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BARRIERS TO FAMILY PLANNING USE IN EASTERN NEPAL: RESULTS FROM A MIXED METHODS STUDY

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Barriers to Family Planning Use in Eastern Nepal: Results from a Mixed Methods Study

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ABSTRACT

Faced with stagnant contraceptive prevalence, the Government of Nepal has recently ramped up efforts to reduce barriers to family planning, to increase methods and services available, and to satisfy the demand for modern contraception. This study, which took place in Eastern Nepal, was a follow-up to the 2016 Nepal Demographic and Health Survey (NDHS). The follow-up study reinterviewed a sample of married female NDHS respondents age 15-39 in 17 clusters of Province 1, typically within a week following their NDHS interview (90% response rate, n=194). It included a range of in-depth questions about family planning use, fertility preferences, and perceived barriers to family planning.

In line with an earlier study in Ghana, the study found an underreporting of traditional method use in the NDHS. Husbands had an important role in family planning, with about half of all users reporting that their husband had specifically suggested the current method. This was disproportionately the case for women who reported using condoms, withdrawal, and periodic abstinence.

Nepal is a major labor exporting country. Unsurprisingly, their husband's absence was the main reason women cited for not using contraception. Respondents tended to be poorly prepared for using contraception when their husbands returned home, often intending to start a hormonal method only after he arrived. Most respondents were in regular contact with nonresident husbands, but many reported not feeling comfortable broaching the issue of contraceptive preparedness before their husband's return.

Nearly all study respondents knew about family planning methods and where to obtain contraceptives. Women's main concern was finding a suitable method, typically described as one that did not cause undesirable side effects. Fear of health hazards and side effects of commodity-based contraception was a theme in about a third of the interviews. Among women who used traditional methods or did not use any method, the major source for their concerns about health hazards and side effects of modern methods appeared to be the views of their husbands.

Access to contraceptives was rarely reported as a reason for nonuse, but discussions revealed a number of access-related barriers to commodity-based methods, including geographic inaccessibility, limited or inconsistent provider operating hours, and a small number of method types locally available. Female community health volunteers helped bridge this gap in some rural communities, but could only dispense condoms and re-supply pills. A more subtle barrier to access was that condoms, pills, and injectables were sometimes perceived as the entire universe of available commodity-based contraceptives, indicating a lack of method diversity in several communities. However, despite these challenges, women and couples who were motivated to use commodity-based methods of contraception were nearly always successful in their efforts, for example, by paying for contraceptives at local pharmacies rather than traveling long distances to obtain them for free at government health posts, or opting for their second-choice method. Unfortunately, upon receiving their method from pharmacies, they were not usually counseled about possible side effects or the time needed for the method to provide protective effects.

Overall, the findings suggest that improved family planning messaging, broader availability of long-term methods, expanded and reliable operating hours, consistent supplies, and more counseling would improve contraceptive uptake and continuation in Eastern Nepal. The study also provides lessons learned for future follow-up studies as well as implications for large-scale survey measurement of family planning worldwide.

1 STUDY OBJECTIVES AND CONTEXT

1.1 Study Objectives

While family planning is considered an essential part of Nepal's national health strategy, levels of family planning uptake among married women stagnated from 2006 to 2011 and unmet need for family planning increased from 25% to 28% over the period (Ministry of Health and Population [Nepal], New ERA, and ICF International 2012; ICF 2017). A major factor affecting contraceptive use and unmet need for family planning in Nepal is cyclical patterns of male migration, which separates husbands from their wives for extended periods of time. In recent years the government of Nepal has committed more resources to stepping up family planning efforts, to identifying barriers to family planning access, and to substantially increasing the number of family planning users by the year 2020 (FP2020 2015; 2017).

This report presents findings from a mixed-methods follow-up study to the 2016 Nepal Demographic and Health Survey (NDHS). It was designed in advance of the 2016 NDHS and reinterviewed a selected number of respondents to examine barriers to family planning use among married women in Eastern Nepal. The study in particular focuses on some of the unique contraceptive challenges faced by married women with migrant husbands. Non-use of family planning during a husband's extended absence may be a strategy to avoid side effects of modern methods, or may even be encouraged as evidence of the wife's faithfulness, but it can put women at risk of unwanted pregnancies when their husbands return. The study also probes in depth a number of other potential barriers to family planning use, including fear of side effects, attitudes toward family planning, access, cost, and the influence of husbands, family members, and religion. Data produced by the study also provide evidence about the consistency of responses to relevant NDHS questions. Current family planning users were included in the study as a reference group.

In addition to better understanding barriers to family planning usage in Nepal, there was another motivation for this study. Demographic and Health Surveys (DHS) are the largest source of data on family planning in low-income countries worldwide. Nationally representative data from DHS surveys and from other surveys that have adopted many DHS questions—notably the Multiple Indicator Cluster Surveys (MICS) and the Performance Monitoring and Accountability Surveys (PMA2020)—are routinely used to measure contraceptive uptake, usage, and discontinuation, as well as reasons for discontinuation and nonuse. DHS datasets enable researchers to study these outcome measures in relation to a large number of background characteristics, including respondents' age, education, parity, marital status, location, empowerment, and health status. In an era of policy and funding commitments to increase voluntary uptake of safe and effective family planning methods in low-income countries, there is renewed interest in addressing the barriers that prevent women and couples who want to delay or stop childbearing from voluntarily adopting safe and effective means to do so. Given the evidence that survey questions as in the DHS may undercount traditional method use (Rossier, Senderowicz, and Soura 2014; Staveteig 2017), and that responses to standard survey questions on individual reproductive health may show inconsistencies, even over the short-term (Staveteig 2016; 2017), there was keen interest in fielding a mixed-methods study that would enable checks on the consistency of DHS responses in a new context and provide rich qualitative data about barriers to contraceptive use, in relation to the data obtained by the DHS itself.

Understanding barriers to family planning usage in Eastern Nepal is an important part of formulating strategies to ensure safe and consistent access to contraceptive methods in Nepal and in similar contexts. Such findings may also help improve how DHS data could be used more effectively for programming and policymaking. Globally, a more robust and holistic understanding of the barriers to family planning and of possible improvements to survey collection and analysis can improve policies, programs, and strategies.

1.2 The Nepal Situation

Family planning has been an essential part of Nepal's national health strategy since 1959 (Ministry of Health [Nepal] et al. 2017). In Nepal, family planning information and services are provided through government, social marketing, nongovernmental organizations (NGOs), and the private sector in an effort to increase access to and use of safe and acceptable services (Department of Health Services, Government of Nepal, and Ministry of Health 2016). In 2015, the government of Nepal further committed to meeting its family planning goals by joining the global initiative known as FP2020 (FP2020 2015). A result of the 2012 London Summit on Family Planning, the goal of FP2020 is to bring voluntary family planning services to an additional 120 million women and girls worldwide by 2020 through collaborative efforts. As part of FP2020, the government of Nepal pledged to identify barriers to family planning access and formulate policies and programs to address these barriers and expand access to services throughout the country (FP2020 2015). Since 2015, the government has provided annual updates on the progress made and challenges faced in pursuing its commitment, including specific pledges concerning policies, financing, programs, and service delivery.

Despite a shortage of skilled health workers, nearly all health facilities (98%) in Nepal offer some type of contraceptives, and nearly all (97%) offer family planning services 5 days or more per week (FP2020 2016b; Ministry of Health [Nepal] et al. 2017). The public sector is the most popular source for modern contraception methods in Nepal, serving 70% of modern-method users (Ministry of Health [Nepal], New ERA, and ICF 2017). Additionally, 6% of modern-method users receive their methods from the NGO sector, and nearly one-fifth (19%) obtain modern contraceptives from the private medical sector (Ministry of Health [Nepal], New ERA, and ICF 2017). However, inequalities in accessing family planning services remain an issue among vulnerable populations, adolescents, and rural residents. Over one-third of Nepalese women live in rural areas. The national Female Community Health Volunteer (FCHV) Program, created in 1988, has served as a bridge between rural communities and government health services (Nepal Family Health Program II 2012). Over 51,000 FCHVs assist with various primary health care activities throughout all 75 districts in the country, with a focus on maternal and child health and family planning, including resupplying pills and providing condoms (Department of Health Services, Government of Nepal, and Ministry of Health 2016).

While fertility rates in Nepal have steadily declined over the past 2 decades, from 4.6 births per woman in 1996 to 2.3 births per woman in 2016, the use of modern contraception has remained stagnant over the most recent decade, at 44% in 2006 and 43% in 2011 and 2016. Over one-fifth (21%) of women age 25-49 have begun childbearing by age 18 (Ministry of Health [Nepal], New ERA, and ICF 2017). Among currently married women age 15-49, the most popular forms of modern contraception are female sterilization (used by 15%), followed by injectables (9%), male sterilization (6%), and oral pills (5%). The use of traditional family planning methods almost doubled between 2006 and 2011, from 4% to 7%, and increased further to

10% in 2016 (Ministry of Health and Population [Nepal], New ERA, and ICF International 2012; Ministry of Health [Nepal], New ERA, and ICF 2017).

Contraceptive prevalence among married women in Nepal varies with age, increasing from 23% among married women age 15-19, peaking at 69% among women age 35-44, and then decreasing to 65% among married women age 45-49 (Ministry of Health [Nepal], New ERA, and ICF 2017). Prevalence among currently married women living with their husbands was 62% in 2011, more than double the level among currently married women with husbands living elsewhere for less than 1 year, at 25%, and more than three times the level among those with husbands living elsewhere for 1 year or more, at 20% (Khanal et al. 2013). In 2016, 58% of women who had begun using a contraceptive method in the 5 years before the survey discontinued the method within 12 months of starting its use. The most common reason women cited for discontinuation was that their husband was away (47%), followed by fear of side effects or health concerns (18%), and desire to become pregnant (13%) (Ministry of Health [Nepal], New ERA, and ICF 2017).

Temporary family planning methods (including male condom and pills) are provided at all levels of the health system, from hospital to health care centers, health posts, health workers, and volunteers. Despite free provision, the uptake and continuation rates of women using long-acting and reversible contraceptives (LARCs) are very low, due to poor awareness of the method, fear and anxiety about its side effects, and misperceptions about its long-term safety and impact on fertility (Sapkota, Rajbhandary, and Lohani 2017). The government of Nepal has addressed the issue by training service providers in long-acting family planning methods and increasing the method mix offered (FP2020 2016a). Intrauterine contraceptive devices (IUDs) and implants are provided only in selected primary health centers and health posts that have the requisite trained health workers.

The Family Health Division of the Ministry of Health has started satellite clinics across all 75 districts, targeting rural areas to improve access to a wider selection of family planning services (Maharjan et al. 2016). Family planning services are provided for free in public hospitals, but in urban areas users are much more dependent on the private sector where services are often perceived as expensive. There are also social marketing outlets providing family planning at subsidized rates and free of charge in designated clinics and hospitals managed by NGOs. The centralized location of government facilities makes it challenging for the urban poor to access these services (Maharjan et al. 2016). The FCHV Program has made some progress in the decentralization of family planning commodities, but stock-outs occur commonly and continue to hinder continued contraceptive use. According to the 2014 FCHV National Survey Report, less than 60% of FCHVs had condoms (59%) or oral contraceptives (58%) available on the day of the survey (Ministry of Health and Population [Nepal] 2014).

Naturally, differences exist among family planning methods in function, effectiveness, side effects, and mode of use; as a result, the acceptability and desirability of different methods varies. Switching methods is common, especially among first-time users and continuing users who know a range of methods. In part, variation in methods offered exists because of differences in the qualifications and training required of providers, as well as the infrastructure needed to safely provide certain methods. Pills, injectables, and condoms can be provided safely with a relatively low level of training, while implants, IUDs, and female and male sterilization require a more advanced level of provider skill and more established infrastructure (Ministry of Health [Nepal], New ERA, and ICF 2017).

Emergency contraception (EC) plays a critical role in reducing unintended pregnancies, but few people in Nepal are aware of the method. The 2016 NDHS revealed that only a third of currently married women and half of currently married men have heard of emergency contraception, while less than 1% of married women have used it as a method of contraception (Ministry of Health [Nepal], New ERA, and ICF 2017).

Abortion became legal in Nepal in 2002 and has been available throughout the country since 2004 (Wu et al. 2017). While post-abortion contraceptive services are included as a priority in the National Safe Abortion Policy of 2003, levels of post-abortion contraceptive use are low, with high discontinuation rates (Padmadas, Lyons-Amos, and Thapa 2014). Post-abortion family planning services often are provided at a separate clinic on hospital premises, and lack effective referral systems. As a result, linkages between the abortion and family planning services remain weak, with only 44% of women reporting receiving family planning counseling during the post-abortion period (Padmadas, Lyons-Amos, and Thapa 2014; Thapa and Neupane 2013).

Migration is common in Nepal. In the 2016 NDHS, nearly half (47%) of households had at least one person who had migrated from the household at some time in the past 10 years (Ministry of Health [Nepal], New ERA, and ICF 2017). Migration has important implications concerning survey findings on unmet need for family planning, as the standard definition of unmet need counts a woman whose husband is away from home and who therefore is not using contraception as having an unmet need for family planning if she responds in the survey that she wants to delay or stop childbearing (Ban et al. 2012). When disaggregated by type of marital arrangement, unmet need in 2011 was disproportionately high among women in Nepal whose husbands were living elsewhere for at least 1 year (58%) compared with currently married women whose husbands were resident at the time of the survey (16%) (Khanal et al. 2013). Over the years, however, out-migration for work opportunities has been increasing, particularly among men. According to Nepal's 2010 census, about 2 million of the total population of 28 million were living outside the country. and the majority were in the reproductive age group (Shrestha, Shrestha, and Ghimire 2012). Overall, unmet need for family planning has decreased, from 28% in 2011 to 24% in 2016 (Ministry of Health [Nepal], New ERA, and ICF 2017), but remains regionally high, likely due to spousal migration.

Among migrant couples, contraception method preferences often depend on the frequency of the husbands' visits. Wives whose husbands are frequently at home are more likely to use injectables and pills, whereas wives whose husbands return home less often are more likely to report higher use of withdrawal and condoms (Nepal Family Health Program II and Center for Research on Environmental Health and Population Activities [CREHPA] 2012). Migrant couples view injectables, pills, and condoms as the most appropriate methods for reasons such as uncertainty of the husbands' arrival and their short length of stay at home. The majority of wives of migrant husbands do not make arrangements regarding the use of family planning methods prior to their husbands' return home—which puts them at risk of unplanned or unwanted pregnancies. Commonly, women expect that the husband will bring condoms with them when they return home, while men perceive that family planning preparations are a woman's responsibility (Nepal Family Health Program II and Center for Research on Environmental Health and Population Activities [CREHPA] 2012).

Adequate contraceptive planning and preparedness rely heavily upon when a husband informs the family of his planned return. Wives whose husbands informed them only a week before their return home reported using condoms mostly or not preparing at all, while wives who received notification a month in advance

were most likely to use pills or injectables (Nepal Family Health Program II and Center for Research on Environmental Health and Population Activities [CREHPA] 2012). Most migrant couples reported switching methods used the first night of a husband's return to a more reliable and safer method, for example. switching from withdrawal to condoms, or from condoms to injectables. Wives of migrants who use temporary methods commonly discontinue use after their husband leaves in an attempt to avoid infidelity rumors while their husband is away (Shrestha, Shrestha, and Ghimire 2012), thus exposing them to the risk of an unplanned pregnancy upon his return.

1.3 Eastern Nepal

Nepal is divided into 75[1] districts distributed across three ecological regions (Mountain, Hill, and Terai), five development regions (Eastern, Central, Western, Mid-western, and Far-western), and seven federal provinces as defined by the 2015 Constitution of Nepal (Provinces 1 through 7). Province 1 comprises 14 districts spread across the three ecological regions in the Eastern part of the country. In the 2011 NDHS, the Eastern development region (which includes all of the newly-created Province 1) had the lowest level of modern method use among married women and the second highest level of unmet need overall (ICF 2017). Additionally, at the time of the 2011 NDHS nonresident husbands were more prevalent in the Eastern region than in the country as a whole (Ministry of Health and Population [Nepal], New ERA, and ICF International 2012). For these and other reasons to be described in Chapter 2, Province 1 was chosen as the study location, in consultation with the study implementing agency, New ERA.

The 2016 NDHS found that a quarter of married women age 15-49 in Province 1 had an unmet need for family planning, higher than, but nearly indistinguishable from, the national average (24%). As with Nepal as a whole, nearly one in five births in the 5 years preceding the NDHS in Province 1 were unwanted.[2] Province 1 has the highest percentage of women using traditional methods (15% versus 10% nationwide). Modern contraceptive prevalence (mCPR) is also lower in Province 1 (40%) than the country as a whole (43%), and is disproportionately low compared with other provinces, such as Province 3 (49%) and Province 7 (48%) (Ministry of Health [Nepal], New ERA, and ICF 2017). Additionally, among episodes of pill use started in the past 5 years, failure was more common as a reason for discontinuation of the pill in Province 1 than in the country as a whole (7% versus 5%).[3]

1.4 Barriers to Family Planning

1.4.1 Prior frameworks

Even as more attention is paid to expanding and ensuring access to family planning services, the measurement of barriers to family planning has been underdeveloped (RamaRao and Jain 2015). Much of the previous research in public health has focused on only a single dimension of access, whether geographic or physical. While evidence confirming the relevance of geographic proximity to family planning services is widely available, it has long been agreed that access is a multi-dimensional concept and that other factors besides distance likely play an important and influential role in contraceptive access and use (Bertrand et

[1] At the time the study was fielded, there were 75 districts, including 2 that were divided between provinces. Immediately prior to publication, the divided districts were recognized as separate, and Nepal now has 77 districts.
[2] Authors' calculations from 2016 NDHS data.
[3] Authors' calculations from 2016 NDHS data.

al. 1995). Three of the most widely used frameworks for access to health care—Bertrand et al. (1995), Penchansky and Thomas (1981), and UNCESCR (2000)—incorporate some common elements, including geographic accessibility, administrative accommodation, and economic affordability.

There are a few notable differences among these three frameworks. For example, the 1995 framework of Bertrand and colleagues does not include the availability of commodities, personnel, and the provision of goods and services in the access equation. Their framework, developed specifically for family planning, intentionally separates access from the quality of care. It is unique in its recognition of the importance to contraceptive use that psychosocial constraints can have, including psychological, attitudinal, and/or social factors (Bertrand et al. 1995; Choi, Fabic, and Adetunji 2016). As the authors note, access helps determine whether an individual makes contact with the family planning provider, while quality of care greatly affects the client's decision to accept a method and the motivation to continue using it (Bertrand et al. 1995). A provider's imposition of personal views regarding what methods are appropriate for certain patients, or a woman's fear of being perceived as unfaithful should she decide to continue using a family planning method while her husband is away, are examples of psychosocial barriers (Bertrand et al. 1995; Shrestha, Shrestha, and Ghimire 2012).

Both the "Five As" framework, developed by Penchansky and Thomas (1981), and the 2000 framework of Availability, Accessibility, Acceptability, and Quality (AAAQ) of the United Nations Committee on Economic, Social, and Cultural Rights (UNCESCR) include service quality. Both were developed for broad health care systems, focusing more on the ability of service delivery contact points to adequately respond when potential clients need services (Choi, Fabic, and Adetunji 2016). Provision of good-quality services not only has been associated with better family planning use (Bongaarts and Bruce 1995; Jain et al. 2012; Mroz et al. 1999; Shah, Wang, and Bishai 2011) but also has been identified as an important human right, regardless of the outcomes (Hardee et al. 2014; World Health Organization 2014). The "Five As" framework incorporates high-quality services through its accountability and availability components and is the only framework to include the client's comfort in interacting with the provider. The AAAQ framework does so explicitly via its quality component and also implicitly via its other three components, each of which represents a particular facet of quality.

Campbell, Sahin-Hodoglugil, and Potts (2006) in their summary of the literature on barriers to fertility regulation delineate several key categories affecting access: geography, method choice, financial costs, the status of women, medical barriers (including requiring unnecessary testing or return visits), provider bias, side effects, misinformation and fear, and lack of safe abortion. Other researchers have taken a more economic or demographic approach to studying barriers to family planning. Some authors have used the Easterlin Synthesis Framework as a starting point, namely that fertility regulation is the function of the strength of motivation to avoid pregnancy and of the costs of adopting methods to regulate fertility (Easterlin 1975). Early work by Nag (1984) delineated four types of costs of fertility regulation: physical/health costs, including side effects and perceived health hazards, psychic costs, in terms of perceptions of sexual modesty or clashes with religious beliefs, social opinion costs, and economic costs. Casterline, Sathar, and Haque (2001) in their study of Punjab articulated six categories of barriers to family planning: the strength of motivation to avoid pregnancy, knowledge of contraception, costs of practicing contraception (including perceptions of social, cultural, and religious costs), husband's opposition to family planning, health concerns about contraception, and inadequate access.

Two other notable studies have each developed an explicit framework for reasons behind unmet need for family planning. In their study of the Philippines, Casterline, Perez, and Biddlecom (1997) outlined two potential explanations for observed levels of unmet need. The first concerns measurement—namely that surveys may not be able to capture the full range and strength of fertility intentions or of intermittent family planning use. The second includes barriers to family planning use: ambivalent fertility preferences, perceived infecundity, lack of knowledge of family planning, social and cultural unacceptability of family planning, fear of health effects, inadequate services, and opposition from husband, relatives, and community members. Based on a review of the literature and an expert review meeting about the causes of unmet need, Machiyama et al. (2017) developed a framework that classifies the causes of unmet need into five categories: weak, inconsistent, or ambivalent fertility preferences; generic disapproval of pregnancy prevention; method-specific barriers to contraceptive use; perceived low risk of getting pregnant, and partner-related factors.

Finally, Choi et al. (2016) synthesized several public health models into a framework featuring six key elements of access: cognitive accessibility, psychosocial accessibility, geographic accessibility, service quality, administrative accommodation, and affordability. Cognitive accessibility means that individuals are aware of methods and service delivery points, and have the correct knowledge to decide whether to use contraception and which method to use. Psychosocial accessibility means that individuals are unconstrained by psychological, attitudinal, and social factors in seeking family planning services. Geographic accessibility means that service delivery points are located nearby and that individuals can affordably reach them. Service quality includes necessary commodities, required equipment, functioning facilities, and ethically and medically appropriate unbiased care. Administrative accommodation includes unrestricted clinic hours, nondiscrimination, and no unnecessary requirements for receiving services.

