
141. Nanda, P., Achyut, P., Mishra, A., & Calhoun, L. (2011). *Measurement, Learning & Evaluation of the Urban Health Initiative: Uttar Pradesh, India, Baseline Survey 2010*. Measurement, Learning & Evaluation Project.
142. Speizer, I., Hotchkiss, D., Magnani, R., Hubbard, B., & Nelson, K. (2000). Do service providers in Tanzania unnecessarily restrict clients' access to contraceptive methods? *International Family Planning Perspectives*, 13-42.
143. Harries, J., Stinson, K., & Orner, P. (2010). Health Care Providers' Attitudes towards Termination of Pregnancy: A Qualitative Study in South Africa. *BMC Public Health, 9*, 1-11.
144. Parker, C. & Family Health International (Organization) (2005). *Adolescents and emergency contraceptive pills in developing countries*. Family Health International.
145. Ebuehi, O.M., Ebuehi, O.A.T., & Inem, V. (2006). Health care providers' knowledge of, attitudes toward and provision of emergency contraceptives in Lagos, Nigeria. *International Family Planning Perspectives*, 89-93.
146. Mills, S., Bos, E., & Suzuki, E. (2010). *Unmet need for contraception at a glance*. World Bank.
147. Curtis, S., Blanc, A., & Macro International: Institute for Resource Development. Demographic and Health Surveys (1997). *Determinants of contraceptive failure, switching, and discontinuation: an analysis of DHS contraceptive histories*. 6. Macro International.
148. Darroch, J., Sedgh, G., & Ball, H. (2011). *Contraceptive Technologies: Responding to Women's Needs*. New York: Guttmacher Institute.
149. Blanc, A., Curtis, S., & Croft, T. (2002). Monitoring Contraceptive Continuation: Links to Fertility Outcomes and Quality of Care. *Studies in Family Planning, 33*, 127-140.
150. Westoff, C. (2005). Recent Trends in Abortion and Contraception in 12 Countries. *Report 8*. Calverton, Maryland: ORC Macro; MEASURE DHS+.
151. Ramarao, S. & Mohanam, R. (2003). The quality of family planning programs: concepts, measurements, interventions, and effects. *Studies in Family Planning, 34*, 227-248.
152. DFID (2010). *Improving Reproductive, Maternal and Newborn Health: Reducing Unintended Pregnancies*. Department for International Development.
153. Johns Hopkins Bloomberg School of Public Health (2009). *Johns Hopkins Center for Communication Programs Wins Global Media Award for Excellence in Population Reporting*. [Online]. Available: **http://www.jhsph.edu/publichealthnews/press_releases/2009/ccp_award.html.**
154. IPPF (2011). Voices from Nepal. *Report 3*.
155. Snyder, L., Diop-Sidibe, N., & Badiane, L. (2003). *A meta-analysis of the effectiveness of family planning campaigns in developing countries*.
156. Speizer, I., Magnani, R., & Colvin, C. (2003). The Effectiveness of Adolescent Reproductive Health Interventions in Developing Countries: A Review of the Evidence. *Journal of Adolescent Health, 33*, 24-48.
157. Boulay, M. & Valente, T. W. (2002). Indirect Exposure to a Family Planning Mass Media Campaign in Nepal. *Journal of Health Communication, 7*, 379-399.
158. Storey, J. & Boulay, M. (2000). *Improving Family Planning Use and Quality of Services in Nepal through the Entertainment-Education Strategy*. Baltimore, Maryland: Center for Communication Programs, Bloomberg School of Public Health, Johns Hopkins University.

159. Richey, C. & Salem, R. (2008). Elements of Success in Family Planning Programming. *Series J*, 57. Johns Hopkins Bloomberg School of Public Health.
160. FHI. (2011). *Mobile Technology: Text Messages for Better Reproductive Health*. [Online]. Available: **http://www.fhi360.org/en/Research/Projects/Progress/GTL/mobile_tech.htm**.
161. Van Rossem, R. & Meekers, D. (2000). An Evaluation of the Effectiveness of Targeted Social Marketing to Promote Adolescent and Young Adult Reproductive Health in Cameroon. *AIDS Education & Prevention, 12*, 383-404.
162. Cabezon, C. et al. (2003). Adolescent Pregnancy Prevention: An Abstinence-Centered Randomized Controlled Intervention in a Chilean Public High School. *Journal of Adolescent Health, 36*, 64-69.
163. Askew, I. (2004). *A multi-sectoral approach to providing reproductive health information and services to young people in western Kenya: Kenya adolescent reproductive health project*. Frontiers in Reproductive Health, Population Council.