1.4.2 The framework used in this study

As global dialogue on family planning has shifted to focus on modern methods—traditional methods are excluded from the broad-scale FP2020 initiative, and demand for contraception satisfied by modern methods is the only major family planning goal included in the Sustainable Development Goals—one major ambiguity in the literature is whether these frameworks are designed to capture barriers to using modern commodity- and service-based contraceptive methods only, or whether traditional methods of fertility regulation such as periodic abstinence (also known as the rhythm or calendar method) and withdrawal are also included. We sought to articulate overall barriers to modern and traditional methods of family planning, as well as barriers to modern service- and commodity-based contraceptives that must be obtained through a medical or health provider such as pills, condoms, injectables, IUDs, sterilization, and implants.

The adoption of commodity-based methods, such as pills, IUD, injectables, and condoms that involve regularly procuring and using a device or medication—and, to some extent, a service-based method like sterilization or LAM—is inherently different than the adoption of a traditional method or modern method that is a formal implementation of natural practices, such as the Standard Days method, Billings ovulation, and symptothermal method. Commodity- and service-based methods are subject to factors such as physical access, service availability, provider quality, and side effects in a way that other modern and traditional methods are not. We therefore included traditional method users in the group of respondents who have a barrier to service- and commodity-based family planning and incorporated their survey responses in our

framework accordingly. However other factors such as lack of awareness, ambivalent fertility intentions, or opposition to methods of fertility regulation apply to prospective users of any method.

In developing a delineation of barriers to family planning for this study, particularly barriers to service- and commodity-based family planning, we gave strong consideration to both the Choi et al. (2016) framework and to the Machiyama et al. framework (2017). Both frameworks resonate with our previous work on Ghana (Staveteig 2016; 2017), and Choi et al.'s framework was specifically developed around DHS data. We began with the Machiyama et al. framework, as it includes fertility preferences, which we perceive as an important *a priori* barrier to family planning use. To be clear about the role of spousal separation as part of "perceived low fecundability," we renamed "partner-related factors" to "partner's opposition to (service- or commodity-based) family planning." In other words, this may apply to opposition to any means of fertility regulation, preference to have a/another child soon, and any particular opposition to service- and commodity-based methods.

The Choi et al. framework provides a comprehensive delineation of access-related barriers to family planning. Indeed, the existence of a service point is effectively meaningless if it cannot provide supplies in a timely, high-quality fashion, if it discriminates against users, or if it has unstable or limited operating hours. Therefore, in lieu of "method-specific barriers to use," we included the four access-related barriers from Choi et al. (2016)—geographic accessibility, service quality, administrative accommodation, and affordability—as well as cognitive barriers, which we renamed "insufficient knowledge of methods or services" to separate it from cognitive factors that may be related to side effects, fertility preferences, attitudinal factors, and/or misperceptions of low fecundability. We then added an additional category entitled personal aversion to (service- or commodity-based) family planning. This includes fear of health hazards and side effects, whether rumored or experienced, as well as attitudinal opposition, which subsumes the category of generic disapproval of pregnancy prevention. We used the resulting six categories to delineate the multidimensional barriers to family planning, including service- and commodity-based contraceptives described by respondents, as outlined in Figure 1.1.

Figure 1.1 Barriers to (service- or commodity-based) family planning

- Weak, inconsistent, or ambivalent fertility preferences
- Insufficient knowledge of methods or services
- Personal aversion to (service- or commodity-based) family planning
  - Rumors and secondhand reports of side effects
  - Personal experience with side effects
  - Attitudinal opposition, including to fertility regulation overall
- Husband's opposition to (service- or commodity-based) family planning
- Perceived low fecundability, including spousal absence
- Access-related barriers to service- or commodity-based family planning
  - Geographic inaccessibility
  - Service quality barriers
  - Administrative accommodation barriers
  - Lack of affordability

Notably, in Nepal spousal absence is so pervasive that this study treats perceived low fecundability due to spousal absence separately in Chapter 4, apart from other family planning barriers.

1.5 Report Contents

The remainder of this report describes the study methodology and provides the key results and conclusions from this follow-up study. Chapter 2 describes the unique design and methods of the study, including sampling, fieldwork, and response rate. Chapter 3 describes the characteristics of the study sample as a whole, using NDHS data that enable us to compare respondents to counterparts in Province 1 and in Nepal as a whole, as well as follow-up data about the same characteristics. As mentioned, Chapter 4 examines the most widespread barrier to family planning use in Nepal: spousal migration. We describe migration patterns, and go beyond the tendency toward contraceptive nonuse during a husband's absence to delve into prior and future family planning use in migrant couples, and how they prepare for his return. Chapter 5 explores each of the remaining barriers listed previously as part of our framework. To help maintain a focus on possible policy interventions, Chapter 6 examines women's interactions with the health system around family planning, including missed opportunities for counseling. Chapter 7 summarizes the study, describes its limitations, and assesses its policy implications. The first appendix provides a comparison of responses for three key questions between NDHS and the follow-up; the second provides additional viewpoints from Nepalese women in our study about how contraceptive services could be improved in Nepal.

2 DATA AND METHODS

2.1 Study Design

This study was designed as a mixed methods follow-up study to the 2016 Nepal Demographic and Health Survey (NDHS). The 2016 NDHS is a nationally representative survey of 12,862 women age 15-49 and 4,063 men age 15-49 residing in 11,040 interviewed households (Ministry of Health [Nepal], New ERA, and ICF 2017). The survey provides information on fertility, family planning, infant and child mortality, maternal and child health, nutrition, spousal violence, and noncommunicable diseases in relation to demographic and other background characteristics of respondents. The NDHS provides representative estimates at the national level, the urban-rural level, and the regional and provincial levels. Fieldwork for the NDHS was conducted by New ERA, with technical assistance from ICF through The DHS Program, which is funded by USAID. The NDHS had a 99% response rate among eligible households and a 98% response rate among eligible women age 15-49.

The design of this follow-up study is similar to a follow-up study in Ghana previously conducted through The DHS Program (Staveteig 2017, 2016; Staveteig et al. 2017). The Nepal study was funded, planned, and fielded independently from the main survey, but it selected respondents from among those already interviewed by the main survey. In this way respondents could be selected based on characteristics of interest to the follow-up study. Interviews could be conducted quickly because the NDHS had already gathered a great deal of background information. Repeated questions were asked, both to set up the skip sequence for additional probes, and to provide information on alignment between responses to the NDHS and the follow-up study.

In this study, unlike in Ghana, we decided to focus on a single region. This was in part necessitated by the mode of NDHS fieldwork, which relies primarily on interviewers traveling by foot in rugged areas without good roads; it would have been difficult to reach a diverse sample from multiple regions with a single team. By focusing on a single region, we could achieve better saturation of a single area. Eastern Nepal was selected for a few reasons. First, it had one of the highest levels of unmet need for family planning in 2011, the lowest level of demand for modern methods satisfied, and a high level of spousal migration (Ministry of Health and Population [Nepal], New ERA, and ICF International 2012; ICF 2017). Second, and perhaps most important, Eastern Nepal was relatively unaffected by the major earthquake of 2015, meaning few respondents would have been displaced; as such the findings are more easily relevant to other low-income contexts.

Ethical clearance for the study was obtained from the ICF Institutional Review Board in tandem with ethical clearance for the parent study, the NDHS. The study was also reviewed and approved by the Nepal Health Research Council. New ERA, the implementing agency for the NDHS, was contracted to conduct fieldwork, produce translated transcripts of interviews, and assist with data analysis for this study.

Out of 44 eligible[4] clusters in the Terai and Hill areas of Province 1 (most of the former Eastern Region), 17 were ultimately selected for the follow-up study. These clusters were chosen based primarily on timing of the NDHS fieldwork in the area, with a desire for geographic diversity and urban-rural representativeness within each altitudinal belt balanced against logistical practicality: during the monsoon season, roads changed quickly and a cluster that DHS had just completed was not always accessible for follow-up.

Initially, a total of 10 urban and 7 rural clusters were sampled; 11 clusters were in the Terai and 6 were in the Hill region. This produced a cluster composition that was largely consistent with the overall composition of eligible clusters in the region, although slightly more representative of urban and Terai areas. Importantly, during NDHS fieldwork, some rural clusters in Nepal were officially reclassified as urban. This classification affected three of the rural clusters selected for this study, which are now considered urban under the new designation. As a result, 13 of the 17 selected study clusters are classified as urban, which is similar to the revised cluster composition of the 44 eligible clusters (Table 2.1)

Table 2.1 Geographic distribution of eligible and selected follow-up study clusters

Of the clusters that were eligible and selected for the study, the percentage that were in each group

	Eligible clusters (n=44)				Selected clusters (n=17)		
	Urban	Rural	Total		Urban	Rural	Total
Terai	50	9	59	Terai	53	12	65
Hill	23	18	41	Hill	24	12	35
Total	73	27	100	Total	76	24	100

A map of the cluster locations by updated rural/urban designation is shown in Figure 2.1.

At the end of the 2016 NDHS questionnaire, women age 15-39 in the Terai and Hill belts of Province 1 were asked if they would consent to an additional follow-up study on family planning. After clusters were selected, a computer program determined eligibility within each cluster based on consent to be contacted and on additional criteria related to family planning use, marital status, age, and inferred fecundability. To avoid double follow-up interviews, a small number of women who were eligible for the verbal autopsy follow-up interview were ineligible for the present study. As the selection criteria shown in Figure 2.2 indicates, a random half of all modern method users were deselected from each cluster. This decision was made in order to maintain the study's focus on barriers to contraceptive use.

[4] Due to the desire to conduct all interviews in Nepali, eight clusters with fewer than 90% of NDHS interviews conducted in Nepali were excluded from consideration.

Figure 2.1 Map of study clusters

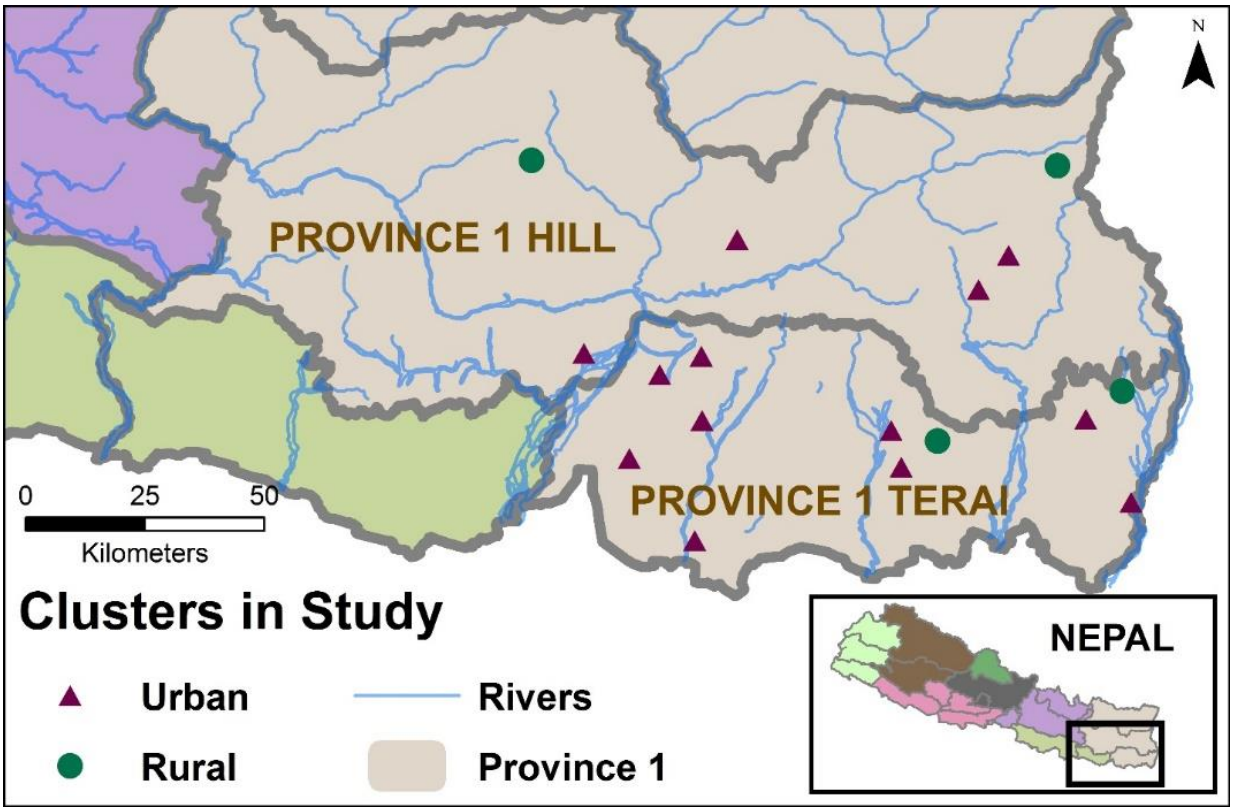


Figure 2.2 Selection criteria for the follow-up study

Women in selected clusters were eligible for the follow-up study if they:

(1) Consented to be recontacted; and
(2) Are age 15-39; and
(3) Were interviewed by the NDHS in Nepali; and
(4) Are married or living with a man as if married; and
(5) Are not eligible for verbal autopsy; and
(6) Are not using male or female sterilization; and
(7) Are not pregnant; and
(8) Meet at least one of the following criteria:
    (a) Had a period in the last 3 months;
    (b) Are using a hormonal method of contraception;
    (c) Gave birth in the past year; or
    (d) Terminated a pregnancy in the past 3 months.

In order to limit the size of the reference group, after selecting respondents, a random half of all modern method users in the cluster (except LAM users) were deselected.

The study design used computer-assisted personal interviewing (CAPI) in both the NDHS and the follow-up. Because the NDHS used CAPI, it was possible for the program to determine which women were eligible for follow-up immediately after the cluster was closed and securely transfer relevant data from the NDHS to computer tablets for the follow-up study.

A single field team of three female interviewers conducted the entire follow-up study over the course of 3 months. The follow-up interviewers met with the NDHS team to receive maps and guidance on household numbering and to transfer selected DHS data entry from eligible respondents. Follow-up interviewers or a supervisor typically met the NDHS teams while in the field to walk the cluster and view the household map, and then returned to the cluster immediately after the NDHS team completed to receive preliminary data about selected respondents via Bluetooth. In three clusters the follow-up team was not able to meet the NDHS team prior to their departure, and data from the NDHS were transmitted remotely to the follow-up interviewers via the Internet File Streaming System (IFSS) system.

Interviews were conducted using a CAPI program implemented in Windows tablet computers. The CAPI program used exported NDHS data to enable interviewers to relocate respondents and reconfirm their identity through repeated questions about background characteristics. Upon respondents' consent, interviewers also used an audio recorder to capture responses to open-ended questions. The study benefited from a multi-modal design: responses to closed-ended questions could be used to confirm consistency with NDHS and to provide supplemental information about barriers to family planning, while responses to open-ended questions could shed light on the intended meaning behind those responses.

2.2 Interviewer Training and Pretesting

Interviewer training began in mid-June 2016. The three interviewers attended training facilitated by the project director, project coordinator, and a research assistant. In the first eight days the team intensively reviewed and discussed the interviewer training manual, the CAPI manual, and the questionnaire. Interviewers took turns teaching back sections of the interviewer manual. Role-plays of questionnaire administration were conducted in English and Nepali, and additional suggestions were made to improve the translations and the questionnaire. A CAPI expert led sessions on field procedures and the CAPI process, including receiving data from NDHS teams via Bluetooth, correcting data, reviewing cases, handling adverse events, and closing the cluster to send data back to New ERA.

During training the CAPI program was also tested thoroughly. Extensive reviews were done to ensure the quality and consistency of translation between the four formats (English paper, English CAPI, Nepali paper, Nepali CAPI). By the end of the training, all four formats were determined to be consistent and correct, skip patterns had been tested, each interviewer had conducted two full simulated practice interviews, and the team had reviewed the survey procedure and interviewer guidelines.

Due to the follow-up nature of the survey, it was deemed necessary to conduct the pretest with actual NDHS respondents. Two NDHS clusters in eastern Kathmandu were selected for pretest. In those two clusters, female NDHS respondents were asked for consent to be contacted for reinterview. The follow-up team visited both clusters, met with NDHS supervisors, received maps, and saw the layout of household numbering. Once the clusters had closed, they received data for selected respondents from an NDHS supervisor via Bluetooth and wrote up a listing of all eligible women. Each of the three interviewers, accompanied by one of the first three study authors, contacted pretest respondents for interviews. Many respondents work 6 days per week, and it was difficult to find them at home in just2 days. However, each interviewer was able to complete two practice interviews. Afterwards, each wrote up brief case summaries and interview notes.

Following the pretest, the tablet information was output to a spreadsheet and interview audio was transcribed in Nepali, then translated into English. The output was carefully reviewed. Transcriptions were used as teaching tools of what had been done well and what could be improved.

2.3 Fieldwork

Fieldwork was conducted from July to September of 2016. In early July the field team travelled with a supervisor from Kathmandu to Biratnagar and met the NDHS supervisors working in adjacent clusters. While waiting for the clusters to be closed, the field team visited clusters that had been selected for the study. They familiarized themselves with the locality and, once the NDHS team closed the clusters, they were at hand to receive data from the NDHS supervisor's tablet to their own tablets.

The data from the NDHS supervisor's tablet listed all the eligible respondents that the program had selected, along with some identifying background characteristics. The NDHS supervisor also led team members to each selected respondent's house or, when the field team was unable to meet the NDHS team personally, left detailed instructions on locating the houses on maps. When Bluetooth was unavailable, the field team securely imported data from new clusters through the wireless network.

The field team located respondents using these detailed household maps along with their full names. Additionally, the data imported from the main NDHS study included records with selected fields of key questions on eligible respondents to ensure the identity of the correct respondent and to check for any discrepancies. The CAPI program for the follow-up study flagged discrepancies in responses. Interviewers were instructed to clarify the responses with respondents and, if the respondent indicated that her original answer was correct, to go back and change her answer in the follow-up study to match that in the original; otherwise, to discuss and continue with the interview. Even if the answer was changed, the CAPI program kept a record of the initial flagged discrepancy. In four cases respondents had at least five initial discrepancies in their background characteristics; these were determined to likely reflect innumeracy, and respondents were asked to confirm their full names before continuing with the interview. (See Staveteig (2018) for the final questionnaire.)

The team of three interviewers selected a supervisor from among themselves for each cluster on a rotating basis, and the supervisor filled up the inventory sheet and then assigned cases to the fellow enumerators in each cluster. Once all the interviews in the cluster were completed, the supervisor officially closed the cluster and uploaded the data to the central office.

As the fieldwork was being conducted in peak monsoon season, floods and heavy downpours presented challenges in some inner clusters of the Terai region. The NDHS supervisors were often available to guide the team through the clusters in the Terai, so locating respondent households was not a problem. And as the NDHS team had built up a rapport with the community, the field team did not have to convince the respondents about the legitimacy of the study itself.

However, as the study moved further into the hills, travelling on foot to reach the clusters became hazardous and painstakingly slow because the prevailing monsoon rains and landslides often had washed away threadbare roads. The NDHS team could not reach all of the clusters on time and hence the fieldwork period extended beyond schedule. In turn, fieldwork for the follow-up study had to be extended by a month. Moreover, because households were scattered, locating each household proved to be a major hurdle. Setting

up appointments for interviews was equally challenging. In urban areas women could be met at home during the day, but in the hills and more remote areas women worked long hours, often leaving home before sunrise, and it was difficult to locate them for reinterview.

Following the DHS protocol of visiting the household three times to complete the interview, the team revisited households in clusters in the Terai if they had been unable to meet the respondents previously. Fieldwork was completed in September 2016.

2.4 Response Rate and Data Processing

Follow-up interviewers or a supervisor typically met the NDHS teams while in the field to walk the cluster and view the household map, and then, immediately after the NDHS team completed, to receive preliminary data about selected respondents via Bluetooth. In three clusters the data from NDHS were transmitted remotely to the follow-up interviewers via the IFSS system.

In total, the NDHS interviewed 535 women age 15-49 in the 17 selected clusters, 525 (98.1%) of whom consented to be re-contacted for follow-up. The selection algorithm determined that 215 of these 525 respondents were eligible for the follow-up study. Interviewers attempted to relocate all of these 215 respondents. The follow-up survey team traced respondents using the location of their household on the NDHS cluster map and the name of the household head. Once located, initiating follow-up interviews with eligible women was facilitated by the rapport established by NDHS and their own prior consent to be re-contacted. However, some respondents were hesitant to participate in this study, most citing the length of the NDHS interview and/or the lack of compensation provided. Many had to be convinced that the follow-up study would not take more than 40 minutes at most. Upon this reassurance, the vast majority of eligible women consented to be reinterviewed. For the follow-up study as a whole there were 17 cases of non-response: six women refused, either personally or their husbands would not grant permission, five were traveling or had moved elsewhere (some had been guests in the household at time of the DHS), five were unreachable even after three visits, and one consented and started the interview. but her husband disrupted and became hostile, so the interviewer considered consent to have been withdrawn and terminated the interview. The remaining 198 (of 215) respondents were successfully reached and consented to be interviewed.

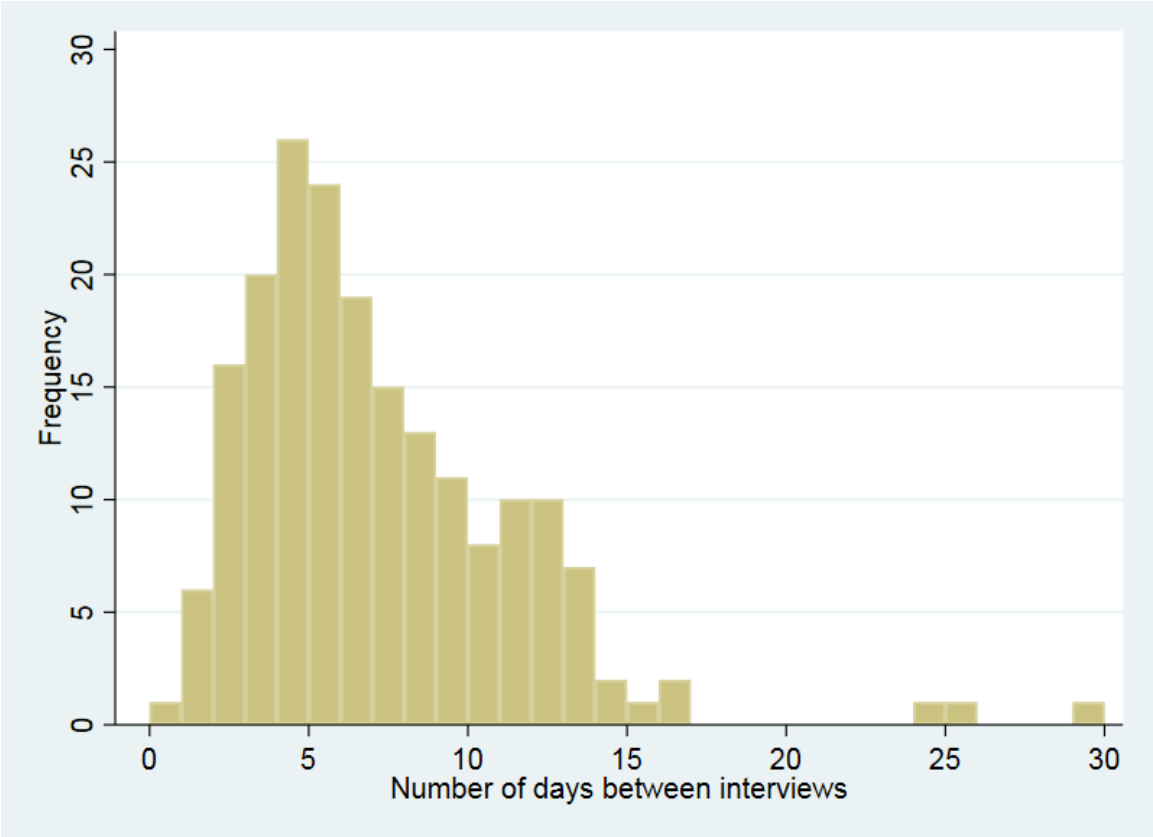
Four of the 198 respondents who consented to be interviewed were determined to be ineligible for the study during the interview process. One respondent reported having found out that she was pregnant since the time of her DHS interview, another reported that she was not married, in contrast to her reported marital status in the NDHS, and in two other cases the interviewer determined that the respondent was effectively unmarried—for example, her husband appeared to have abandoned the marriage several years earlier. Therefore, the valid response rate was 194 of 215, or 90.2% (Table 2.2).

Follow-up respondents were normally interviewed within 1 week of the NDHS; as Figure 2.3 shows, the full range was from 0 to 30 days after the NDHS. The median gap between interviews was 6.0 days and the mean gap was 6.7 days. Only in three cases did the gap exceed 16 days; these were instances where interviewers returned to a previously completed cluster to relocate respondents who had been traveling.

Table 2.2 Response rate and interview completion, follow-up study

	Freq.	Percent
Consented; completed interview	194	90.2
Consented; determined ineligible (incomplete interview)	4	1.9
Unreachable after 3 visits	5	2.3
Migrated or traveling	5	2.3
Refused	6	2.8
Consent withdrawn by husband	1	0.5
Total	215	100.0

Figure 2.3 Distribution of number of days elapsed between NDHS interview and follow-up interview



Audio recordings of the interviews began after permission was granted. These recordings ranged in length from just over 12 minutes to nearly an hour.[5] The average and median interview length was just over 29 minutes. Shorter interviews tended to be with nulliparous women whose husbands were away and who gave very short responses to open-ended questions, with no additional information provided. Longer interviews occurred with women who were willing to share a lot of information during open-ended questions, as well as with those who had more complex circumstances that were of interest to the study.

[5] In one case (Respondent 01.089.02), the audio is incomplete as the recorder was paused partway through when the respondent needed to attend to her baby, and it was not restarted. The audio lasted 25 minutes and was included in these calculations.

When possible, tablet data were securely uploaded to the New ERA office at the end of each day of interviews. Occasionally, in remote areas a signal was not available, and tablet data were uploaded as soon as the team reached a location with a suitable signal. At the end of the study, the downloaded tablet data were aggregated into a single data file, together with a dictionary of variable and value labels. The dataset was then converted into Stata for analysis.

All respondents assented to audio recording, which produced over 98 hours of audio. The interview audio was transcribed in Nepali by the three study interviewers, typically one of the two who had not conducted the interview, and the Nepali transcripts were randomly audited by two managers to check for accuracy. Nepali transcripts were then translated into English by the three interviewers and two managers; sections of each translated transcript were checked for correctness by a different staff member. In all, the transcription and translation process produced over 3,400 pages of translated transcripts.

A database of translated transcripts was built using ATLAS.ti software. Within the program, transcripts were divided into 58 possible question codes. Additionally, the three interviewers, two local managers, and first author developed a set of codes, both deductively (from study aims) as well as inductively (from themes that emerged during the study). A set of thematic codes was developed, and then all six team members independently coded 10 documents with the thematic codes, stopping after each one to compare and discuss coding and the definition of codes until convergence was reached. Thematic definitions were clarified and revised throughout this process. Ultimately, the team developed 17 thematic codes for transcripts and delineated the boundaries of each. Afterwards, the team of interviewers and study authors independently coded documents from each of eight subgroups, pausing at the beginning of each subgroup to independently code the same document and ensure agreement with themes. The result was a database organized by question number, theme, and family. This database was used to generate raw output for each analytic section, generally between 50 and 150 pages of relevant material for each section, that the first three authors used to synthesize patterns in tandem with tablet data, and from which illustrative quotes were selected.

3 CHARACTERISTICS OF RESPONDENTS

3.1 Background Characteristics

Respondents to the follow-up survey were systematically selected from among married respondents in 17 clusters of the 2016 Nepal Demographic and Health Survey (NDHS). For the purpose of analysis, a comparable set of respondents was derived from the NDHS in Province 1 and nationwide samples using the selection algorithm outlined in Figure 2.2, minus the deselection of a random half of modern method users. Table 3.1 shows the background characteristics of follow-up respondents versus these comparable NDHS respondents in Province 1 and nationwide. Province 1 and nationwide samples are weighted using NDHS sample weights. To ensure consistency with tables based on follow-up tablet data, the follow-up sample is shown unweighted.

Table 3.1 Background characteristics of follow-up respondents versus comparable[1] respondents in Province 1 and nationwide, Nepal DHS 2016

	Follow-Up		Province 1		Nationwide	
	n	%	n	%	n	%
Province						
Province 1	194	100.0	924	100.0	924	21.5
Province 2	NA	NA	NA	NA	86	2.0
Province 3	NA	NA	NA	NA	1,079	25.1
Province 4	NA	NA	NA	NA	576	13.4
Province 5	NA	NA	NA	NA	819	19.0
Province 6	NA	NA	NA	NA	346	8.0
Province 7	NA	NA	NA	NA	474	11.0
Ecological region						
Mountain	NA	NA	102	11.0	335	7.8
Hill	66	34.0	351	38.0	2,475	57.5
Terai	128	66.0	471	51.0	1,494	34.7
Residence						
Urban	144	74.2	601	65.0	2,832	65.8
Rural	50	25.8	323	35.0	1,472	34.2
Age						
15-19	7	3.6	64	7.0	347	8.1
20-24	39	20.1	211	22.8	990	23.0
25-29	60	30.9	239	25.9	1,190	27.7
30-34	48	24.7	207	22.4	1,035	24.0
35-39	39	20.1	201	21.7	741	17.2
40-44[2]	1	0.5	1	0.1	1	0.0
Education						
None	16	8.2	136	14.7	853	19.8
Primary	43	22.2	210	22.7	862	20.0
Some secondary	76	39.2	317	34.3	1,348	31.3
SLC[3] and above	59	30.4	261	28.3	1,241	28.8
Employment						
Employed for cash	64	33.0	278	30.1	1,239	28.8
Employed not for cash	46	23.7	309	33.5	1,542	35.8
Not employed	84	43.3	336	36.4	1,523	35.4
Wealth						
Poorest	15	7.7	172	18.7	935	21.7
Poorer	41	21.1	229	24.8	840	19.5
Middle	40	20.6	178	19.2	645	15.0
Richer	50	25.8	180	19.5	811	18.8
Richest	48	24.7	164	17.8	1,073	24.9

(Continued…)

Table 3.1—*Continued*

	Follow-Up		Province 1		Nationwide	
	n	%	n	%	n	%
Number of living children						
0	18	9.3	101	10.9	493	11.4
1	71	36.6	323	34.9	1,457	33.8
2	81	41.8	325	35.2	1,465	34.0
3	18	9.3	111	12.1	553	12.8
4	6	3.1	42	4.5	223	5.2
5+	0	0.0	22	2.4	113	2.6
Religion						
Hindu	159	82.0	711	77.0	3,725	86.6
Buddhist	7	3.6	66	7.2	290	6.7
Muslim	0	0.0	30	3.2	64	1.5
Kirat	20	10.3	85	9.2	86	2.0
Christian	8	4.1	31	3.4	138	3.2
Ethnicity						
Hill Brahmin	34	17.5	110	11.9	636	14.8
Hill Chhetri	51	26.3	192	20.8	1,088	25.3
Terai Brahmin/Chhetri	1	0.5	4	0.4	53	1.2
Other Terai caste	8	4.1	25	2.7	94	2.2
Hill Dalit	15	7.7	60	6.5	467	10.8
Terai Dalit	1	0.5	12	1.3	27	0.6
Newar	7	3.6	57	6.2	246	5.7
Hill Janajati	68	35.1	354	38.3	1,256	29.2
Terai Janajati	9	4.6	77	8.4	365	8.5
Muslim	0	0.0	30	3.2	60	1.4
Other	0	0.0	3	0.3	10	0.2
Husband's residence						
Living with her	100	51.5	559	60.5	2,575	59.8
Staying elsewhere	94	48.5	365	39.5	1,729	40.2
Spousal age difference						
Woman older	19	9.8	95	10.3	349	8.1
Man 0-4 years older	81	41.8	449	48.6	2,328	54.1
Man 5-9 years older	76	39.2	283	30.6	1,237	28.7
Man 10+ years older	18	9.3	97	10.5	391	9.1
Unknown	0	0.0	0	0.0	0	0.0
Husband's education						
None	8	4.1	53	5.7	293	6.8
Primary	18	9.3	154	16.6	815	18.9
Some secondary	81	41.8	382	41.4	1,488	34.6
SLC and above	87	44.8	335	36.3	1,699	39.5
Unknown	0	0.0	0	0.0	9	0.2
Total	194	100.0	924	100.0	4,304	100.0

Note: NA indicates the category is inapplicable due to sampling criteria.
[1] Comparable sample created using the seven selection criteria outlined in Figure 2.2 (minus random deselection of half of modern method users). The follow-up sample is unweighted, while Province 1 and national samples are weighted.
[2] One respondent from the follow-up sample was initially coded as age 39 and thus qualified for the study; she was later judged to be 40 but is maintained in all samples.
[3] In Nepal, a school-leaving certificate (SLC) is equivalent to having completed secondary education.

The follow-up study operated solely in Hill and Terai regions of Province 1. Table 3.1 indicates that the follow-up sample is somewhat more urban (74%) than comparable respondents in Province 1 as a whole (65%), while nationwide the comparable sample is 66% urban. The table also shows that respondents to the follow-up survey are moderately older than their Province 1 and national counterparts, with fewer adolescents (4% versus 7% and 8%, respectively). Follow-up respondents appear to have slightly more education, with more having completed some secondary education (39% versus 34% and 31%, respectively) and fewer having received no education compared with the comparable Province 1 and national NDHS samples (8% versus 15% and 20%).

By socioeconomic status, according to the NDHS 33% of women in the follow-up sample were employed for cash, while 24% were employed but not for cash, and the remaining 43% were unemployed. There appears to be somewhat higher unemployment among the follow-up sample compared with all NDHS respondents in Province 1 and nationwide (36% and 35%, respectively). Over half of the follow-up sample was concentrated in the richer and richest wealth quintiles (26% and 25%), and only 8% in the lowest wealth quintile. This stands in contrast to 19% of comparable respondents in the lowest wealth quintile in Province 1 and 22% nationwide.

According to NDHS, a plurality of follow-up respondents has two living children (42%), while slightly over one-third (37%) have one child. Nine percent of women are nulliparous and another 9% have three children, while the remaining 3% have four living children. Follow-up respondents appear slightly more likely to have two children than comparable samples of women in Province 1 and nationwide (35% and 34%, respectively); in other respects, the follow-up and comparable samples are similar.

A majority of women in Nepal are Hindu, as reflected in the follow-up sample (82%). According to NDHS, an additional 10% of women in the follow-up sample identified as Kirat, while Buddhist and Christian each account for 4%. The religious composition of follow-up and comparable respondents is similar in Province 1, except that Hindus are slightly overrepresented in the follow-up survey (at 82% versus 77%) and Muslims underrepresented (0% in the follow-up sample versus 3%). Compared with the country as a whole, the Kirat religion is more prevalent in Province 1. Ethnic and caste identity is diverse in Nepal, with a plurality of women in the follow-up sample of Hill Janajati origin (35%), followed by Hill Chhetri (26%) and Hill Brahmin (18%). The remaining ethnic groups in the sample, in descending order of size, are Hill Dalit, Terai Janajati, other Terai caste, Newar, Terai Brahmin/Chhetri, and Terai Dalit.

Women were asked about their husband's current residence. Table 3.1 shows that in the NDHS, 49% of respondents in the follow-up sample reported that their husband was temporarily living elsewhere, versus 40% of comparable respondents in Province 1 and in the country as a whole.

3.2 Fertility Preferences

Both the NDHS and the follow-up study asked respondents about their future fertility preferences. The standard phrasing of the DHS question about fertility preferences is: *Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?* Allowable responses are: have (a/another) child, no more/none, says she cannot get pregnant, or undecided/don't know. Women who want a/another child are asked how long they would like to wait from now before the birth of the (next) child. Table 3.2 shows the NDHS responses to these questions for the follow-up sample compared with comparable respondents in Province 1 and in the country as a whole.

As Table 3.2 shows, the majority of respondents in the follow-up study (59%) said they do not want to have any more children[6], 37% want to have a/another child, and 4% are undecided, while no respondents declared themselves to be infecund. Fertility preferences are largely similar between follow-up respondents and comparable respondents in Province 1 and nationwide.

[6] All nulliparous women wanted a child.

According to the 2016 NDHS, among women who said they want more children, one-tenth of the follow-up sample want a/another child within 2 years, while one-fourth want to wait for 2 or more years. This result resembles the pattern among comparable NDHS respondents in Province 1, while comparable respondents nationwide are slightly more likely than follow-up respondents to want a/another child within 2 years (13% versus 10%) and somewhat less likely to want a/another child after 2 years (20% versus 25%).

Table 3.2 Fertility preferences of follow-up respondents versus comparable respondents in Province 1 and nationwide, Nepal DHS 2016

	Follow-Up		Province 1		Nationwide	
	n	%	n	%	n	%
Fertility preference						
Have a/another	71	36.6	347	37.6	1,458	33.9
Undecided	8	4.1	29	3.2	145	3.4
No more	115	59.3	548	59.3	2,682	62.3
Declared infecund	0	0.0	0	0.0	19	0.4
Timing preference						
Wants within 2 years	19	9.8	110	11.9	565	13.1
Wants after 2+ years	48	24.7	225	24.3	866	20.1
Wants, unsure timing	4	2.1	12	1.4	28	0.6
Undecided	8	4.1	29	3.2	145	3.4
Wants no more	115	59.3	548	59.3	2,682	62.3
Declared infecund	0	0.0	0	0.0	19	0.4
Total	194	100.0	924	100.0	4,304	100.0

The follow-up survey also asked women the same question on fertility preference and timing as in the NDHS. As Table 3.3 shows, respondents were more likely to say in the follow-up study that they want to have a/another child (40% versus 37%) and less likely to say that they want no more children than in the NDHS (55% versus 59%). In total, 20 respondents gave conflicting answers between the two surveys (Appendix Table A.1).

As in the NDHS, follow-up respondents who said they wanted a/another child were asked their time preference for the next birth. However, unlike the NDHS, in the follow-up survey, respondents were allowed to specify a range of time preference rather than a specific point in time. As Table 3.3 indicates, a greater share of respondents said they want to give birth within 2 years in follow-up than during the NDHS (14% versus 10%). Additionally, nine respondents (5%) gave a range of time that overlapped the 2-year cut point. Twenty-one percent said they want to have a/another child after 2 or more years, and only one respondent (<1%) wanted a/another but was uncertain of the timing.

Table 3.3 Fertility preferences among follow-up respondents, according to the follow-up study

	n	%
Fertility preference		
Have a/another child	78	40.2
No more	107	55.2
Undecided	9	4.6
Timing preference		
Wants within 2 years	27	13.9
Wants after 2+ years	41	21.1
Range overlaps 2 years	9	4.6
Wants, unsure timing	1	0.5
Wants no more	107	55.2
Undecided	9	4.6
Total	194	100.0

3.3 Family Planning

Table 3.4 shows family planning characteristics of follow-up respondents versus comparable respondents in Province 1 and nationwide according to the NDHS survey. All women in every group know of at least one modern contraceptive method. Fifty-seven percent of women in the follow-up sample (111 respondents) reported to the NDHS that they were not using a family planning method at the time of the NDHS interview, while the others were almost evenly split between traditional and modern method use. Due to the sampling strategy described in Figure 2.2, modern method users were disproportionately undersampled; consequently, the use of traditional methods was more common in the follow-up study than among comparable respondents in Province 1 and nationwide (22% versus 17% and 14%, respectively), while the use of modern methods was less common (21% versus 36% in both Province 1 and nationwide).

The table also shows that, according to the NDHS, among the follow-up study participants who use family planning, withdrawal is the preferred primary method[7] overall (49%), followed by injectables (19%), pills (18%), and implants/Norplant (5%). The IUD, condoms, and periodic abstinence are used only minimally. Users of male and female sterilization were excluded from the survey. The main contrast in method mix between the follow-up sample and comparable respondents in Province 1 and nationwide is the balance between injectables and withdrawal, largely due to the sampling strategy. According to the NDHS, 34% and 30% of Province 1 and nationwide respondents, respectively, use injectables compared with 19% of follow-up respondents, whereas only 30% in Province 1 and 26% nationwide use withdrawal.

[7] Per DHS, if more than one family planning method is used, the most effective method is considered primary.

Table 3.4 Family planning characteristics of follow-up respondents versus comparable respondents in Province 1 and nationwide, Nepal DHS 2016

	Follow-Up		Province 1		Nationwide	
	n	%	n	%	n	%
Knowledge of family planning						
Knows a modern method	194	100.0	924	100.0	4,304	100.0
Knows traditional methods only	0	0.0	0	0.0	0	0.0
Knows no method	0	0.0	0	0.0	0	0.0
Total	194	100.0	924	100.0	4,304	100.0
Family planning use, grouped						
No method	111	57.2	439	47.5	2,158	50.1
Modern method	40	20.6	328	35.5	1,566	36.4
Traditional method	43	22.2	157	17.0	580	13.5
Folkloric method	0	0.0	0	0.0	1	0.0
Total	194	100.0	924	100.0	4,304	100.0
Primary family planning method among users						
IUD	2	2.4	10	2.1	84	3.9
Implants/Norplant	4	4.8	33	6.9	210	9.8
Injectables	16	19.3	163	33.6	633	29.5
Pill	15	18.1	94	19.4	315	14.7
Emergency contraception	0	0.0	0	0.0	6	0.3
Male condom	3	3.6	27	5.6	316	14.7
Lactational amenorrhea (LAM)	0	0.0	0	0.0	1	0.0
Periodic abstinence	2	2.4	12	2.5	33	1.5
Withdrawal	41	49.4	145	30.0	547	25.5
Other traditional	0	0.0	0	0.0	1	0.0
Total	83	100.0	485	100.0	2,146	100.0
Unmet need						
Unmet need for spacing	37	19.1	123	13.4	487	11.3
Unmet need for limiting	50	25.8	176	19.1	919	21.4
Using for spacing	29	14.9	148	16.0	587	13.6
Using for limiting	54	27.8	337	36.5	1,559	36.2
No unmet need	18	9.3	103	11.2	561	13.0
Infecund, menopausal	6	3.1	36	3.9	190	4.4
Total	194	100.0	924	100.0	4,304	100.0

Table 3.4 also shows unmet need for family planning status among respondents. In the NDHS, 19% of follow-up respondents had an unmet need for spacing births, while 26% had an unmet need for limiting births. Due to undersampling of modern method users in the follow-up study, these proportions are higher than among comparable NDHS respondents in Province 1 and nationwide.

Table 3.5 shows respondents' primary and secondary family planning methods as reported to the follow-up study. In total, 86 respondents reported currently using one method and 9 respondents reported using one or more methods. The vast majority of secondary method use (seven of nine cases) is withdrawal, typically as a supplement to periodic abstinence. One respondent reported supplementing the pill with periodic abstinence, and another reported using condoms along with injectables.

The follow-up questionnaire (Staveteig 2018), which asked additional questions about traditional method use, found that only 99 respondents were nonusers of family planning compared to 111 of the same sample in the NDHS. This change was largely driven by an increase in the number of respondents reporting traditional methods. Appendix Table A.2 shows a comparison of primary method reported in NDHS versus follow-up. According to the follow-up study, 47 respondents reported withdrawal compared with 41 in the NDHS.

Table 3.5 Primary and secondary family planning methods among follow-up respondents, according to follow-up study

	Secondary method					
Primary method	**No other method**	**Male condom**	**Periodic abstinence**	**Withdrawal**	**Total**	**%**
IUD	2	0	0	0	2	1.0
Implants/Norplant	4	0	0	0	4	2.1
Injectables	16	1	0	1	18	9.3
Pill	14	0	1	0	15	7.7
Emergency contraception	0	0	0	0	0	0.0
Male condom	1	0	0	2	3	1.5
Lactational amenorrhea (LAM)	1	0	0	0	1	0.5
Periodic abstinence	1	0	0	4	5	2.6
Withdrawal	47	0	0	0	47	24.2
Not using a method	99	NA	NA	NA	99	51.0
Total	185	1	1	7	194	100.0

Note: NA indicates that the number is zero because the category is inapplicable.