164. Kanesathasan, A. et al. (2008). *Catalyzing Change: Improving Youth Sexual and Reproductive Health through DISHA, an Integrated Program in India* Washington, DC: ICRW.
165. Lloyd, C. (2009). *New Lessons: The Power of Educating Adolescent Girls*. New York: Population Council.
166. Baird, S., Chirwa, E., McIntosh, C., & Ozler, B. (2009). The Short-Term Impacts of a Schooling Conditional Cash Transfer Program on the Sexual Behavior of Young Women. *Health Policy*, 1-14.
167. Baird, S., McIntosh, C., & Ozler, B. (2011). Cash or Condition? Evidence from a Cash Transfer Experiment. *Quarterly Journal of Economics*, 126-130.
168. Ashburn, K. & Warner, A. (2010). *Can Economic Empowerment Reduce Vulnerability of Girls and Young Women to HIV?* Washington, DC: ICRW.
169. Lundgren, R., Gribble, J., Greene, M., Emrick, G., & Monroy, M. (2005). Cultivating men's interest in family planning in rural El Salvador. *Studies in Family Planning, 36*, 173-188.
170. Gribble, J., Lundgren, R., Velasquez, C., & Anastasi, E. (2008). Being strategic about contraceptive introduction: the experience of the Standard Days Method. *Contraception, 77*, 147-154.
171. Toure, L. (1996). *Male Involvement in Family Planning: A Review of Selected Program Initiatives in Africa*. USAID (SARA Project).
172. Amatya, R. et al. (1994). The Effect of Husband Counseling on NORPLANT Contraceptive Acceptability in Bangladesh. *Contraception, 50*, 263-273.
173. Sternberg, P. & Hubley, J. (2004). Evaluating men's involvement as a strategy in sexual and reproductive health promotion. *Health Promotion International, 19*, 389-396.
174. Kim, Y., Marangwanda, C., & Kols, A. (1996). *Involving men in family planning: The Zimbabwe Male Motivation and Family Planning Method Expansion Project, 1993-1994*. The Johns Hopkins School of Public Health.
175. Cheng, H., Kotler, P., & Lee, N. (2011). *Social Marketing for Public Health: Global Trends for Success Stories*. Sudbury, MA: Jones and Bartlett Publishers, LLC.
176. PSI (1998). *Social Marketing: An Effective Tool in the Global Response to HIV/AIDS*. UNAIDS.
177. DKT International (2009). *2008 Contraceptive Social Marketing Statistics*. Washington, DC: DKT International.
178. DKT International (2011). *2010 Contraceptive Social marketing Statistics*. Washington, DC: DKT International.
179. Meekers, D. (1998). *The Effectiveness of Targeted Social Marketingto Promote Adolescent Reproductive Health: The Case of Soweto, South Africa*. Washington, DC: Population Services International.

180. Dayaratna, V. et al. (2000). *Reproductive Health Interventions: Which Ones Work and What Do They Cost?* The Futures Group.
181. DFID (2004). *Contraceptive Social Marketing, India*. DFID.
182. Agha, S. (2002). A quasi-experimental study to assess the impact of four adolescent sexual health interventions in sub-Saharan Africa. *International Family Planning Perspectives*, 67-118.
183. Bellows, N., Bellows, B., & Warren, C. (2011). The use of vouchers for reproductive health services in developing countries: systematic review. *Report 16*.
184. Population Council (2011). *The Voucher Evaluation Project*. [Online]. Available: **http://www.rhvouchers.org/rhv/the-voucher-evaluation-project/objectives-and-design**.
185. PATH (2012). *Reaching youth through pharmacies: PATH develops a model for increasing youth's access to reproductive health services*. [Online]. Available: **http://www.path.org/projects/rxgen_pharmacy_project.php**.
186. Meuwissen, L., Gorter, A., & Knottnerus, A. (2006). Impact of accessible sexual and reproductive health care on poor and underserved adolescents in Managua, Nicaragua: a quasi-experimental intervention study. *Journal of Adolescent Health, 38*, 56-e1.
187. Meyer, C., Bellow, N., Campbell, M., & Potts, M. (2011). *The Impact of Vouchers on the Use and Quality of Health Goods and Services in Developing Countries: A Systematic Review*. Berkeley: Venture Strategies for Health and Development.
188. Frew, P., del Rio, C., Lu, L., Clifton, S., & Mulligan, M. (2009). Understanding Differences in Enrollment Outcomes Among High-Risk Populations Recruited to a Phase IIb HIV Vaccine Trial. *Journal of Acquired Immune Deficiency Syndromes, 50*, 314-319.