In line with an earlier study in Ghana (Staveteig 2017), we found that in many instances respondents did not report using a traditional method to NDHS because—despite the question on method use in NDHS being preceded by a series of questions about method knowledge, including knowledge of traditional methods—they did not consider traditional methods to be part of what the family planning question asked about. For example, one respondent twice insisted she was not using a method, despite clarifying that she was using withdrawal:

> *Interviewer: Are you or your husband currently doing something or using any method to delay or avoid getting pregnant?*
> *Respondent: No.*
> *Interviewer: You are not using any methods?*
> *Respondent: Nothing.*
> *…*
> *Interviewer: I would like you to know that I am also interested in learning about your use of natural or traditional methods. Are you and your husband currently using withdrawal? By that, I mean that men can be careful and pull out before climax.*
> *Respondent: Yes.*
> *Interviewer: So, you are using this method?*
> *Respondent: Yes. This one.*
> *Interviewer: Based on the information I received, I understood that you were not using a method to delay or avoid pregnancy. Did I receive incorrect information from my colleague about your use of the method?*
> *Respondent: We aren't using.*
> *Interviewer: So, you are not using contraceptives but using a method?*
> *Respondent: Yes, that is correct.*
> -R#082 (18.224.03), age 24, urban resident of Sunsari district (Terai belt), nonresident husband, using withdrawal

There is no word in Nepali for *withdrawal*. In many cases, respondents used terms like letting it out, throwing it out, taking it out, or being careful. Some said: I don't use any method, but just use withdrawal method or just withdrawal method. For instance, one respondent, who initially stated she was a nonuser explained about withdrawal after prompting:

Interviewer: On your last sexual activity, in order to avoid or delay pregnancy did you use any method?
Respondent: No.
Interviewer: Did you not use any method?
Respondent: We used a method to stay safe.
Interviewer: What did you use?
Respondent: Letting it out.
Interviewer: The natural method, is it the withdrawal method?
Respondent: Yes.
-R#056 (12.086.01), age 39, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

Similarly:

Interviewer: What method have you been using?
Respondent: We have not really used any sort of family planning devices or methods.
Interviewer: What method are you using then?
Respondent: We don't have much of this sexual contact. Even if we do, we throw it out.
Interviewer: So, you have been using the withdrawal method?
Respondent: Yes.
-R#004 (01.033.02), age 38, urban resident of Ilam district (Hill belt), resident husband, using withdrawal

One woman using periodic abstinence said that the NDHS interviewer told her that her method did not count because she was not using it properly. In total, out of 111 women in the NDHS who said they do not use a family planning method, 8 reported upon follow-up that their primary method is withdrawal and 2 said their primary method is periodic abstinence. Only 1 of these 10 nonusers indicated that she started using this method in the time between being interviewed for the NDHS and for the follow-up study. By and large, women did not consider withdrawal or periodic abstinence to be methods asked about in the NDHS. This underreporting of natural methods echoes results of studies in Ghana by Staveteig (2016; 2017) and in Burkina Faso by Rossier, Senderowicz, and Soura (2014).

3.3.1 Sources of information about methods

According to the 2016 NDHS, knowledge of family planning methods is nearly universal in Nepal; 99.9% of all women age 15-49 know of at least one method of family planning. Among married women, fully 100% know of at least one modern method and 82.0% know of a traditional method. Injectables have surpassed sterilization as the most commonly known family planning method (Ministry of Health [Nepal], New ERA, and ICF 2017).

The follow-up study probed all women who reported currently using a family planning method, including those using multiple methods, on how they first decided to use the method. This section analyzes how the women first decided to use the specific method and the sources of information about it. In 10 cases women reported using more than one method, while this study covered only up to two methods per respondent, the two deemed most effective.

A review of the transcripts of those respondents who reported currently using family planning found 109 reports of current use (89 of one method, 10 of two methods). Of these 109 reports, more than half (57)

reported using withdrawal, while hormonal methods such as injectables and pills accounted for the second and third most used methods (18 and 16 cases, respectively). Six women reported currently using periodic abstinence, while five women reported using condoms, and six reported long-acting reversible methods like implants and the IUD as their current method (Table 3.6). Users of male and female sterilization were excluded from the study.

All respondents reporting family planning use were asked, for each of up to two methods: *How did you first decide to use the method? Was it something you knew about, something your husband suggested, or something that was recommended to you?* Table 3.6 shows the primary answer given for each method. Almost half of the respondents currently using family planning (48) reported that their husbands suggested using the method; this was disproportionately the case for male-initiated methods (condoms and withdrawal) as well as for periodic abstinence. In slightly over one-fourth of all cases, the method was something the woman already knew about and then decided to use. The remaining cases of method use were divided fairly evenly among nurse or doctor suggested, a Female Community Health Volunteer (FCHV) or other health worker suggested, a joint decision with husband ("both decided"), and friends or relatives suggested. One case was unspecified. Long-acting methods (IUD and implants) were substantially more likely to have been suggested by a nurse or doctor, although the sample sizes for women using both methods were small.

Table 3.6 How first decided to use method, by method type, according to follow-up study

	Method																	
	IUD		Implants		Injectables		Pill		Male condom		Withdrawal		Periodic abstinence		Lactational amenorrhea method		Total	
How first decided to use	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Both decided	(0)	(0.0)	(0)	(0.0)	1	5.6	0	0.0	(0)	(0.0)	5	9.3	(0)	(0.0)	(0)	(0.0)	6	5.8
Knew about it already	(0)	(0.0)	(1)	(25.0)	9	50.0	6	40.0	(0)	(0.0)	10	18.5	(1)	(16.7)	(0)	(0.0)	27	26.0
Husband suggested	(0)	(0.0)	(0)	(0.0)	4	22.2	2	13.3	(4)	(100.0)	34	63.0	(4)	(66.7)	(0)	(0.0)	48	46.2
Nurse/doctor	(2)	(100.0)	(2)	(50.0)	1	5.6	2	13.3	(0)	(0.0)	1	1.9	(0)	(0.0)	(0)	(0.0)	8	7.7
FCHV/health worker	(0)	(0.0)	(1)	(25.0)	1	5.6	4	26.7	(0)	(0.0)	1	1.9	(0)	(0.0)	(0)	(0.0)	7	6.7
Friends/relatives	(0)	(0.0)	(0)	(0.0)	2	11.1	1	6.7	(0)	(0.0)	2	3.7	(1)	(16.7)	(1)	(100.0)	7	6.7
Unspecified	(0)	(0.0)	(0)	(0.0)	0	0.0	0	0.0	(0)	(0.0)	1	1.9	(0)	(0.0)	(0)	(0.0)	1	1.0
Total	(2)	(100.0)	(4)	(100.0)	18	100.0	15	100.0	(4)	(100.0)	54	100.0	(6)	(100.0)	(1)	(100.0)	104	100.0

Note: Numbers in parentheses are based on fewer than 10 cases. Nine respondents listed two methods used; both were asked about and are included here.

A comprehensive reading of the transcripts finds that young nulliparous women may feel that they do not know much about family planning, or they are told that they should not use a contraceptive method as it might have side effects or even affect their future fecundability. Thus they rely on natural methods or condoms, as suggested by their husbands. For instance, one respondent said:

> *I was married in 2068[8], since then my husband's been using it…I didn't know, we were very young, and girls don't know about such things initially. He was the one who said that I shouldn't take pills, and what side effects it gives, and he said he'd take care of it himself so that I won't have to face the side effects. Since then we haven't used any pills or contraceptives.*
> -R#031 (04.132.02), age 23, urban resident of Jhapa district (Terai belt), resident husband, using withdrawal

Another respondent reported along the same lines:

> *Respondent: My husband told me about [withdrawal]… I didn't know anything about this.*
> *Interviewer: What did he tell you?*
> *Respondent: Now, who wants to have a baby as soon as you have just gotten married and then left holding a baby, right? I told him I do not want to have a baby soon. We decided not to have a baby immediately. We had also heard of other people about side effects of using family planning methods as well, such as if you use injectables then you won't get pregnant. If you take pills also then you won't get pregnant…So we decided not to use any of those.*
> -R#074 (18.011.02), age 27, urban resident of Sunsari district (Terai belt), resident husband, using withdrawal

There were many cases where the husband suggested discontinuing hormonal methods due to side effects and the couple started using a natural method. For example:

> *After taking medicine, I felt like it was affecting my body and making me fat, so he told me to stop medication [pills] and that he would control himself, and since then, he started controlling himself with this withdrawal method.*
> -R#087 (19.169.02), age 34, urban resident of Sunsari district (Terai belt), resident husband, using withdrawal

As discussed previously, more than a quarter of respondents (27 out of 104 cases) reported that they primarily made the decision on their own, as they already knew about the methods. They were mostly referring to withdrawal (10 cases), injectables (9 cases), oral pills (6 cases), implants (1 case), and periodic abstinence (1 case). Some reported that they learned about the methods by reading articles in newspapers or from school curriculum. Others said they already knew about methods from radio or television. Some respondents who reported using traditional methods mentioned that they use both periodic abstinence and the withdrawal method to help avoid accidental pregnancy. For instance, one respondent who knew about periodic abstinence from school said:

[8] The Nepali year 2068 began in April 2011, while the survey was fielded during Nepali year 2073 (July to September 2016).

Interviewer: So, you have been using both the methods like rhythm or calendar and withdrawal method?
Respondent: Yes.
…
Interviewer: I would like to ask you more about the rhythm method you have been using. First of all, how did you decide to use this method first?
Respondent: I did not know about this earlier. My husband told me that he would control himself.
Interviewer: What about rhythm method? Did he tell you about this method also?
Respondent: No. this...
Interviewer: About withdrawal method?
Respondent: About rhythm method I read about it. For instance, I came to know about 8 to 20-22 days by studying books. We read about it in school from 9th to 10th grade, I knew a little bit about it since then.
Interviewer: This means you notice your menstrual cycle and use the withdrawal method during 8-22 days of your period?
Respondent: Yes.
Interviewer: You use this withdrawal method on the days that have high chances of getting pregnant and after that you don't use anything?
Respondent: Yes, we don't use anything after those days.
-R#087 (19.169.02), age 34, urban resident of Sunsari district (Terai belt), resident husband, using withdrawal

Eight women reported that a nurse/doctor from a health post/clinic or hospital suggested using the specific methods, mainly modern methods including the IUD (2 cases), implants (2 cases), oral pills (2 cases), injectables (1 case), and withdrawal (1 case). In some cases, the health personnel (nurses and doctors) suggested not using a hormonal method due to the side effects experienced from methods like injectables and pills or due to their other health problems, and instead the women were advised to use the withdrawal method.

Seven women reported that FCHVs/health workers from a health post suggested using specific methods, such as oral pills (4 cases) and injectables, implants, and withdrawal (1 case each). FCHVs/health workers were more likely to suggest hormonal methods such as oral pills, injectables, and implants. For instance, as one respondent reported:

Respondent: I knew it beforehand.
Interviewer: What is your source of information?
Respondent: You can learn about it easily.
Interviewer: Have you heard about it from any source?
Respondent: The FCHV visit in every village, you can hear it on the radio.
-R#022 (04.034.01), age 29, urban resident of Jhapa district (Terai belt), nonresident husband, using injectables

Similarly, one respondent who was advised to use an implant by an FCHV said:

Respondent: There is this one person who goes around talking to people, she told me what to do to avoid getting pregnant.
Interviewer: Was it a FCHV who visited you at home?

Respondent: Yes, she visits households and asks those women who do not want to conceive more to use such methods.
-R#019 (02.186.02), age 28, urban resident of Jhapa district (Terai belt), resident husband, using implant

Most of the respondents held the view that the FCHVs and health workers in the health posts generally provide necessary information on family planning methods, including the need to choose a method that suits one's health and is used correctly, and they also provide contraceptives such as oral pills and condoms when requested.

A pill user who consulted an FCHV reported:

Interviewer: I would like to know more about the pills you are using. Firstly, how did you decide to use this method? Did you know about this earlier? Did your husband suggest this or did anyone else told you about this method?
Respondent: I was given the suggestion [to use pills] by the volunteer. I came to know about this from them. I did not know about this earlier. I used to take pills even during my menstruation. I took that continuously for 2-3 years…. Later on, continuously after 7 days (of my period).
Interviewer: After they told you about this?
Respondent: Yes, after taking their advice I used this.
Interviewer: Did they suggest you to take these pills? What did they tell you about this?
Respondent: Volunteers told me to consume after 6-7 days [of my period]. Later when they told me the pattern of taking pills, I had to use it again, while all this time I thought it did not suit me.
-R#175 (50.027.01), age 37, rural resident of Bhojpur district (Hill belt), resident husband, using pill

However, in some cases respondents said they were not provided information about all available method choices, while being recommended a long-acting reversible method such as the IUD. For instance, one respondent who consulted doctors and nurses before using the IUD reported:

Interviewer: I would like to know more about the IUCD you have been using. First of all, how did you decide to use IUCD?
Respondent: For this we took suggestions from doctors and nurses about what we could do for a birth control. They told me that I could use this method to avoid pregnancy as taking injectables, I will have to visit every 2-3 months, and using this will be safer and long lasting. So, I used this.
Interviewer: What did they tell you about other methods?
Respondent: They did not talk about other methods or contraceptives. We were just told about this method, which was reasonable.
Interviewer: Did you ask about using copper T?
Respondent: First we asked what could we use and they suggested this, so we were convinced and we used it, now if 8-9 years …10-12 years could pass easily.
Interviewer: What is the time limit of the copper T you are using right now?
Respondent: This is for 12 years.
-R#191 (57.168.02), age 36, rural resident of Udayapur district, resident husband, using IUD

A few respondents reported friends and relatives, including mothers-in-law and sisters-in-law, as an important source of information about family planning methods. In several cases, women reported that

friends and relatives suggested their current methods, such as injectables and withdrawal (2 cases each), oral pills, periodic abstinence, and LAM (1 case each).

In other cases, friends and relatives suggested using natural methods such as withdrawal instead of modern methods. One respondent currently using the withdrawal method said:

> *I came to know about it from my friends. One of my friends is a teacher, and she saw me taking medicines, buying medicines (e.g. pills and E-con tablets), she told me not to use such medicines for long, and she told me about this withdrawal method.*
> -R#059 (12.125.02), age 30, urban resident of Morang district (Terai belt), resident husband, using withdrawal

Similarly, one respondent reported that her mother-in-law advised her to use the withdrawal method when she proposed using Depo-Provera injectable:

> *Interviewer: Now, I would like to understand more about your use of withdrawal. How did you first decide to use withdrawal? For example, was it something you knew about, something your partner suggested, or something that was recommended to you? Please tell me more about that.*
> *Respondent: My mother in law told me about this method.*
> *Interviewer: What did she tell you?*
> *Respondent: To take the Depo injectable, if I use that then I won't get pregnant.*
> *Interviewer: You said that you were using the withdrawal method. Who told you about that method? Besides Depo is a different method.*
> *Respondent: I told her I wanted to use Depo injectable, but she said why do that?*
> *Interviewer: Oh, so when you said that you wanted to use the Depo injectable, your mother in law advised you to use withdrawal method instead?*
> *Respondent: Yes.*
> -R#048 (11.136.01), age 27, urban resident of Morang district (Terai belt), nonresident husband, using withdrawal

From the interviews it is evident that husbands are a major source of information among women in the study area, as well as making the decisions about family planning use. Moreover, health personnel such as nurses, doctors, FCHVs, and other health workers, as well as friends and relatives, play important roles in raising awareness about family planning methods and in stimulating demand for well-informed method choices and effective contraceptive use among women most in need.

3.3.2 Reasons for nonuse of family planning

In the NDHS, respondents who were not using family planning and who did not desire a child in the near future were asked their reasons for nonuse of family planning. In the follow-up study, women who were not pregnant, not using family planning, and did not desire a child *after* the next 2 years were asked the same question. The question is phrased: *You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy?... Any other reason?* Table 3.7 shows the results. In the NDHS, 49 of the 194 follow-up respondents were asked this question and collectively they gave 51 reasons. Seventy-three percent of these reasons were that the respondent's husband was away at the time of interview. An additional 10% of reasons for nonuse were due to side effects and health concerns,

followed by 6% each due to infrequent sex and not menstruated since last birth. Remaining reasons given to NDHS were breastfeeding, not having sex, and preferred method not available (one each; 2%).

In the follow-up study, 66 respondents were asked about reasons for nonuse, and collectively they gave 78 responses. Seventy-six percent of these reasons were that the husband was away. An additional 6% indicated that they were not having sex, typically because their husbands were away. Only one respondent gave side effects or health concerns as a reason for nonuse. All other reasons besides preferred method not available were given at least once (Table 3.7). Of the three "other" responses, two were from respondents who indicated they had health concerns or their body was weak. One additional "other" response was from a respondent with incomplete audio and unable to be retrieved.

Table 3.7 Reason(s) given for not using family planning to limit or space births, Nepal DHS 2016 and follow-up study

Reasons cited for nonuse among non-pregnant follow-up respondents who were not using family planning and did not desire a child in the next 2 years in Nepal DHS, and respondents who were not using family planning and did not desire a child until after 2 years[1] in follow-up study

	Nepal DHS		Follow-up	
	N	%	n	%
Husband away	37	72.5	59	75.6
Not having sex	1	2.0	5	6.4
Infrequent sex	3	5.9	2	2.6
Not menstruated since last birth	3	5.9	2	2.6
Breastfeeding	1	2.0	1	1.3
Side effects/health concerns	5	9.8	1	1.3
Preferred method not available	1	2.0	0	0.0
Respondent opposed	0	0.0	1	1.3
Husband opposed	0	0.0	1	1.3
Knows no method	0	0.0	1	1.3
Knows no source	0	0.0	1	1.3
Religious prohibition	0	0.0	1	1.3
Other	0	0.0	3	3.8
Total reasons	51		78	
Respondents	49		66	
Reasons per respondent	1.04		1.18	

[1] In the Nepal DHS, this question was asked of non-pregnant women who were not using family planning and did not desire a child in less than two years. In the follow-up study, there was a slight non-uniformity, as the question was asked of non-pregnant women who were not using family planning and did not desire a child in *more than two years*.

The CAPI program used for the follow-up survey compared reasons for nonuse among women who were asked the question in both surveys. Results of this comparison are shown in Appendix Table A.3. If respondents gave a reason for nonuse in the NDHS that they did not also give in the follow-up study, they were asked about that reason. Among the 31 respondents who qualified for the question in both studies, four gave a reason in NDHS that they did not give in follow-up. These were: infrequent sex (2), not menstruated since last birth (1), and not having sex (1).

One respondent who had said in the NDHS that her reasons for nonuse were infrequent sex and that her husband was away only cited that her husband was away as a reason in follow-up. After being asked about the discrepancy, she affirmed that infrequent sex was also a reason for nonuse. The other respondent who cited infrequent sex as a reason for nonuse in the NDHS explained in follow-up that she and her husband

were both opposed to family planning. When asked about infrequent sex she stated that she did not give this as a reason to the NDHS. A respondent who in the NDHS said she was not using family planning because she was not having sex, and said in follow-up only that it was because her husband was away, seemed, based on their earlier discussion, to have been prompted by the interviewer for the latter response. She affirmed that for her these reasons were synonymous. The fourth respondent who gave a reason in the NDHS that she did not give in follow-up said to the NDHS that she had not menstruated since her last birth, while in follow-up she said that her husband was away. Upon discussion, she said her menstrual cycle had just returned in the past few days but that she was still not using family planning because her husband was away.

3.3.3 Role of husband

This section analyzes the influence of husbands on the use of family planning methods among the study respondents. As mentioned, among the total 194 respondents in the study, 95 respondents reported that they were currently using a family planning method, and 99 said they were not using any method at the time of the survey. Among the 99 nonusers were 66 respondents who were not currently using any method but also did not want to have another child within 2 years. Those two groups of respondents—current family planning users (95 cases) and family planning nonusers who do not want a child within 2 years (66 cases)—were asked a few more questions to explore the role of their husbands in making the decision to use or not to use a family planning method. This section covers each group in turn.

Role of husband in family planning use among current users

Respondents who reported currently using a family planning method, either a modern or traditional method, were asked: *Have you and your husband ever discussed using [current method(s)] to avoid pregnancy?* In almost all cases (97%), respondents reported that they had discussed it with their husbands, while only three women responded that they had not (Table 3.8).

Table 3.8 Role of husband and other family members in family planning, according to follow-up study

Among current users: have discussed method with husband

	n	%
Yes	92	*96.8*
No	3	*3.2*
Total	95	*100.0*

Among current users: role of each in decision to use

	Husband		Other family members	
	n	%	n	%
Important	80	84.2	6	6.3
Somewhat important	8	8.4	3	3.2
Neither	2	2.1	1	1.1
Somewhat unimportant	2	2.1	3	3.2
Unimportant	3	3.2	82	86.3
Total	95	100.0	95	100.0

(Continued…)

Table 3.8—*Continued*

Among nonusers who do not want a/another child in 2 years or less: role of each in decision to not use

	Husband		Other family members	
	n	%	n	%
Important	55	83.3	6	9.1
Somewhat important	4	6.1	8	12.1
Neither	4	6.1	4	6.1
Somewhat unimportant	2	3.0	2	3.0
Unimportant	1	1.5	46	69.7
Total	66	100.0	66	100.0

The study also explored the extent of influence that the husbands and other family members have in making decisions about the use of family planning methods. Current family planning users were further asked: *Now I would like to ask you, in terms of your decision to use family planning, how important of an influence was your husband?* Table 3.8 shows that among the current users the vast majority (84%) responded that the husband's role is important in making a decision to use a family planning method, and another 8% reported that it was somewhat important. With respect to the role of other family members in making decisions about family planning, a large majority of current users (86%) viewed their role as *not* important. However, 6% of them viewed the role of other family members as important, and 3% viewed it as somewhat important, while the remaining 4% viewed the role of other family members as somewhat unimportant or neither important nor unimportant.

A review of the transcripts finds that most of the respondents held the view that they needed to have a discussion with their husband first before deciding to use a method. They may consider him as a guardian and find it is necessary to consult and to have mutual decisions on every aspect of life, including family planning and fertility decisions. Others also said that their husband knows more about family planning methods and possible side effects than they know themselves. They do not feel comfortable using a method without asking their husband. As one respondent stated:

> *He is older than me and I think I should ask him.*
> -R#184 (57.044.05), age 20, rural resident of Udayapur district (Hill belt), resident husband, using injectables.

Another respondent said:

> *Interviewer: What about the role of your husband? How important of an influence is he on your decision to use family planning?*
> *Respondent: He is important.*
> *Interviewer: Why is he important?*
> *Respondent: He was the one to start the discussion. We both decide to [use it], that is why.*
> -R#131 (35.074.02), age 21, rural resident of Jhapa district (Terai belt), resident husband, using withdrawal

A third respondent reported along the same lines:

> *Yes, I need to talk to him first before making the decision. If I say I want to do this and he disagrees then I have to accept it. I am not educated and he is. He is educated and so knows and understands the effects and what is good and what is bad. So I defer to his judgment.*
> -R#161 (43.087.03), age 30, rural resident of Sunsari district (Terai belt), resident husband, using withdrawal

A few respondents indicated that their husband's role in making decisions about family planning is neither important nor unimportant (2%), or somewhat unimportant (2%), while a few (3%) stated that it is not important. One respondent said:

> *These are simple things that I can decide myself.*
> -R#003 (01.029.02), age 33, urban resident of Ilam district (Hill belt), resident husband, using injectables

Some respondents also observed that, when it is a matter of protecting yourself from an unwanted pregnancy, they need to make the decisions on their own, as is evident in the conversation below:

> *Interviewer: Now I would like to ask you, in terms of your decision to use family planning method, how important of an influence was your husband?*
> *Respondent: No*
> *Interviewer: Why is that? So you feel it's not important to ask him, if he forbids you to use it, would you not use it?*
> *Respondent: No, that decision you have to make yourself.*
> *Interviewer: Why do you think it is not important?*
> *Respondent: If you listen blindly to your husband, you could end up with dozens of children. You have to protect our own body yourself.*
> *Interviewer: That is why you do it yourself?*
> *Respondent: I need to do it myself to stay protected.*
> -R#155 (43.008.03), age 31, rural resident of Sunsari district (Terai belt), nonresident husband, using injectables

In sum, the majority of family planning users felt their husband plays an important role in their decision to use family planning, whereas other family members do not.

Role of husband in nonuse of family planning

Consistent with current family planning users, the majority (83%) of nonusers who did not want to have a child within the next 2 years said their husband has an important role in the decision to not use a family planning method. Meanwhile, 6% each stated that his role is somewhat important or that it is neither important nor unimportant (Table 3.8). The remaining 5% felt that his role is unimportant or somewhat unimportant. Most respondents felt that they can decide about using a family planning method only after discussing it with their husbands, or only if the decision is mutual. For instance, one respondent stated:

> *My husband is my guardian and I have to discuss with him regarding this childbirth and everything.*
> -R#187 (57.099.01), age 25, rural resident of Udayapur district (Hill belt), nonresident husband, not using family planning

Similarly, some women viewed that they need to consult with their husbands before making a decision to use a family planning method so that their husbands do not get upset or angry with them. One respondent stated:

> *It's not something you can decide on your own, you need to speak to him about it whether it's available easily or not.*
> -R#173 (50.015.01), age 34, rural resident of Bhojpur district (Hill belt), nonresident husband, not using family planning

Other respondents stated that it is important to discuss family planning use with their husbands in order to avoid disputes and disturbances in the family. This is explicit in the following conversation:

> *Respondent: We need to discuss.*
> *Interviewer: Is it important?*
> *Respondent: If I don't discuss it, I might conceive a child. There will be a lot of quarreling. It will be a disturbance because of these things, so we need to discuss about it. It is important, it is very important.*
> -R#097 (22.054.01), age 31, urban resident of Dhankuta district (Hill belt), nonresident husband, not using family planning

Some respondents said they cannot force their husband to use a method; they need to obtain his consent. One respondent who intended to use a family planning method in the future stated:

> *Interviewer: According to the information I have received you have not used any family planning methods. In your opinion, what is the role of your husband, if any, on your decision to discontinue or not use a method to prevent pregnancy? How important of an influence was your husband?*
> *Respondent: For that I go for suggestion first and they tell me what is good for me, later I ask my husband and we discuss it for a while and whatever is suitable I use that method.*
> *Interviewer: Is it important?*
> *Respondent: That is there after all it is the discussion between husband and wife, I cannot force him on this.*
> -R#149 (36.156.01), age 39, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

A few nonusers said that their husbands do not have much influence on their decision to use or not to use a family planning method, as they do not care much about it. One respondent shared:

> *Respondent: More than discussion, he won't know if I am using any contraceptives or not.*
> *Interviewer: This means he does not influence.*
> *Respondent: No, there are many things he won't know. He will only know if I talk about it or else he would never notice.*
> *Interviewer: There is not much of influence then.*
> *Respondent: Yes, he does not care much.*
> -R#063 (12.180.01), age 28, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

Among the family planning nonusers, over two-thirds of respondents (70%) viewed the influence of other family members besides the husband as unimportant, a somewhat smaller proportion than among current

family planning users. Twenty-one percent of the nonusers reported that the role of other family members is important or somewhat important in making decisions about not using a family planning method.

In the majority of couples studied, husbands play a significant role in making decisions about use of family planning methods, irrespective of their residence status. This is evident from the fact that in most cases both current family planning users and nonusers consult with their husbands about family planning use and method choice and make a mutual decision. Moreover, the study reveals that, although a majority of respondents say the role of other family members is not important in family planning decisions, a minority of respondents reports that other family members have some influence over their decision not to use a family planning method.

3.3.4 Role of religion

Women in the follow-up study were asked about their religion's views on family planning. As discussed in section 3.1, according to the NDHS more than four-fifths of follow-up respondents identified as belonging to the Hindu religion, while the remainder identified as either Kirat, Christian, or Buddhist. In the follow-up study, when respondents gave a conflicting answer for their religious affiliation, they were asked to clarify the discrepancy. In the end, all but three respondents gave the same answer for religion in follow-up as they did in NDHS. Following from the religious affiliation stated in the follow-up study, respondents were asked what their religion's views on family planning are. In a few cases, respondents indicated that their religion held a slightly negative or positive view of family planning, for example, their religion emphasized small families (a Christian respondent), or was against the use of family planning devices (a Hindu respondent). However, the overwhelming majority of respondents indicated that either their religion had no views on family planning, or that they did not know what those views were. Consequently, almost without exception, respondents perceived their religious affiliation as having no bearing on their family planning decisions. As Table 3.9 indicates, nearly all current contraceptive users (98%) viewed religion as not important in making family planning decisions, and almost all nonusers (99%) stated that religion has no influence in their decision not to use a family planning method.

Table 3.9 Role of religion in family planning, according to follow-up study

Among current users: role of religion in decision to use

	n	%
Important	1	1.1
Somewhat important	1	1.1
Neither	0	0.0
Somewhat unimportant	0	0.0
Unimportant	93	97.9
Total	95	100.0

Among nonusers who do not want a/another child in 2 years or less: role of religion in decision to not use

	n	%
Important	0	0.0
Somewhat important	1	1.5
Neither	0	0.0
Somewhat unimportant	0	0.0
Unimportant	65	98.5
Total	66	100.0

The vast majority of women in Eastern Nepal viewed the role of religion in decisions about family planning as negligible. Both current users who said religion was important or somewhat important were Hindu, as was the nonuser who said her religion had a somewhat important role in her decision not to use family planning. In two of these discussions, one with a nonuser and one with a user, after probing further the respondents did not cite any particular Hindu teaching on family planning that influenced their decision. Instead, the respondents appear to have been speaking in broad terms about the importance of the Hindu faith itself in their lives. In discussion with the third respondent who had indicated that her religion was important in her decision to use family planning, she said it was the teaching of her particular Guru that postpartum abstinence was beneficial and that couples who had achieved their desired number of children could stop having sex altogether if they wanted. Otherwise, religion appeared to play virtually no role in the family planning decisions of study respondents.

4 FAMILY PLANNING AMONG COUPLES WITH A MIGRANT HUSBAND

Nepal is one of the world's top labor-exporting nations, with substantial temporary emigration among reproductive-age adults for employment. Nationwide, 34% of married women had absent husbands at the time of the 2016 NDHS survey (Ministry of Health [Nepal], New ERA, and ICF 2017). Of the 194 respondents to the follow-up study, 48% reported that their husbands were abroad or somewhere else within the country for employment at the time of the survey, while another 8% reported that their husbands usually migrate or travel outside for work, though they were currently residing in the household.

This chapter deals with those respondents whose husbands were nonresident at the time of the interviews (n=94) and a small group whose husbands were currently in residence but usually were away for employment or work (n=15). It analyzes the migration pattern of the husbands, the couple's most recent sexual activity, their use of family planning, and the respondents' intentions and arrangements for using family planning methods upon the return of their husbands.

4.1 Migration Patterns

To assess patterns of spousal residence, the follow-up survey first asked respondents if their husbands or partners currently were living with them in the households, and the responses were cross-checked against the original NDHS responses through the CAPI program. For those respondents whose responses differed from the original DHS survey, responses were reconfirmed as to the status of husband's residence. Additionally, respondents who said their husbands are living with them were asked whether their husbands usually live with them, or else migrate sometimes for work or study. All respondents who said their husbands do not currently live with them, or who usually migrate for work or study, were probed for more details on where the husbands travel, how long they stay away, and how often they return, as follows:

> *Interviewer: I would like to understand more about your husband's travels. Where does he usually go? (PROBE country, city)*
> *Please tell me more about why he stays there, and for how long.*
> *How often does he return?*
> *(PROBE on pattern – how long have they had this arrangement?)*

Table 4.1 shows destination of husband's migration by duration of time between visits[9] based on the information provided by the respondents with nonresident husbands (n=94). Among the sample, Qatar was the most common destination for overseas employment: about a quarter of respondents (23%) reported their husbands work in Qatar (22 out of 94 respondents), followed by Malaysia (16 cases), United Arab Emirates (14 cases), Saudi Arabia (13 cases), and India (8 cases). Seven respondents reported that their husbands had gone to a different country for work (Kuwait, Bahrain, Iraq, Korea, Maldives, or Oman). Fourteen

[9] Time between visits was judged to be more informative than total time away, as it indicates how frequently the respondent may be exposed to the risk of unintended pregnancy. It is drawn from women's explanation of migration patterns or, in a few cases their knowledge of when their husband left and when he will return.

respondents reported their husbands were either posted or traveled to different districts within Nepal for employment.

Table 4.1 Amount of time between visits from migrant husbands[1], by destination country, according to follow-up study

	Nepal (another district)	India	Malaysia	Qatar	Saudi Arabia	United Arab Emirates	Other countries[2]	Total	
	n	n	n	n	n	n	n	n	%
"Returns frequently"	3	1	0	0	0	0	0	4	4.3
<1 month	4	0	0	0	0	0	1	5	5.3
1 to <6 months	6	3	1	0	1	0	0	11	11.7
6 months to <1 year	1	1	1	0	1	1	0	5	5.3
1 year to <2 years	0	2	1	4	0	7	1	15	16.0
2 years to <3 years	0	1	4	11	10	6	4	36	38.3
3+ years	0	0	9	7	1	0	1	18	19.1
Total	14	8	16	22	13	14	7	94	100

[1] In most cases, average time between visits. In a few cases, time since husband left plus time until husband returns home for a visit or permanently.

[2] Bahrain, Iraq, Korea, Kuwait, Maldives, and Oman

When respondents were probed about how often their husbands typically return home, a plurality of respondents with migrant husbands (38%) said the duration of their husband's absence is between 2 and 3 years. Another 19% reported that their husbands are away for more than 3 years at a time (Table 4.1). At the opposite end, 4% of respondents said their husband returns home "frequently," and 5% said there was less than 1 month between visits. The remaining respondents (33%) reported time between visits varied from 6 months to 2 years. For Nepal and India the modal duration of absence was 1 to 6 months, while for all other destinations except the United Arab Emirates the modal time between visits was between 2 and 3 years.

The study also found that for those respondents whose husbands have been away, many have had this arrangement for long periods of time. Most have been working in the same country, such as India, Malaysia, Qatar, and the United Arab Emirates, for a long time, while for a handful of others, their husbands migrated from one country to another after completing their tenure in the former one.

Among the respondents whose husbands were away in India for work, quite a few reported that their husbands had been working there for a long time, including two in the Indian army for 4 to 10 years or more, but that they tend to visit home more frequently, usually once in a year, or whenever they have leave or holidays—indicating that the women are regularly in contact with their husbands. However, for respondents whose husbands have migrated abroad to such countries as Malaysia, Dubai, Qatar, and Saudi Arabia, most reported that their husbands would return home only at 2- to 3-year intervals, for 2 or 3 months at a time. Among the respondents whose husbands have been away from home in different districts/places within Nepal, some were away because their job postings were elsewhere (e.g., police, army, bank, teacher), while others were away because of their profession (e.g., driver, technician.). Many have been at these posts or in these professions for a long time, 10 years or more, but visit home frequently during weekends or on holidays, and some every few months. Almost universally, women reported regular contact with their husbands by mobile phone, internet, imo (a video call application), and social networks including Facebook and WhatsApp.

There were an additional 15 respondents whose husbands usually travel or migrate abroad but were currently residing at home at the time of the follow-up study. Eight of the husbands had just returned from foreign countries, such as Malaysia, Qatar, Saudi Arabia, Bahrain, and India, either on vacation for a few months or after completion of their contractual tenure (data not shown). Those who returned after termination of their contract often try to migrate to another country for work. These patterns are evident in the following conversation:

> *Interviewer: Does your husband currently live in your household?*
> *Respondent: Yes, he just returned.*
> *Interviewer: Does your husband travel a lot whether it be for work or educational purposes?*
> *Respondent: He just returned from abroad. He does not stay here. He will be leaving soon.*
> *Interviewer: I would like to understand more about your husband's travels. Where does he usually go?*
> *Respondent: Qatar or Saudi Arabia.*
> *Interviewer: Where is he going now?*
> *Respondent: Possibly Korea, he has attended an exam to go to Korea.*
> *Interviewer: If he goes now, when will he go and how long will he be away for?*
> *Respondent: It is not fixed when he is going. He will go once he passes the exam.*
> *Interviewer: If he goes, how many days will he be gone for?*
> *Respondent: 5 years.*
> *Interviewer: Before, when he goes abroad for work, he used to come in 2 years of interval, right?*
> *Respondent: Yes, he used to come in 2 years of interval. He gets leave once in 2 years of work.*
> -R#055 (12.078.01), age 25, urban resident of Morang district (Terai belt), husband currently resident but usually away, using pill

Seven respondents had husbands who travel frequently within Nepal but were currently residing at home. Of these, two had stationary job postings elsewhere in Nepal, while the husbands of each of other five respondents travelled to different districts in relation to their occupations as laborer, ambulance driver, boring machine operator, plumber, or businessman. The interval between their returns home ranged from a week to a few months.

4.2 Use of Family Planning

The varying intervals between a husband's return home from an absence might suggest different needs for contraception. A woman with a husband who returns home frequently might seek a method that would provide constant protection, while one whose husband stays away for several years might choose a multi-year method, such as an IUD, or prefer to wait to start a method until just before his return. Table 4.2 presents the pattern of current contraceptive use and method use at the last sex by husband's residence among the follow-up study respondents. Among the respondents with resident husbands, whether usual migrants or not, a similar proportion (20% and 17%, respectively) were not using any family planning method. About a third (35%) to a half (47%) of respondents with resident husbands were using a modern contraceptive method, while the vast majority of respondents with nonresident husbands (87%) reported not using any method. Respondents with resident husbands were more frequent users of traditional methods (48%), while respondents with resident but usually migrant husbands reported the highest use of modern methods (47%).

To better understand the circumstances and patterns of method use, all respondents were asked whether they had used a family planning method at the last or most recent sex to delay or avoid pregnancy. Irrespective of husband's residence, nearly three-fourths of respondents reported that they had used a family planning method at the last sex. A comparatively smaller proportion of respondents with nonresident husbands reported using a family planning method at the last sex compared with respondents with resident husbands, whether usually migrant or not (Table 4.2). Despite the fact that reported use at last sex is lower among respondents with nonresident husbands, it is important to note that the majority of respondents with nonresident husbands—80% of whom are classified by NDHS as having unmet need for family planning—used a family planning method at last sex, and a majority said they intended to use a method at next sex. This finding highlights the temporal issue with measurement of current use in countries such as Nepal with high labor migration: Women may be family planning users whenever their husband is resident, but the survey records them as nonusers because he is away at the time of interview.

Table 4.2 Family planning use by husband's residence, according to follow-up study

Current family planning use by husband's residence

	Husband resident; usual resident		Husband resident; usual migrant		Husband nonresident; usual migrant		Total	
	n	%	n	%	n	%	n	%
Modern user	30	35.3	7	46.7	6	6.4	43	22.2
Traditional user	41	48.2	5	33.3	6	6.4	52	26.8
Nonuser	14	16.5	3	20.0	82	87.2	99	51.0
Total	85	100.0	15	100.0	94	100.0	194	100.0

Family planning use at last sex by husband's residence

	Husband resident; usual resident		Husband resident; usual migrant		Husband nonresident; usual migrant		Total	
	n	%	n	%	n	%	n	%
Yes	70	82.4	13	86.7	60	63.8	143	73.7
No	15	17.7	2	13.3	34	36.2	51	26.3
Total	85	100.0	15	100.0	94	100.0	194	100.0

Table 4.3 shows that among respondents with currently nonresident husbands who were using family planning (n=12), five reported using injectables, four reported using withdrawal, two were using periodic abstinence, and one reported using implants. However, it should be noted that while the study allowed women to self-classify their method use at the time of interview, users of coitus-dependent methods whose husbands are away from home might also be considered nonusers. Among the 12 respondents with currently resident but usually migrating husbands, 5 were using withdrawal, 4 were using pills, and 3 were using injectables.

Table 4.3 Primary family planning method among users by husband's residence, according to follow-up study

	Husband resident; usual resident		Husband resident; usual migrant		Husband nonresident; usual migrant		Total	
	n	%	n	%	n	%	n	%
IUD	2	2.8	0	0.0	0	0.0	2	2.1
Injectables	10	14.1	3	25.0	5	41.7	18	18.9
Implants	3	4.2	0	0.0	1	8.3	4	4.2
Pill	11	15.5	4	33.3	0	0.0	15	15.8
Male condom	3	4.2	0	0.0	0	0.0	3	3.2
Lactational amenorrhea	1	1.4	0	0.0	0	0.0	1	1.1
Periodic abstinence	3	4.2	0	0.0	2	16.7	5	5.3
Withdrawal	38	53.5	5	41.7	4	33.3	47	49.5
Total	71	100.0	12	100.0	12	100.0	95	100.0

The respondents with currently nonresident or usually migrating husbands who reported currently using a family planning method, either modern (13 cases), or traditional (11 cases), were further probed on their patterns of method use, including since when or how long they have been using the method, and how they decided about using the method, or how they came to know about it and whether they were provided with adequate information or counseling about methods. A review of the transcripts of all these respondents revealed that among the respondents who reported using modern methods a plurality had been using their method for the past 3 years or more, while a few had been using the methods for 1 to 3 years. Some of the respondents reported using their method only recently, for a month or even just a few days, as their husbands had just returned home. The majority of the respondents reported using one or another methods and discontinued use when their husbands were away. Some reported using the methods repeatedly for spacing between births of their children, while others reported using a method after completing their desired family size, irrespective of whether their husbands were living at home or were away.

Most current modern family planning method users were knowledgeable about how or when to use their method and its possible side effects. For instance, almost all injectable users were aware of its effectiveness for 3 months, that it needs to be taken every 3 months on the fourth or fifth day of their menstruation, and that it can be obtained from hospitals or health posts, and in some cases from nurses/sisters at health clinics in the villages. However, in several cases women underused the pill or started taking it only a few days before the arrival of their husbands. For example:

> *Interviewer: When do you consume this pill? Before he comes or…?*
> *Respondent: Why would I intake earlier?*
> *Interviewer: For instance, will you consume it 3-4 days before he arrives or will you consume from the day he arrives?*
> *Respondent: Yes, once he arrives.*
> -R#089 (19.212.01), age 31, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

One respondent who reported using implants said that the implant is an easy method and provides long-term protection. She started using the implant after discontinuing injectables due to excessive bleeding. She appeared happy with the method as a long-term solution and has not experienced any side effects, as she explained:

Interviewer: You are currently using the Norplant. Could you please tell me since which month and year have you been using this method?
Respondent: It has been a lot of years now. I inserted first for 7 years and after the date off, I inserted another one for 7 years. The one I have inserted now has been 2 years.
Interviewer: I would like to know more about the family planning method you have been using right now. First of all, how did you decide to use this method?
Respondent: This is easy and it is a long-term solution. Also, for me long-term protection is easier. This is why I decided to use this.
...
Interviewer: During that time, did the service provider talk about its side effect or anything?
Respondent: Yes, they do say, they advise. If it affects, we need to remove it soon but if it doesn't affect then I should let it be.
Interviewer: Has it affected you until now?
Respondent: Nothing has happened until now. After wearing it for 7 years, I have been wearing the other one for 2 years already now. There are no complications until now.
-R#120 (32.167.01), age 33, rural resident of Ilam district (Hill belt), nonresident husband, using implants

Among respondents with usually migrant husbands and respondents with currently migrant husbands, nine reported using withdrawal as their primary method. Most respondents who reported using withdrawal have continued using it for quite a long time; three women reported using it since the birth of their child (e.g., 1 to 6 months after the birth of their child, and 1 year after birth), two reported using it since they married, and two others reported using it for the last 5 to 7 years. One respondent reported using withdrawal for the last few months, while another said she started using it in the last 2-3 days as her husband had just returned home.

The study shows that withdrawal has been an important primary method to resort to as a safety method after a couple gets married and a commonly-used method among those whose husbands usually migrate temporarily and return home for a short period. It is also used as a backup method among some who report using periodic abstinence. Many respondents intend to use a more secure or effective and long-duration family planning method if their husbands plan to stay home longer. Almost all of these respondents agreed that they use withdrawal most of the time they have sexual relations with their husbands, to be on the safe side. When asked about how long she has been using the withdrawal method without stopping, one respondent who did not want more children stated:

It hasn't been that long. My husband only returned recently. It looks like I'll have to take the 3-monthly injectables now. This time, the time to take it has passed, so if he stays home long, then I'll have to take the injection next time.
-R#025 (04.083.01), age 37, urban resident of Jhapa district (Terai belt), husband currently resident but usually away, using withdrawal

Table 4.4 presents the pattern of family planning method use at the last or most recent sex among respondents with currently nonresident or usually migrating husbands (n = 109). The table shows that one-third of respondents with nonresident or usually migrating husbands reported they did not use any contraceptive method at the last sex. Among those who reported using a family planning method at the last sex, however, the composition of methods was more heavily weighted toward injectables and pills than the overall method mix shown in Table 4.3. Injectables were the most commonly-used method (24%), followed by withdrawal (19%) and oral pills (17%).

In terms of the timing of most recent sex, a review of the transcripts of respondents with nonresident husbands indicates that the modal time since last sex (38 of 94 cases) was 1-2 years before the interview. In another 35 cases the women reported having most recent sex about 1-11 months before the interview, while 11 respondents reported having most recent sex less than 1 month before, and the remaining 10 reported having most recent sex between 2-4 years before. Meanwhile, among respondents with usually migrating but currently resident husbands, four-fifths (12 of 15 cases) reported having sexual relations within the past week, while two women reported having their most recent sexual activity within 1- 3 weeks before the interview, and one reported having sexual relations more than 3 weeks before (data not shown).