189. Clifton, D. (2010). *Expanding Access to Family Planning. Population Reference Bureau*. [Online]. Available: **http://www.prb.org/Articles/2010/expandfpaccess.aspx**.
190. Bates, L., Islam, M., Al-Kabir, A., & Schuler, S. (2003). From home to clinic and from family planning to family health: Client and community responses to health sector reforms in Bangladesh. *International Family Planning Perspectives*, 88-94.
191. Routh, S., Ashraf, A., Stoeckel, J., & Barkat-e-Khuda (2001). Consequences of the shift from domiciliary distribution to site-based family planning services in Bangladesh. *International Family Planning Perspectives*, 82-89.
192. National Rural Health Mission (2011). *ASHA: Accredited Social Health Activist*. [Online]. Available: **http://mohfw.nic.in/NRHM/asha.htm**.
193. Ministry of Health and Family Welfare, Government of India (2007). *Standard Operating Procedures for Sterilization Services in Camps*.
194. Mwangi, A. & Warren, C. (2008). *Taking Critical Services to the Home: Scaling-up Home-based Maternal and Postnatal Care, including Family Planning, through Community Midwifery in Kenya*. United States agency for international development (USAID).
195. Douthwaite, M. & Ward, P. (2005). Increasing Contraceptive Use in Rural Pakistan: An Evaluation of the Lady Health Worker Programme. *Health Policy and Planning, 20*, 117-123.
196. AIDSTAR-Two (2011). *The Use of Information and Communication Technology in Family Planning, Reproductive Health, and Other Health Programs: A Review of Trends and Evidence*. Cambridge: Management Sciences for Health.
197. Aker, J. & Mbiti, I. (2010). Mobile phones and economic development in Africa. *The Journal of Economic Perspectives, 24*, 207-232.
198. USAID (2010). Community Based Family Planning. *Technical Update No. 8: Mobile Outreach Service Delivery*. USAID.
199. FHI (1999). Gender Norms Affect Community Distribution. *Network, 19*.
200. Pritchett, L. (1994). Desired Fertility and the Impact of Population Policies. *Population and Development Review, 20*, 1-55.

201. Malarcher, S. (2009). *A Review of the Evidence Developed for a Technical Consultation on Expanding Access to Injectable Contraception*. Family Health International.
202. Burket, M. (2006). *Improving Reproductive Health through Community-Based Services: 25 Years of Pathfinder International Experience*. Pathfinder International.
203. Phillips, J., Greene, W., & Jackson, E. (1999). *Lessons from community-based distribution of family planning in Africa*. Population Council.
204. Kumar, S. & Saran, K. (2011). *Jhpiego in Rajasthan—Reinvigorating Family Planning Services*. Jhpiego.
205. Keesbury, J., Liambila, W., Obare, F., & Kuria, P. (2009). *Mainstreaming Emergency Contraception in Kenya: Final Project Report*. Kenya: Population Council and Population Services International.
206. Kim, Y., Putjuk, F., Basuki, E., & Kols, A. (2000). Self-assessment and peer review: improving Indonesian service providers' communication with clients. *International Family Planning Perspectives*, 4-12.
207. Kim, Y. et al. (2005). Promoting informed choice: evaluating a decision-making tool for family planning clients and providers in Mexico. *International Family Planning Perspectives*, 162-171.
208. IntraHealth International (2004). *Improving the Performance of Primary Providers in Family Planning and Reproductive Health: Results and Lessons Learned from the PRIME II Project, 1999-2004*. PRIME II.
209. Combary, P., Newman, C., & Royer, A. (2001). *Technical Report #24A Follow-up and Evaluation of a Distance Learning Program for Family Planning Service Providers in Morocco*. Chapel Hill, NC: PRIME II Morocco Project.
210. Kols, A. & Sherman, J. (1998). Family planning programs: improving quality. Population Reports, *Series J: Family planning programs*, 1.
211. Townsend, J. (1991). Effective family planning service components: global lessons from operations research. *Progress in clinical and biological research, 371*, 45.
212. Bertrand, J., Hardee, K., Magnani, R., & Angle, M. (1995). Access, quality of care and medical barriers in family planning programs. *International Family Planning Perspectives*, 64-74.
213. Schuler, S. & Hossain, Z. (1998). Family planning clinics through women's eyes and voices: a case study from rural Bangladesh. *International Family Planning Perspectives*, 170-205.

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