Table 4.4 Primary family planning method used at last sex among women with current and usual migrant husbands, according to follow-up study

	Husband resident; usual migrant	Husband nonresident; usual migrant	Total	
	n	n	n	%
Implants	0	1	1	0.9
Injectables	3	23	26	23.9
Pill	4	15	19	17.4
Male condom	0	2	2	1.8
Periodic abstinence	1	3	4	3.7
Withdrawal	5	16	21	19.3
No Method	2	34	36	33.0
Total	15	94	109	100.0

In sum, about one in six respondents whose husband is away identifies as a current user of a family planning method (Table 4.2); half of self-identified users with migrant husbands indicate that their method is coitus-dependent (Table 4.3). The majority of respondents with nonresident or usually migrant spouses report having used a family planning method to avoid or delay pregnancy at the time of their last sex, most commonly injectables, withdrawal, or pills (Table 4.4).

4.3 Plans for Husband's Return

As Table 4.5 shows, nearly all respondents with nonresident husbands (97%) reported that their husbands inform them before their return. Advance notice ranged from less than a day, typically for women with husbands staying within Nepal, to more than a year. In discussions with respondents, nearly two-thirds of women with usually migrant husbands indicated that they are typically informed of their husband's return at least a month in advance.[10] About one-fourth of respondents said they are typically informed less than a month beforehand, while the remainder did not specify or said they already knew his date of return (results not shown).

Women with husbands who usually migrate were asked to describe how they typically arranged for family planning upon their husband's return, and—for their husband's next return—specifically what method they planned to use, when they planned to start, and how they coordinated use with their husbands. Nearly two-thirds (62%) of nonusers with nonresident husbands said they intended to use a method upon their

[10] Includes seven women who said they generally know for a "long time" in advance, or know his end date (typically for a multi-year posting) as soon as he leaves.

husband's return (Table 4.5). However, during discussions with respondents, only a handful of respondents stated that family planning was something they would discuss with their husband in advance of his arrival. Among the respondents who did not plan to use a method upon his return, nearly half wanted to become pregnant (Table 4.5). Almost all others wanted to wait until he was back to discuss either the method to use or the decision of whether to have another child; two respondents stated that family planning is something they do not use.

Table 4.5 Responses to selected spousal migration questions in follow-up study

Among women with typically migrant husbands, responses to the question *"Does your husband inform you prior to his return?"*

	n	%
Yes	106	97.2
No	1	0.9
Depends	1	0.9
Other[1]	1	0.9
Total	109	100

Among respondents with currently migrant husbands who are not currently using family planning, responses to the question *"Do you expect to use a method of family planning when your husband returns?"*

	n	%
Yes	51	62.2
No: wants to become pregnant	13	15.9
No: waiting until he arrives to discuss[2]	12	14.6
No: we "do not use" family planning	2	2.4
DK/Other	4	4.9
Total	82	100.0

[1] Her husband is away for the first time, so she could not state a typical pattern. However, she knows the month and year he is expected to return.

[2] Includes waiting to discuss whether to have another child as well as waiting to discuss specific method type

All 51 transcripts from respondents with nonresident husbands who were not using a method of family planning but intended to use one upon his return were analyzed to determine which method they intended to use and how far in advance they expected to start this method. Table 4.6 shows the results. In 11 cases the respondent's intended method was coitus-dependent and thus could not be started until the husband's arrival. Among the 33 respondents who intended to use injectables and the pill, at least half either planned to get the method on their own 1 to 3 days before their husband arrived or wanted to wait to discuss with their husband until after his return. In three other cases the timing was undecided or unspecified.

For hormonal methods such as pills and injectables, such close timing can be problematic as women need to start the method at a specific time in relation to their cycle and, in the case of pills available in Nepal, if women start the pill outside of 5 days within their menstrual cycle they need to start at least 7 days in advance in order to be protected (FHI360 Sangini Service Provider's Reference Manual 2064). A close reading of Table 4.6 shows that less than half of intended pill and injectable users indicated that they intended to start the method in accordance with their cycle and/or up to a month in advance of their husband's return. The majority intended to start 1-3 days before, upon his arrival, or were undecided; they are expected to face a potentially problematic window of exposure to unprotected pregnancy upon their

husband's return. Six other respondents said they were undecided about their intended method altogether, most saying they would decide on a method upon their husband's return and after discussion, a situation that could leave a similarly problematic exposure to the risk of unintended pregnancy.

Table 4.6 Amount of time intending to start method in advance of husband's return, by intended method, according to follow-up study

Among women with currently migrant husbands who intend to use family planning upon his return, the amount of time in advance of his return that they intend to start a method of family planning, by most likely intended method

Intended method	Up to 1 month before	Depends on menstru-ation	1-3 days before	Upon return	Upon return and after discussion	Undecided/ Unspecified	Total
Injectables	2	6	3	3	5	2	21
Pill	3	2	1	4	1	1	12
Emergency contraception	NA	NA	NA	1	0	0	1
Male condom	NA	NA	NA	2	0	0	2
Withdrawal	NA	NA	NA	8	1	0	9
Undecided	1	0	0	0	4	1	6
Total	6	8	4	18	11	4	51

Note: NA indicates the number is zero because the category is inapplicable.

In discussions with respondents, with few exceptions the sentiment was that the topic of family planning could not be broached in advance of their husband's return. One respondent, when asked what method she and her husband would use upon his return, remarked simply:

> *That we don't discuss.*
> -R#086 (19.148.01), age 33, urban resident of Sunsari district (Terai belt), nonresident husband, using periodic abstinence

Others did not perceive a need to discuss family planning prior to husband's arrival. One respondent said:

> *After he comes we shall discuss about this. There is no use of using [family planning] earlier.*
> -R#085 (19.116.01), age 26, urban resident of Sunsari district, Terai belt, nonresident husband, not using family planning

Similarly, a respondent said that family planning cannot be discussed openly:

> *Interviewer: So you don't know how you will arrange [family planning]?*
> *Respondent: That I don't know. [laughing]*
> *Interviewer: Do you discuss about it on the phone?*
> *Respondent: No, you can't talk about such issues openly.*
> *Interviewer: You are embarrassed?*
> *Respondent: Yes. He talks a little but not about things like that. [laughing]*

This respondent later stated that she would choose a method once her husband returned:

> *Interviewer: You intend to use a method in the future. Have you considered injectable, condoms, anything?*
> *Respondent: No, we will talk about it when he returns. [laughing]*
> *Interviewer: Where would you obtain it? Do you know?*
> *Respondent: I have heard you can get it from the hospital. Or from the pharmacy as well.*

Interviewer: But you don't know what method you'd use?
Respondent: Yes
Interviewer: Why is that?
Respondent: It's because he's not here. If he was here, then we'd have to talk about ways of preventing pregnancy, we would have tried to learn about the methods available, when he's not here, then the need hasn't arisen.
-R#045 (07.216.03), age 21, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Discussions with respondents revealed some dangerous myths about how early to take the pill before their husband's arrival. One respondent replied to a query about taking the pill before arrival by saying:

Yes, I will take the pill] after he returns. Why would I use it before?
-R#183 (57.037.01), age 18, rural resident of Bhojpur district (Hill belt), nonresident husband, not using family planning

Another woman said:

When my husband returns, I will take it.
-R#105 (29.017.07), age 22, rural resident of Panchthar district (Hill belt), nonresident husband, not using family planning

And another explained that her understanding was that pills should be taken after sexual contact:

Interviewer: Do you know when the right time to use these pills is?
Respondent: I know that we should take these pills after the sexual contact. I don't know anything else besides that.
Interviewer: That means you will use it only after the contact?
Respondent: Yes, only after the two of us meet.
-R#142 (36.049.01), age 31, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

In a few cases, respondents appeared to believe that taking two pills at once would be an effective means of contraception. However, if she didn't have pills they would use withdrawal:

Interviewer: How often do you take [the pill]?
Respondent: If my husband is coming home, then I start taking it 1-2 days earlier, if he comes home unexpectedly, then I take 2 pills at once.
Interviewer: Has there been instance when you've been unable to use it? Like when he comes home without informing?
Respondent: Yes, then we use the withdrawal method. Otherwise I take pills. If I know prior to his arrival, I start taking it one or 2 days ahead. Sometimes he visits on the way and if there are no pills then there is no other way.
-R#167 (43.159.03), age 36, rural resident of Sunsari district (Terai belt), resident husband, using pill

For some respondents a similar logic applied to use of injectables. When asked how she would know when the time for the injectable was right, one respondent replied:

> *What is there to know! I will get [the injectable] after he arrives.*
> -R#166 (43.151.02), age 28, rural resident of Sunsari district (Terai belt), nonresident husband, not using family planning

Many respondents who used injectables planned to start up to 1 month before, depending on their cycle. In a few cases when they did not intend to get it until their husband's return, they intended to abstain from sexual relations:

> *Interviewer: Now please describe for me how you and your husband have typically arranged for family planning use upon his return, if at all.*
> *Respondent: When he is about to come home, I will have to visit either the FCHV or the health post.*
> *Interviewer: And you will be using injectables?*
> *Respondent: Yes.*
> *Interviewer: Will you take it before he comes or after he arrives home?*
> *Respondent: After he arrives. Why bother using it needlessly before he arrives?*
> *Interviewer: And do you know when you should get it?*
> *Respondent: Yes, I have heard that you take it 5 days after getting menstruation. The FCHV has told me about it.*
> *Interviewer: And you will use it after your husband returns?*
> *Respondent: Yes.*
> *Interviewer: What if you haven't had your menstruation at that time when your husband is back? What will you do then?*
> *Respondent: I won't [have sexual relations].*
> *Interviewer: You mean you will abstain?*
> *Respondent: Yes.*
> -R#173 (50.015.01), age 34, rural resident of Bhojpur district (Hill belt), nonresident husband, not using family planning

A minority of respondents who intended to use the pill were aware of the importance of starting their method within a certain number of days of the end of their menstrual cycle and planned to start during the month before. Women who did arrange in advance typically did not explicitly discuss it with their husbands. For example:

> *Interviewer: Now please describe for me how you and your husband have typically arranged for family planning use upon his return, if at all.*
> *Respondent: Arrangement, that you need to be smart and clever about it yourself, shouldn't you? What to use, maybe continue using the pills? For a short 1-month period, I should not use a long-term contraceptive… so I find it convenient to use pills.*
> *Interviewer: So, you plan and prepare about it on your own?*
> *Respondent: Yes, I do everything on my own.*
> *Interviewer: Before your husband arrives, how long before do you start to prepare? You said you plan to use pills then how long before he comes, do you begin preparing?*
> *Respondent: Oh, about 1 month before.*
> -R#051 (11.226.01), age 29, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

In sum, while there may be understandable reasons and social norms against using contraception while husbands are away, particularly for years at a time, the concern arising from respondents who planned to use family planning when their husbands return is that they typically do not discuss it in advance. This is particularly problematic for hormonal methods, as injectables should be started within 7 days of the menstrual cycle or else a backup method should be used for the first 7 days (FHI360 Sangini Service Provider's Reference Manual 2064). Supplemental qualitative data highlight the issues with measuring current use among women whose husbands are away. Because surveys such as the DHS rely on self-identification of contraceptive use, they may overlook women who consider themselves to be regular method users (both at last sex and at next sex), but who are not using any method because they are not currently having sex. Additionally, the issue of contraceptive preparedness is of key importance in the context of male migration but typically not included in surveys such as the DHS.

5 OTHER POTENTIAL BARRIERS TO FAMILY PLANNING

As the previous chapter discussed, the majority of nonusers in the study stated that they were not using family planning because their husbands were absent and thus they did not perceive a need for it. While husband's absence may have been the most immediate reason for nonuse, many respondents identified several other barriers to service- or commodity-based family planning during their interviews. We explore each of these using the categories in turn, as shown in Figure 1.1.

The first potential barrier—weak, inconsistent, or ambivalent fertility preferences— is omitted from the discussion here. While some respondents expressed weak fertility preferences—9% of respondents who wanted to delay or stop having children reported that their preference was weak or uncertain, and another 5% of respondents were undecided—these weak or uncertain preferences do not appear to be a strong barrier to family planning use. Most respondents felt strongly or very strongly about their professed fertility preferences, and the vast majority of respondents said that they and their husbands had similar fertility preferences.

5.1 Insufficient Knowledge of Methods or Services

Lack of awareness of contraceptive methods or of service availability does not appear to be a major barrier to contraceptive use in Eastern Nepal. As measured in the 2016 NDHS, all respondents who were contacted again in the follow-up study were aware of at least one modern contraceptive method. In the follow-up study most respondents expressed an awareness of at least a few contraceptive methods and, even in isolated areas, knew a place where they could obtain them. In rural areas women typically cited the health post or distribution by a female community health volunteer (FCHV), and in urban areas women indicated they could easily purchase methods at nearby pharmacies, clinics, and hospitals.

In conversation, only two or three respondents expressed a lack of awareness of methods generally. For example:

> *Interviewer: In your opinion how can contraceptives services in Nepal be improved?*
> *Respondent: It would be better if other methods were available.*
> *Interviewer: What methods?*
> *Respondent: Like iron pills.*
> *Interviewer: Iron pills?*
> *Respondent: Rather than having operation, it's better to use it.*
> *Interviewer: There are already pills for that.*
> *Respondent: I haven't heard about that. I don't know.*
> *Interviewer: So you don't know much about it?*
> *Respondent: Yes, I don't know that much about it.*
> -R#037 (07.031.01), age 30, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Very few women expressed lack of knowledge as plainly as the respondent above. Knowledge of family planning was generally evident, but *sufficient* knowledge to make an informed choice about contraception is more difficult to gauge. In several cases it was implicitly clear that women saw two or three modern

methods—typically condoms, pills, and injectables—as the universe of possible modern methods. For example, one respondent said:

> *I will use this withdrawal method. Injectables and pills don't work for me.*
> -R#064 (12.219.01), age 33, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

Another respondent indicated how she was choosing between pills, injectables, and withdrawal:

> *Interviewer: Have you used any methods?*
> *Respondent: How do you call this method?*
> *Interviewer: Withdrawal method?*
> *Respondent: Yes, this is it, the main thing is that this is the right method since, injectable will just make you sick, and even pills will make you sick. That is why I use this method.*
> -R#129 (35.060.01), age 35, rural resident of Jhapa district (Terai belt), nonresident husband, using withdrawal

Many respondents seemed to have a combination of personal experience, secondhand knowledge, and education about contraceptives. Interviews revealed some points of confusion, however. For example, one respondent expressed confusion over what she had heard about pills and injectables.

> *Interviewer: Now, you have heard about pills and injectable, will you be using pills or injectables?*
> *Respondent: People say pills would not work all the time, you may forget to take it. Also, you hear such things like the tablets would be collected in your stomach, which might damage the kidney. Also the 3-months injectable Depo Provera would affect the menstruation cycle. There are so many things you hear and I am confused. I have not been able to fix my mind on one method.*
> -R#070 (17.161.01), age 27, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

As in NDHS, all follow-up respondents had heard of at least one modern method and seemed to know at least one place where they could obtain methods. Aside from rumors about side effects, which are considered separately in the next section, the main knowledge barrier revealed during the interviews was women's limited awareness of method types, and in some cases rumors they had heard about these methods.

5.2 Personal Aversion to (Commodity-Based) Family Planning

Even when prompted, respondents in the follow-up study expressed relatively little social, attitudinal, or religious opposition to family planning overall, or to commodity-based contraceptive methods. Among respondents who were not using family planning, only two specifically said that they feared side effects, when asked in a closed-ended question about their reasons for nonuse. A reading of the transcripts, however, reveals that among a few other nonusers, and particularly among those using traditional methods, fear of side effects and health concerns emerged as a significant theme of conversations, organically arising in 50 of 151 such interviews. There was a perception that modern methods cause weakness, disrupt the body's natural processes, and place future fecundity at risk. In some cases fear of side effects was based on personal experience, while in other cases it was based on rumors. We thus disaggregate side effects by source of information: rumors and secondhand information versus personal experience. We discuss generalized

opposition and an emergent theme of suitability in the third subsection. For some women, aversion to modern method usage mainly came from their husbands, who were perceived as the decision-makers on contraception. These factors are dealt with separately in the next section.

5.2.1 Rumors and secondhand reports of side effects

Overall, rumors and secondhand reports of side effects and health concerns, particularly weakness and bleeding but also disruptions to future fecundity, appear to be an important barrier to nonuse of modern methods in Eastern Nepal. Among respondents who cited side effects as a reason for nonuse at some point during their interview, some based this perception on secondhand reports. For example:

> *Interviewer: Have you used any contraceptives until now?*
> *Respondent: No, I am told [by my husband] to use injectable but I don't [laughs].*
> *Interviewer: Why are you not using it?*
> *Respondent: They say this would harm our body. Now, I don't know if it harms or not but mostly even I have not seen it. One of my aunt had used the 3 months injectable that affected her in weight gain. Also, my sister-in-law used this method which affected on extreme bleeding.*
> *Interviewer: This means you have heard a lot about these side effects?*
> *Respondent: Yes, because of side effects, that is why I don't use these contraceptives.*
> -R#139 (35.184.02), age 34, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

This respondent is notable because her official reasons for not using family planning are her husband's absence and infrequent sex. Other respondents mentioned secondhand reports of possibly unrelated outcomes. For example:

> *Interviewer: Do you think you will be safe only using the withdrawal method?*
> *Respondent: Yes, I think so, previously it has worked for 4 months.*
> *Interviewer: Why do you not want to use other method like the injectable?*
> *Respondent: It's that a lot of women, my sisters, have used it and have later experienced miscarriage. That is why I fear using it myself.*
> -R#034 (04.195.04), age 27, urban resident of Jhapa district (Terai belt), resident husband, not using family planning

While these respondents cited direct secondhand reports, in other cases the perception of side effects was based on local rumors and advice from relatives:

> *Interviewer: Did you use any contraceptives to avoid pregnancy within 6 months of giving birth?*
> *Respondent: This is it, we have not used anything else in 6 months.*
> *Interviewer: This withdrawal method?*
> *Respondent: Yes, nothing besides that since, medicines affect me.*
> *Interviewer: What medicines? What did you hear about?*
> *Respondent: That it affects health and also it would stop menstruation by tablets. These are the rumors in our village.*
> *Interviewer: So, you did not hear this from the hospital?*
> *Respondent: No, from the village people and my mothers.*
> -R#131 (35.074.02), age 21, rural resident of Jhapa district (Terai belt), resident husband, using withdrawal

The main concerns about modern methods were weakness and menstrual disruptions. For example:

> *Interviewer: Why have you not used any other method [besides withdrawal]?*
> *Respondent: Some people say family planning methods are terrifying to use; for instance, it may cause weakness and excess bleeding.*
> *Interviewer: Is that the reason you have not been using these methods?*
> *Respondent: Yes, and they also say it affects the uterus.*
> -R#058 (12.101.02), age 30, urban resident of Morang district (Terai belt), resident husband, using withdrawal

While overall health and disruptions to menstruation were important considerations, a secondary concern about modern methods was how they would affect future fecundity. Sometimes, as already reported, this was expressed as uterine concerns, and other times more directly:

> *I have heard from villagers that if we take family planning medicines, it might have side effects, heard things like if we take pills or medicines, you will not be able to get pregnant or give birth later. But we educated people should have used the family planning methods.*
> -R#029 (04.118.07), age 23, urban resident of Jhapa district (Terai belt), nonresident husband, using periodic abstinence

Information about resistance to modern methods is not easily captured with existing NDHS questions on reasons for nonuse, nor are simple probes on opposition sufficient. In part, this appears to be because in Nepal husband's absence is the more immediate reason that women often do not use contraception.

5.2.2 Personal experience with side effects

For the most part, women who said they were not using commodity-based methods because of side effects had experienced these themselves. One respondent said side effects from pills and advice received about other methods led her to choose a traditional method instead:

> *Interviewer: You said you used to take pills?*
> *Respondent: Yes, I used them for a short period when my child was 4 months. I started my period so I thought it was time for me to take pills. After I took pills, my head started to ache, my stomach hurt real badly and later the doctor suggested I stop taking pills. The doctor told me that it would affect me and my daughter too and that it did not suit me. He also advised me about injectable like Sangini and various other contraceptives, I did not want to because they said it did not have a proper control [was not completely effective]. Later, I decided not to use any contraceptives and yes this [withdrawal] is what my husband and I decided to use.*
> -R #007 (01.069.04), age 29, urban resident of Ilam district (Hill belt), resident husband, using withdrawal

Women also commonly reported side effects associated with injectables. For example:

> *Respondent: It is not good to use family planning methods like oral pills, it will affect on health.*
> *Interviewer: Do you think it will affect on health?*
> *Respondent: Yes. It affected me while I used it earlier.*
> *Interviewer: Are you saying this, because you have experienced it?*
> *Respondent: Yes, when I took the injectable, I had bleeding for 3 months continuously.*

Interviewer: Is it so?
Respondent: I used injectable after my son was born, I had used that 3-month injectable once, after my son was born, I had resumed my menstruation in 1 month after the delivery and then I took the 3-monthly injectable, after taking it, I bled for 3 months.
Interviewer: Is that the reason you discontinued this contraceptive?
Respondent: Yes, I took pills after that. I did not bleed but I started having pain here [points to chest]
Interviewer: Oh, you had pain in your chest.
Respondent: Yes, [pills] used to cause pain in my chest and breast, so I stopped using them too.
-R#059 (12.125.02), age 30, urban resident of Morang district (Terai belt), resident husband, using withdrawal

Excessive bleeding with injectables was one concern, but the complete absence of menstruation was considered an equally undesirable side effect. There was a perception that a lack of menstruation causes disease in the body. For example:

Interviewer: Did the injectable cause any problem in you health-wise?
Respondent: I did not have my menstruation. The unclean blood and waste that is supposed to let out through menses still remained inside body, then it caused feeling unwell and inconvenient.
-R#062 (12.156.02), age 40, urban resident of Morang district (Terai belt), resident husband, using withdrawal

In some cases, the apparent reaction to injectables was quite severe:

Respondent: I will be using withdrawal [when my husband returns]. My husband and I have already made a decision to use this method. Also because I am weak, probably due to the side effects of the injectable that I used earlier... when I asked the doctor why this happened to me, he asked me if I had used injectable, then I told him, yes, I had been using injectable, Then he told me that is the reason for those problems.
Interviewer: While using that injectable you said you bled a lot and you missed your menstruation too?
Respondent: Yes, I did not have my menstruation. I added a lot of weight and later all of sudden I bled a lot. After a lot of bleeding my husband took me to [city] hospital, after that I was given saline water, did my video X-ray and they said I needed blood transfusion, but I could not get the matching blood I needed. Later, I was given a lot of vitamins. My body was fully swollen, my hips hurt a lot, and I discharged unusual pieces of blood too.
Interviewer: Oh, you had so many difficulties.
Respondent: We had to walk up to [city] from here. We had to take break for rest in between... there are no transports here.
-R#95 (22.035.06), age 32, urban resident of Dhankuta district (Hill belt), nonresident husband, not using family planning

In contrast to women who were not using commodity-based methods, current modern-method users reported relatively few side effects with their method (Table 5.1). Most of these respondents who experienced side effects from their current method said they were manageable, while a few intended to discontinue soon due to side effects.

Table 5.1 Experience with side effects by method type, according to follow-up study

Responses to the question "have you experienced any side effects or health concerns with your method?"

	Traditional user		Modern user		Total	
	n	%	n	%	n	%
Yes	0	0.0	8	18.2	8	7.7
No	60	100.0	36	81.8	96	92.3
Total	60	100.0	44	100.0	104	100.0

Note: includes up to two methods per respondent.

5.2.3 Attitudinal opposition and method suitability

Outside of aversion to side effects, women included in the follow-up study expressed little generalized opposition to family planning and fertility regulation overall. Even among nonusers, respondents almost universally supported the use of family planning by married couples. Only 3 of 194 respondents indicated that they were opposed to family planning. Two other respondents were uncertain of their opinion on family planning. Upon further discussion, the respondents who opposed family planning seemed to be obliquely referring to health concerns. For example,

> *Interviewer: Thank you. I would like to ask you some more questions about family planning and contraception... in general, do you support or oppose the use by married couples of methods or ways to avoid becoming pregnant?*
> *Respondent: I would have to oppose it.*
> *Interviewer: Why do you oppose it?*
> *Respondent: I don't want to use it… so I'd rather like others don't use it either.*
> *Interviewer: What is it about contraceptives that you oppose or don't like?*
> *Respondent: Other people have their own preference and use the method they want, but I don't like it.*
> *Interviewer: So you haven't used it ever?*
> *Respondent: Yes.*
> *Interviewer: is there any reason why you are against it or you do not want to use it?*
> *Respondent: Because it makes you physically weak. That's why I haven't used it to date and that's why I would rather think that other people also not use it.*
> -R#030 (04.125.04), age 22, urban resident of Jhapa district (Terai belt), nonresident husband, using withdrawal

The second respondent who opposed family planning said that she endorsed only natural methods due to possible side effects of modern methods; similarly, the third respondent said she opposed family planning because of its effect on health, reasons that all appear to reflect a fear of side effects.

The attitude toward contraceptives that respondents expressed could perhaps be best summarized as "it suits some and not others." They tended to express not so much an opposition to family planning as much as a set of challenges they and their partners faced in finding a *suitable* method. As previous excerpts from transcripts have indicated, the suitability of a method appeared to be determined in part by the absence of adverse symptoms: that is, a suitable method can be best described as one that does not cause overly burdensome side effects. For example:

Interviewer: Why did you choose to use pills?
Respondent: Well, there were other methods like injectables and Copper T [IUD]. I had doubts on injectables… it suits some and doesn't suit others, I have heard that people have some side effects after using injectables, for instance excessive bleeding for months.
Interviewer: You have not used it yourself, did your friends tell you?
Respondent: Yes, my friends told me. They said it doesn't suit some people and they bleed for months, this is why I did not opt to use injectables.
Interviewer: Is everything fine with pills?
Respondent: Yes, everything is good.
-R#054 (12.062.04), age 27, urban resident of Morang district (Terai belt), resident husband, using pills

A method is deemed suitable if there is an absence of side effects, or if the side effects are tolerable. For example:

Interviewer: You had problems with injectables, right? What side effects did you experience?
Respondent: It did not suit me, I bled a lot. I had continuous bleeding.
Interviewer: How long did you use injectable?
Respondent: What do you mean by how long?
Interviewer: Did you use it once?
Respondent: I took it twice. Doctors told me it was my first time so this was normal. I need to take another dose. So I took the second dosage and I had the same problem, so I started taking pills.
Interviewer: Didn't pills affect you?
Respondent: Nothing happened. Pills suited me.
-R#089 (19.212.01), age 31, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

The suitability of a method was of such importance that some women even reported that suitability of a method was an explicit part of the instructions they had received from a health care provider. For example:

The FCHV said that she's heard other women complain about the side effect of using injectables, it suits some and doesn't suit others. If the pills suit you then you take the white pills monthly and after you take the 2 black pills you get the menstruation on time. If the injectable suits you then you get menstruation of time, I heard, if you don't then it's not suiting you.
-R#167 (43.159.03), age 36, rural resident of Sunsari district (Terai belt), resident husband, using pill

Overall, there was little personal opposition to family planning methods. Instead, as mentioned, the main concern was that every particular method suited some women but did not suit others. Women's main concern was finding a suitable method. A mention of suitability of contraceptives spontaneously emerged in over one-third of all interviews. Efficacy of the method was not explicitly mentioned in the discussion of suitability; typically, a suitable method was regarded as one that caused few to no side effects or one whose side effects were tolerable. In many cases, this meant that, after a bad experience with hormonal methods, the respondent found using withdrawal to be most suitable.

5.3 Husband's Opposition to (Commodity-Based) Family Planning

Respondents rarely expressed opposition to family planning, and when they did they were more likely to explain that their husbands were the ones opposed to modern contraception. This factor is considered separately as it interacts with women's empowerment and agency. In some cases women perceived their husbands as the sole decision-maker on contraception and wanted to defer to his preference. In other cases husband's opposition was a factor that the respondent considered carefully in deciding which method to use.

When asked about their husband's opposition to family planning, only 11 of 194 respondents indicated that their husband was generally opposed to family planning. This is relatively low overall but nearly four times as high as reports of personal opposition. Yet what emerged through discussions with respondents was that their husband was not *generally* opposed to family planning use but was opposed to *her* using modern methods. Typically, the reason given was side effects or health concerns. For example:

> *Respondent: We support others using it. Better to use family planning rather than not using it and facing problems. Now, my husband disagrees with me… he does not think it's good. My menstruation was erratic when I was using it before. It wasn't good for my body.*
> *Interviewer: So, he is opposed to you using it?*
> *Respondent: Yes, I think he's opposed.*
> *Interviewer: Is it because of the adverse effect it had on your health or is it because of other reasons?*
> *Respondent: That is why.*
> *Interviewer: What did he say?*
> *Respondent: I haven't used other methods. The injectable didn't suit me. I think that is why he is opposed to the idea and said not to use any contraceptives.*
> -R#047 (11.113.01), age 31, urban resident of Morang district (Terai belt), nonresident husband, using withdrawal

Similarly, other respondents stopped using after their husband told them to:

> *Interviewer: Did [your husband] ever tell you to use contraception?*
> *Respondent: I did use it before. But it was giving me side effects. When I used the injectable, I started putting on weight and had back pain. So he told me to stop using it and we started using this method [withdrawal] instead.*
> -R#018 (02.173.02), age 32, urban resident of Jhapa district (Terai belt), resident husband, using withdrawal

In a few cases the respondent reported that her husband cautioned against modern methods prospectively rather than after any particular experience. For example:

> *[My husband] used to say if we use a contraceptive method, it may have side effects, like if we want a child later on we might be unable to have one, it's said that using it make you weak. It makes you dizzy, and causes all kinds of women health issues if you use it for a long time. He understands about it that's why he wouldn't let me use it but others don't [have a husband who objects]… I've heard from my friends.*
> -R#031 (04.132.02), age 23, urban resident of Jhapa district (Terai belt), resident husband, using withdrawal

When asked about the source of their husband's knowledge about family planning, some users reported medical advice, but generally the source was secondhand information or rumors. In other cases the husband's knowledge was unspecified. Often there was an assumption that the husband had superior information about family planning. For example:

> *Interviewer: You said you and your husband don't use family planning methods because you think this will affect your health?*
> *Respondent: Yes, we feel so.*
> *Interviewer: Did you husband say that?*
> *Respondent: Yes.*
> *Interviewer: How does your husband know that family planning methods are not good?*
> *Respondent: He is a man; how will he not know about this? After hanging out with his friends and seeing it, he will know about it. We are women, we don't really go out of these walls, and we won't know anything. We only go out sometimes. They will know about everything since they can learn.*
> *Interviewer: Oh, so your husband knows about the family planning method and its side effects?*
> *Respondent: Yes, he knows everything but women are very ignorant about this.*
> -R#130 (35.067.04), age 28, rural resident of Jhapa district (Terai belt), resident husband, not using family planning

This passage serves as a good illustration of how much contraceptive knowledge and agency are intertwined with women's empowerment and education in Nepal. When combined with other data from our study it also illustrates that, among a key subset of respondents, opposition of husbands to modern methods appears to be the driving factor in opting to use withdrawal or not using family planning at all.

5.4 Perceived Low Fecundability

Perceived low fecundability includes respondents who cite infrequent sex or no sex as a reason for nonuse, as well as those who believe that they cannot or are unlikely to become pregnant. Nearly half of all respondents to the follow-up study had a nonresident husband at the time of the survey, and his absence was the main reason they cited for not using family planning. These respondents were discussed separately in the previous chapter. This section addresses respondents with a resident husband who said they did not need family planning or only needed a traditional method due to infrequent or no sex, or due to low fecundability.

Two of seven respondents with resident husbands who did not want a/another child within the next 2 years but were not using family planning reported not having sex as a reason for nonuse. Another respondent cited a lack of menstruation since her last birth, a fourth cited breastfeeding, and a fifth included infrequent sex as a reason for nonuse.[11] Since married women are presumed to be sexually active and therefore need contraception if they want to avoid pregnancy, this finding suggests that in Nepal perceived low fecundability is an important reason for unmet need for family planning among women with resident husbands. Lack of sex was typically attributed to postpartum abstinence. For example:

[11] A sixth said she and her husband were opposed, and the seventh indicated fear of side effects and another reason.

Interviewer: Is your husband away?
Respondent: No, he is home. We do not have any sexual contact but we already have enough children, why would we want more?
Interviewer: Is that the reason you have not been using any method?
Respondent: Yes, it is not that in our case. In spite of living together, sexual relation is not like the rice and daal that you need to eat everyday (laughs)
Interviewer: How long have you not had a sexual relationship?
Respondent: After the birth of our younger son, our family is complete. Some people might want more. But it is enough for us. If we don't do it, there is nothing to worry about and no chances of getting pregnant.
…
Interviewer: What I meant to say is, did you two discuss and came up to this decision [to not have sex] together?
Respondent: Yes, we have agreed not to having sexual relations and not to use any family planning methods. I also do not like to use injectables or have an operation. I told him if you want to have relation with your wife, get male sterilization done, but he also didn't like to have operation. So we both didn't want to go for operation and I didn't want to use injectables, so what to do? We decided not to use anything and not to have physical relation. Once we do not get into sexual relation, both of us do not have any problem, he is also fine, I am also fine.
-R#066 (12.234.02), age 37, urban resident of Morang district (Terai belt), resident husband, not using family planning

In several cases, women were content to use a traditional method despite its lower efficacy because they were fairly confident they couldn't become pregnant. For example:

Interviewer: Now I would like to understand more about your current situation. How likely do you think it is that you could become pregnant in the next few months?
Respondent: Unlikely.
Interviewer: Why do you say that?
Respondent: There is no desire for more now. If you desire something, then you find ways to get it about, now if you don't want more then you find ways to prevent it.
Interviewer: So because you are using withdrawal, you don't think you're likely to get pregnant soon?
Respondent: Yes, and we don't do it a lot either. If it does happen then we'd have to raise it; after all it is God's creation. But it would be difficult for us. But we are pretty confident it won't happen.
Interviewer: So you are pretty confident about your method being safe?
Respondent: Yes, and we are also getting older, soon my menstruation will also stop… until then we'll continue using this method… we are pretty confident to date.
-R#038 (07.038.01), age 36, urban resident of Jhapa district (Terai belt), resident husband, using withdrawal

The final group of women who were concerned about fecundability includes those who wanted to become pregnant within the next 2 years but worried that they might not be able to conceive. They are excluded from this discussion because they were not using family planning in order to have a child, not because of concerns about fecundability.

5.5 Access-Related Barriers

5.5.1 Geographic inaccessibility

In Province 1, where the study was carried out, the interviews indicate that geographical terrain is an important factor determining the accessibility of family planning methods and services among women. Nepal's topographic structure is diverse, ranging from flat land in the Terai to hills and mountains. The infrastructure in hilly, and mountainous regions have not been as well developed as flat, Terai regions. As a result, women in the Hills have to exert effort and allocate a few hours or half a day just to reach a health post or reach the nearby pharmacy where they can access family planning services. Generally, women in the Terai said they were more able to access family planning methods and services than their counterparts living in the Hills.[12]

At the same time, only a minority of respondents perceived a lack of accessibility to contraceptives, and even fewer perceived access as a major barrier to contraceptive use. When asked if it is difficult to obtain contraception—*By that I mean whether it is difficult to reach a provider during office hours and to obtain a desired method*—three-fourths of the respondents (75%) disagreed with this statement, while one-fifth (20%) agreed that obtaining contraception was difficult (Table 5.2). The remaining 5% were not sure. Non-users and traditional method users were most likely to perceive difficulty in obtaining contraception (24% and 19%, respectively).

Table 5.2 Perceived access barriers to contraception, according to follow-up study

Responses to the question "do you think that it is difficult to obtain contraception?"[1], by primary method type

	Non-user		Traditional user		Modern user		Total	
	n	%	n	%	n	%	n	%
Yes	24	24.2	10	19.2	4	9.3	38	19.6
No	69	69.7	39	75.0	38	88.4	146	75.3
Not sure	6	6.1	3	5.8	1	2.3	10	5.2
Total	99	100.0	52	100.0	43	100.0	194	100.0

[1] "By that I mean whether it is difficult to reach a provider during office hours and to obtain a desired method."

Overall, the majority of respondents stated that accessing a family planning method was reasonable, as some methods are available in government-run hospitals and health posts, heavily subsidized or free of cost. During discussions, urban residents particularly in the Terai reported few difficulties in accessing contraceptives, because pharmacies were conveniently located at every corner if they found it difficult to get service at hospitals. Even nonusers perceived few immediate barriers in accessing family planning methods. For example:

> *There are health service provider visiting areas, service providers are providing their services from markets, and they visit around [town] and keep updating and asking us about the methods and contraceptives. Also, there are lots of medicals in the market area, so it is not a problem [to access contraceptives] at all.*
> -R#062 (12.156.02), age 40, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

[12] The survey did not cover the mountain belt.

Women in the Hill belt sometimes acknowledged that it was difficult to access family planning services. A multinomial logistic regression predicting responses to the question shown in Table 5.2 about access finds that, after controlling for family planning use, living in the Hill belt was a statistically significant predictor of reporting an access barrier (results not shown). During conversation, an urban respondent living in an urban area in the Hill belt shared her difficulty in accessing contraception:

> *For us, it would be better if a health post or clinic is set up nearby here at [town], at [school in town] or at [nearby town]. It will be easier for women here. For people out here, if we want to use the services, we need to go to the health post up there near [school in another town], or we have to go to [city] itself. Since we have to walk up to [city], it is very difficult if it rains a lot, we are scared that flood in the river would drown us and also scared of the landslide. Nowadays, since it is rainy season; it is very difficult to walk on road, even to visit market too. So, we feel that such health facilities and services should be provided nearby here.*
> -R#95 (22.035.06), age 32, urban resident of Dhankuta district (Hill belt), nonresident husband, not using family planning

Women in the Hill belt are penalized economically for not being close to a service provider. Taking half a day or more just to reach a market nearby or a health post to access family planning services meant that they lost out on a day's work or faced difficulties with childcare, besides the possible expense of traveling. However, these women did not typically dwell on economic liability as a barrier in reaching family planning services.

Though unhappy about their situation, women used modern contraception regardless of access barriers and clearly prioritized accessing family planning services over the cost and inconvenience. And while respondents in the Hill belt did not concretely measure the economic burden they had to bear as a result of their locality, they expressed the need to have family planning services nearby in the close future.

5.5.2 Service quality barriers

In Nepal, the government has implemented extensive programs to cater to concerns related to family planning and reproductive health (Ministry of Health [Nepal] 2015). These include the National Family Planning Program, Safe Abortion Services (SAS), Adolescent and Sexual Reproductive Health (ASRH), Female Community Health Volunteers (FCHV), who promote the birth preparedness package (BPP), and Primary Health Care Outreach Clinics (PHCORC). In addition, several NGOs and INGOs in Nepal run programs related to family planning and reproductive health, and the private health sector also offers family planning services.

The 2015 Nepal Health Facility Survey (NHFS) reported that 98% of the health facilities provide a modern method of family planning (such as the pill, Progestin-only injectable, implants, IUD, male condom, or female or male sterilization). Facilities providing family planning services 5 days a week or more were at 83% for hospitals at the level of zonal and above, 76% for district-level hospitals, and 96% among the private sector and lower-level health services (Ministry of Health [Nepal] et al. 2017).

Because of the centralization of services in easily accessible urban areas, urban women have many services to choose from. However, women in remote villages and hills often have to rely on their FCHVs or health

post for basic family planning services that urban women take for granted. A few women in the follow-up study pointed out that their health institutions have failed to address their family planning needs.

While almost all health facilities in Nepal (97%) offer some type of temporary family planning method, only 44% are equipped and provide long-term methods such as implants and IUDs (Ministry of Health [Nepal] et al. 2017). Short-acting methods including pills, male condoms, and injectables are readily available; long-term methods including the IUD and implants that require more extensive training and infrastructure are not widely available. These methods are accessible across hospitals and primary health care centers, but of the 45% of health posts claiming to offer IUDs and implants, the 2015 NHFS found that only 15% actually provide these methods (Ministry of Health [Nepal] et al. 2017).

FCHVs are currently trained and assigned only to distribute condoms and re-supply pills. They refer first-time pill users and those interested in other methods to local health facilities. However, local facilities do not always offer a wide range of methods. Often, participants in the study stated that they have access to only a limited choice of modern methods in their immediate vicinity:

> *Respondent: We cannot find the methods with ease here. We need to go very far. Injectable is available nearby here, while to obtain other methods we need to reach [another city].*
> *Interviewer: Do you mean it is difficult to go there or is it that you are not sure if you can obtain the method or not after reaching there?*
> *Respondent: We can find the contraceptives, but it is difficult to go there, it takes about three hours of walking for me, I cannot walk much.*
> *Interviewer: Do you only get injectable over here and nothing else?*
> *Respondent: yes, we cannot find other methods here.*
> -R#178 (50.033.03), age 29, rural resident of Bhojpur district (Hill belt), resident husband, using injectables

In addition, women said they face the possibility that their method of choice would be unavailable or scarce and they would need to find an alternative solution. An urban resident shared how she had to visit several health facilities to access injectables:

> *That might be a problem sometimes because there are times when the service provider cannot be found when you go and visit them, and also when they are running out of stock. Sometimes there is no madam there; they are usually off to somewhere. Once, I had been to governmental hospital for the injectable and it even costs Rs. 40 there and later I went to [another city].*
> -R#145 (36.093.03), age 26, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

One respondent reported having to walk 4-5 hours to town to get pills because her local health post does not stock the pill:

> *Respondent: There are times when we cannot get it. We need to go to [another city]. Sometimes they come here or else the other time we will have to reach [another city]. That is it.*
> *Interviewer: Why? Can't you find it from the health posts?*
> *Respondent: We cannot find these methods in the health posts. It is a simple health post.*
> *Interviewer: Where do you get it from?*

Respondent: These pills can be obtained from here. Just down the hills.
-R#175 (50.027.01), age 37, rural resident of Bhojpur district (Hill belt), resident husband, using pill

While overall accessibility was not widely perceived as a problem, reaching a service provider with the desired method type in stock proved difficult for some respondents, particularly rural residents and women in the Hill belt. Responses provided to the 2016 NDHS about reasons for nonuse did not capture access-related barriers or service quality barriers that respondents articulated during follow-up. Supplemental questions on access and service barriers helped start the conversation, but access-related barriers such as limited method mix or difficulty reaching their most desired method only came through during interviews as an important barrier to contraceptive use in Nepal.

5.5.3 Administrative accommodation barriers

Women living in large urban areas and those living in small towns and villages had disparate experiences accessing contraceptive services. In large cities in the Terai women could access services with ease and therefore could choose services that best suited their needs and preferences. Women in the Hill belt, whether urban or rural, as well as women in the Terai living in smaller urban and rural areas, did not have that same ease of access. Instead, they had to make do with whatever services were available to them.

Often, community health workers are the only accessible health service providers in small urban towns and rural areas constrained by limited health infrastructure. While they provide invaluable services in these communities and have played a crucial role in improving women's access to basic health services, the quality of service has not been uniformly exemplary in areas where the study was conducted.

Especially in the Hill belt, women in the follow-up study reported that in addition to having to travel long distances to reach the service provider/health center, they faced problems when they arrived. Notably, service providers often were unavailable even during office hours. Respondents said they often had to wait for the service provider to arrive, sometimes for many hours, and could end up returning home without receiving any care. For example:

Interviewer: In your opinion how can contraceptives services in Nepal be improved?
Respondent: There should be a proper service provider at the center of our area. For instance; a particular place where anyone can access with ease. A place where we can visit regularly with no difficulty. The village home clinic up the hill is also quite far from here. After all, this is a government service; we should get proper services on time.
Interviewer: Are there any health posts nearby?
Respondent: We must go very far for the health post.
Interviewer: Would it be easier if it was available here?
Respondent: There is a village home clinic nearby, but it is very far from here. On top of that, workers are never available. We wait there for the entire day and when no one comes, we return home just like that. Even our hearts get wrenched.
-R#003 (01.029.02), age 33, urban resident of Ilam district (Hill belt), resident husband, using injectables

Commenting on the challenges women in the Hill belt face, another woman stated:

> *Respondent: I think it is a bit difficult.*
> *Interviewer: Why is it difficult? Is it because it is far or difficulty to approach the health service provider?*
> *Respondent: Yes, kind of. It is a bit far.*
> *Interviewer: Where do you go?*
> *Respondent: [city]*
> *Interviewer: Is it far? How long does it take?*
> *Respondent: Yes, we have to walk till there. It takes 3 hours.*
> *Interviewer: Is it difficult to approach health service provider?*
> *Respondent: Sometimes, we don't find him or her. We cannot find the person we are looking for.*
> *Interviewer: Do you find the contraceptive methods you are looking for?*
> *Respondent: Sometimes it is not available. There are times when we have to return without the methods and we are called the next time. This is what they do.*
> *Interviewer: This means, there are lots of challenges?*
> *Respondent: Yes, there are.*
> -R#005 (01.057.02), age 23, urban resident of Ilam district in (Hill belt), resident husband, uses implants

This obstacle is not unique to women living in the hills. A few women in small villages in the Terai also reported experiencing this situation and said they had no choice but to make alternate arrangements, for example, visiting a pharmacy to buy contraceptives at higher prices, which they could have accessed free at a health post:

> *Respondent: Sometimes when I go to get the injectable, I can't meet the service provider.*
> *Interviewer: Oh! Have you experienced such things? How did you address them?*
> *Respondent: Sometimes the service provider may have gone to the office, at such times, I go to the market and pay 60 Rs and get injected.*
> -R#014 (02.062.01) age 26, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning.

Some respondents faced with this problem had to resort to using natural methods or practice abstinence:

> *Respondent: If there are no vehicles then you have to walk far, you don't meet the person, and managing your own time to get there is difficult.*
> *Interviewer: Did you face this problem while living in the village?*
> *Respondent: Yes*
> *Interviewer: Have you faced this problem here?*
> *Respondent: We moved here 2 years ago, and my husband is not around either.*
> *Interviewer: So you faced a problem accessing it while in the village?*
> *Respondent: Yes*
> *Interviewer: How did you address them?*
> *Respondent: What can you do? You have no option but to abstain.*
> -R#041 (07.083.01), age 29, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Service providers' tardiness in reaching their work station has caused inconvenience and created an artificial unmet need for family planning among women trying to obtain contraception. Even in urban Terai

areas, women repeatedly identified limited office hours as a difficulty in accessing health services. In addition, some women said they were able to access their method of choice only during limited times of the month:

> *Respondent: People from our village go there. They say they need to stay on queue to purchase. They go to [another city] and they say it is difficult.*
> *Interviewer: It is difficult this means. One needs to go till [another city]?*
> *Respondent: Yes, people from here need to go to [another city].*
> *Interviewer: Do they need to stay in the queue to get injectable?*
> *Respondent: Yes, they said so. To get injectables one needs to stay in the queue and that they gave it on few days of the week.*
> *Interviewer: Is it only about injectables or other medicines too?*
> *Respondent: I don't know about others. I am just talking about injectables. We need to wait for months and then also few days a week. It is okay for those who get it regularly. It is not suitable for those who use it sometimes and the first time user, they said.*
> *Interviewer: Difficult?*
> *Respondent: One needs to get the injectable within 5-6 days of menstruation. Some of them crosses that date and some come during their 2nd or 3rd day.*
> -R#066 (12.234.02), age 37, urban resident of Morang district (Terai belt) resident husband, not using family planning

In addition, women were unhappy about having to spend long hours for their turn at government facilities. They complained about the inefficient service they had to endure:

> *Respondent: That happens... some people don't get medicines when they need. But I have always got it when I've needed it.*
> *Interviewer: So, you did not have any difficulties?*
> *Respondent: No, there are people who had to wait and stay long to purchase it*
> *Interviewer: It is difficult in general?*
> *Respondent: Yes.*
> *Interviewer: You are saying this because you heard about it?*
> *Respondent: Yes, I have heard about it and seen it too. When they go to purchase, they are not given time. They are not available whenever we need them. We need to wait a lot at government health facilities. We need to stay in the queue, which is very difficult.*
> -R#056 (12.086.01), age 39, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

Women who sought services from the local health post faced uncertainty about meeting the health worker even during official opening hours. This points to a potentially weak supervision system that further contributes to the degradation of service quality.

Although family planning services in Nepal have made many improvements since their inception, loopholes in administrative policy and planning persist. Even in urban Terai areas of Province 1, the failure to provide good quality of service and to offer services that are consistently reliable remains an important problem. These barriers were largely missed by the 2016 NDHS survey. In areas where contraceptive access was unreliable, respondents sometimes resorted to using less desirable methods or visiting less desirable dispensaries for services.

5.5.4 Lack of affordability

In Nepal, contraceptives are distributed from the government free of charge through health posts, hospitals, and community health volunteers. They are also available from private clinics and pharmacies at a subsidized cost. The follow-up study asked respondents if they believe contraception is expensive. As Table 5.3 shows, 68% of respondents disagreed with this statement, while 17% agreed and 15% were not sure, primarily because they had never tried to access contraception. Women using modern methods were by far the most likely to disagree that contraception is expensive, at 81%, followed by users of traditional methods, at 67%, and contraceptive nonusers, at 63%.

Table 5.3 Perceived expense of contraception, according to follow-up study

Responses to the question "do you believe contraception is expensive?" by primary method type

	Non-user		Traditional user		Modern user		Total	
	n	%	n	%	n	%	n	%
Yes	16	16.2	10	19.2	7	16.3	33	17.0
No	62	62.6	35	67.3	35	81.4	132	68.0
Not sure	21	21.2	7	13.5	1	2.3	29	14.9
Total	99	100.0	52	100.0	43	100.0	194	100.0

Over half of modern method users (24 of 42, excluding one LAM user) obtained their current method for free from a government health post, a government hospital, or a FCHV. Reportedly, a packet of pills costs around 50 Nepalese rupees (US$0.47) but could cost as much as 175 rupees (US$1.64) at private pharmacies. Injectables are cheaper, between 10 and 50 rupees per injection, but at pharmacies injectables could reportedly cost as much as 160 rupees. Norplant implants are reportedly much more expensive, between 500 and 1,250 rupees (US$4.68 to US$11.69). User of modern methods who cited exact prices typically did not consider them to be expensive. As one respondent explained:

> *For my body and health, 100 or 50 rupees is nothing.*
> -R#006 (01.061.02), age 25, urban resident of Ilam district (Hill belt), resident husband, using pill

Among nonusers of modern methods, a qualitative reading of the discussion of expense reveals that around half based their opinion about the expense of contraceptives on their personal experience, and another one-fifth on word of mouth from friends, relatives, and villagers. The remainder learned about cost through hospital or health personnel, had unstated general knowledge of cost, or simply deduced that contraception would not be expensive. For example:

> *How would poor people use it if it was expensive? It is difficult for those people to take care of so many children, and they won't be able to afford the expense. I guess it is available for free. I have never used these contraceptives and I have not tried to purchase them either.*
> -R#072 (17.175.01), age 30, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

Around a third of nonusers specifically mentioned that contraceptives could be obtained for free from government health posts and government hospitals, and from FCHVs. There also is wide awareness that contraceptive commodities are subsidized. As one respondent explained:

> *It's far cheaper than what you'd pay for other medicines or operations.*
> -R#017 (02.160.03), age 36, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Additionally, some women who typically used family planning when their husband was at home felt it was worth it regardless of expense:

> *Yes, I find it expensive. But if it is so, then to prevent unwanted pregnancy, it's better to take prevention. So you have to buy it no matter what the cost.*
> -R#023 (04.069.01), age 36, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Others felt that the expense would not be a problem for those who were employed, but might be for others:

> *Yes, it is indeed expensive… those who are earning and those who can afford, will buy it, but for those women from lower status [lower income group], it will be problem for them to buy such contraceptives.*
> -R#029 (04.118.07), age 23, urban resident of Jhapa district (Terai belt), nonresident husband, using periodic abstinence

After a comprehensive reading of the transcripts of interviews with respondents, and in light of the fact that contraceptives are available for free from government sources, the expense of contraception appeared to be a major barrier for only one respondent:

> *Interviewer: Now, a general question. Do you think that contraception is expensive?*
> *Respondent: It is expensive.*
> *Interviewer: Why do you say so?*
> *Respondent: I cannot afford it. I feel it is expensive. Sometimes it is confusing whether to spend money in buying this family planning method or in buying other essential goods.*
> -R#058 (12.101.02), age 30, urban resident of Morang district (Terai belt), resident husband, using withdrawal

The respondent above went on to say that she had suggested withdrawal to her husband and he agreed. For most respondents, however, the decision to use contraception appeared to be independent of cost. When asked to name their reason(s) for not using family planning, none of the respondents cited cost as a factor, either in the NDHS or in the follow-up study. Upon probing, a few respondents mentioned concerns about affordability, but only one indicated it as a barrier to family planning. Thus, in Province 1 of Nepal affordability appears to play only a very minor role in women's decision not to use contraception.

6 INTERACTIONS WITH THE HEALTH SYSTEM AROUND FAMILY PLANNING

The health system is a key provider of family planning services in Nepal. Medically assisted births and abortions are important times when women interact with providers who may be able to counsel them on family planning services. Additionally, women may interact with female community health volunteers (FCHVs). In this section we report on respondent's interactions with the health system and FCHVs at the times of birth or abortion.

6.1 At and After Birth

Out of 194 respondents, 105 reported to the follow-up study that they had given birth within a little over 5 years before the date of interview. These women were asked if anyone who attended to them during the birth talked to them about ways to space births or ways to avoid pregnancy. Additionally, they were asked whether, in the first 6 weeks after birth, if anyone else talked to them about ways to space births or avoid pregnancy. Table 6.1 shows the results. A strong majority (71%) of respondents who gave birth since Nepali year 2068 said they did not receive advice about birth spacing or ways to avoid pregnancy at either time from any source. Additionally, less than one-fifth of respondents received advice about birth spacing or limitation from any source at the time of birth, and less than one-fifth reported receiving advice within the first 6 weeks after birth.

Table 6.1 Counseling about family planning at and after birth, according to follow-up study

Of women who gave birth since Nepali year 2068, number and percent who received advice about ways to limit and space births at the time of birth from anyone, versus number and percent who received advice about ways to space births within first 6 weeks after birth from anyone (else)

	Within the first 6 weeks					
	Yes		**No**		**Total**	
At time of birth	**n**	**%**	**n**	**%**	**n**	**%**
Yes	8	7.6	11	10.5	19	18.1
No	11	10.5	75	71.4	86	81.9
Total	19	18.1	86	81.9	105	100.0

An in-depth reading of the transcripts indicates that, in total, of the 30 women who reported receiving advice about birth spacing either at birth or within 6 weeks, 18 said the advice was from a medical professional, primarily a nurse, and 4 said the advice was from an FCHV. The remaining 8 respondents said the advice was from their husband, family members, or villagers. In about two-thirds of cases a specific method was discussed; in other cases women were advised to delay or space births, but were not specifically counseled on how to do so. Some women said they already knew how and did not need counseling.

Here is a typical exchange with one of the 75 women who did not receive counseling:

> *Interviewer: Did anyone in the hospital who helped you in the delivery suggest to you for birth spacing, delay in birth of next child and methods on family planning devices?*
> *Respondent: No one told me about it.*
> *Interviewer: Didn't the nurse tell you anything?*
> *Respondent: They did not say anything.*

Interviewer: Did anyone suggested you on birth spacing or family planning methods within 6 weeks of giving birth to your younger child?
Respondent: No.
-R#012 (01.097.03), age 23, urban resident of Ilam district (Hill belt), nonresident husband, not using family planning

As one respondent explained, the nurses and doctors at hospitals are busy and may feel that birth spacing is a personal matter:

Interviewer: Did anyone who attended to you during your birth talk to you about ways to space births, or ways to avoid pregnancy?
Respondent: No one there has the time to chat to you about that.
Interviewer: No one at the hospital told you anything?
Respondent: If you want to learn and know things, then you take the initiative and ask about it otherwise no one will tell you anything. But if you do ask they will tell you. Otherwise, they are too busy to talk to you.
Interviewer: Within the first 6 weeks after your birth, did anyone talk to you about ways to space births or avoid pregnancy?
Respondent: No one comes over and tells you what to do. I do know a lot of things. Most people think that it's a personal matter, but if you don't know then you should approach the health workers or go to place where they can give you the information you need. Otherwise no one has time to come to me and inform it.
Interviewer: So no one talked to you within 6 weeks either?
Respondent: No.
-R#163 (43.119.01), age 27, rural resident of Sunsari district (Terai belt), nonresident husband, not using family planning

Some respondents were counseled by a nurse or doctor in passing, others if they had an acquaintance with the nurse. Here is what one woman said about being counseled:

Interviewer: Did anyone who helped you in the delivery suggested you to use a family planning method for birth spacing or for avoiding or delaying next pregnancy after giving birth to your child?
Respondent: Yes, a nurse friend was there. She is really close to us, so she said this.
Interviewer: What did she tell you?
Respondent: That I might get pregnant even if I don't get my menstruation, just be careful and that I could use withdrawal method and also that I could use injectables so, this is what she suggested me.
-R#131 (35.074.02), age 21, rural resident of Jhapa district (Terai belt), resident husband, using withdrawal

In some cases, postpartum abstinence was part of the discussion:

Interviewer: Did anyone, who helped you in the delivery suggested you to use a family planning method for birth spacing or for avoiding or delaying next pregnancy after giving birth to your child?
Respondent: Doctors told me not to have any sexual contact until 6 months; if that happens they suggested me to use pills.
-R#140 (35.204.01), age 27, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

While a few respondents gave birth at home without any health workers present, the vast majority gave birth in a health facility or with medical personnel present, and thus the responses reveal a missed opportunity to counsel on family planning.

6.2 At and After Abortion

Abortion was legalized in Nepal in September 2002. Previously, abortion was permitted only to save a woman's life; otherwise, it equated to infanticide and was therefore subject to prosecution and imprisonment by the law (Ministry of Health [Nepal] 2002). As a result, women underwent abortions furtively and often at the hands of poorly trained practitioners in unsanitary and unsafe conditions. A community-based study on abortion estimated the rate of covert abortions in 1986 to be 117 per 1,000 women age 15-49 (Thapa, Thapa, and Shrestha 1994). A hospital-based study revealed that in 1985 more than half of the total maternal deaths in hospitals of Nepal were attributed to unsafe abortion (Thapa, Thapa, and Shrestha 1992).

Since the National Safe Abortion Policy and Strategy came into effect in 2003, Comprehensive Abortion Care (CAC) is available across all 75 districts of Nepal (Ministry of Health [Nepal] 2015). However, only trained health workers and doctors are certified to provide abortion services at health facilities approved by the government. With the legalization of abortion, any woman has a right to terminate her pregnancy up to 12 weeks of gestation up to 18 weeks in the case of rape or incest, and at any time if doctors recommend it on the basis of the pregnancy being life-threatening to the mother, or posing a danger to her physical or mental health, or if there is a risk of fetal abnormality. In addition, the revised law strictly prohibits sex-selective abortions and abortions done without the consent of the woman (Ministry of Health [Nepal] 2002).

Maternal mortality in Nepal fell from 901 maternal deaths per 100,000 live births in 1990 to 258 per 100,000 in 2015 (World Health Organization 2015). Some of this decline may be the result of the availability of legal abortion services. However, a substantial reduction in maternal mortality was achieved prior to legalization of abortion, likely due to reductions in fertility, societal changes, increased overall health, and improvements in obstetric and delivery care (Hussein et al. 2011).

Complications from legal abortion and the existence of unsafe abortions both remain a major concern in Nepal. The 2016 NDHS showed that 9% of all pregnancies that ended during the 5 years preceding the survey were aborted (Ministry of Health [Nepal], New ERA, and ICF 2017). In the 2011 NDHS, 8% of all pregnancies that ended during the past 5 years were aborted, and a quarter of women who reported having had an abortion in the past 5 years had experienced post-abortion complications (Ministry of Health and Population [Nepal], New ERA, and ICF International 2012). Similarly, a recent study on "Abortion and Unintended Pregnancy in Nepal" found that an estimated 323,000 abortions were performed in Nepal in 2014, which translates into an annual rate of 42 abortions per 1,000 women age 15-49—between the rates estimated for neighboring Bangladesh, at 37 per 1,000, and Pakistan, at 50 per 1,000 (Puri et al. 2016) .

In the present follow-up study, among the 194 respondents, 28 (14%) reported ever having had an abortion. For the most recent abortion, half of these 28 women (15) had surgical abortion procedures, dilation and curettage (D&C), referred to locally as *curate*, followed closely by medical abortion induced by orally ingesting pills (12 cases). The remaining respondent reported taking herbal medicine to induce abortion.

Women underwent surgical abortion at medical institutions such as hospitals, health posts, and private clinics, while those who took abortion pills obtained them either from a hospital or pharmacy. Describing her experience, a woman who obtained an abortion pill from a pharmacy said:

> *Interviewer: Where did you go for the abortion service?*
> *Respondent: I bought it from the medical shop nearby.*
> *Interviewer: Was it a private clinic?*
> *Respondent: No, I didn't have the abortion in that medical shop, I bought the medicine from the pharmacist and took it orally myself at home, and then I started bleeding …that is how I got abortion.*
> *Interviewer: What kind of medicine did you take? How did you purchase the medicine?*
> *Respondent: I told the pharmacist that I had stopped getting menstruation and that I needed a medicine to get it back.*
> -R#078 (18.159.02), age 34, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

One respondent who used Ayurvedic medicine to induce abortion a few years earlier on her close friend's recommendation reported:

> *Respondent: For this abortion, I did not go to the doctor. My close friend told me about the medicine we could use to abort the child.*
> *Interviewer: Did you use the medicine from the pharmacy?*
> *Respondent: No, no. There was this Ayurvedic medicine which my friend has recommended.*
> *Interviewer: What did you take then?*
> *Respondent: I did not consume it but I was supposed to insert that in my uterus.*
> *Interviewer: Didn't it effect on your health?*
> *Respondent: It did not effect in my health. Everything was good. I just bled a lot. Since, I opted for an abortion with this method, I knew I would bleed for sure. It is very difficult to abort a fetus after it has already grown a lot.*
> -R#191 (57.168.02), age 36, rural resident of Udayapur district (Hill belt), resident husband, using IUD

Most of the respondents who reported having a history of abortion had the abortion within the legal gestational age, up to 12 weeks of their pregnancy. They mentioned not wanting to add one more child or wrong timing (as they had a small child to take care of) as the main reason for having an abortion, usually with the consent of their husbands.

Another respondent who had a history of complicated pregnancy was advised to terminate her 3-month pregnancy because of health complications that were putting her at risk:

> *Interviewer: You said earlier that you had a curate done after your daughter was born?*
> *Respondent: No, it was because I wasn't carrying full term. The doctor told us it wasn't feasible… It's dangerous… it was putting both mine and the child's life at risk.*
> *Interviewer: you were pregnant?*
> *Respondent: Yes, it had happened previously as well and I found after getting checkup. I was told it won't survive and as the months go, it would only add risk to my health.*
> *Interviewer: did you get a curate or did you take medicine?*

Respondent: I took medicine… because I was scared, I had the curate [before], but this time I decided to take my chances and took medicine…
-R#171 (43.238.01), age 31, rural resident of Sunsari district (Terai belt), nonresident husband, not using family planning

Despite abortion being illegal after 12 weeks of gestation, and after 18 weeks' gestation if the pregnancy resulted from rape or incest, four women reported having an abortion at 4-6 months of pregnancy, indicating risky behavior in resorting to abortion to end an unwanted pregnancy. A few women had abortions at private clinic and hospitals even during the fifth and sixth months of pregnancy. They also stated that they opted to have an abortion after determining the sex of the unborn fetus. Both of these practices are illegal in Nepal.

For example, one woman implied that knowing both the fetuses were girls added to the doctor's prognosis that one was too weak to survive and led her to undergo abortion:

Respondent: He was abroad… We already have 2 children and I didn't desire more… both the [fetuses] were girls so I told him I'm doing this. The doctor also told me that one of the twins wouldn't survive as it was very weak… I also informed him about this. He couldn't come home then so I went on my own.
Interviewer: Did you have a video x-ray done?
Respondent: Yes, I had a video X-ray done. What I found scared me so I had the abortion done.
-R#050 (11.166.02), age 28, urban resident of Morang district (Terai belt), resident husband, using pill

Prenatal sex determination is illegal in Nepal, as it can lead to sex-selective abortions. The law clearly states that parties involved in prenatal sex determination and sex-selective abortion are subject to punishment (Ministry of Health [Nepal] 2002). However, this has not stopped women from seeking out such services nor health personnel and technicians from providing them.

While women showed a preference to get abortion services from trained health personnel, the rate of having a follow-up exam after successful abortion was low, at only around one-third of the respondents (11 out of 28 cases). Some of the reasons for the lack of a follow-up visit were the use of pharmacies to obtain medication, a general tendency to be unconcerned unless symptoms/health problems were severe, as well as lack of knowledge about the need to have a follow-up visit after an abortion. A woman who chose to forgo a post-abortion visit:

Interviewer: Did you have a post-abortion visit?
Respondent: No, I didn't. You had to travel far and in the village, we didn't know you had to do it either.
Interviewer: And the pharmacist didn't tell you to get a post-abortion visit?
Respondent: No,
Interviewer: Did the pharmacist talk to you about family planning methods when you got the medication?
Respondent: No.
-R#041 (07.083.01), age 29, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Some of the women were told by the health workers to come back for a follow-up but chose not to go. For example:

Yes, they did call me for follow up, but I did not go. It was all fine and there were no bleeding or other complications. It was all good, so I did not go.
-R#069 (17.027.01), age 27, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

A few other women stated that they had talked to a health worker in lieu of going for a physical examination: For example

Interviewer: Did you go for your health checkup after your abortion?
Respondent: No.
Interviewer: After you recovered, didn't you go for a checkup even once?
Respondent: No, after I went there and took medicine I had my menstruation the next day. I called them and told that I had my period.
-R#071 (17.168.02), age 28, urban resident of Sunsari district (Terai belt), resident husband, using withdrawal

One of the key components of the Comprehensive Abortion Care (CAC) is to provide counseling on contraceptive methods at abortion and after (Ministry of Health [Nepal] 2015). But less than half of women interviewed who had undergone abortion through certified medical establishments said they received counseling on family planning from health care workers. As Table 6.2 shows, among the 16 women to whom the question applied, only 7 indicated yes. Table 2 also shows that among the 28 respondents who had ever had an abortion, whether with or without a health provider, fewer than half (43%) reported using any contraceptive method within a month after ending the pregnancy.

Table 6.2 Discussion of family planning at or after abortion and family planning use after abortion, according to follow-up study

Among women who have ever had an abortion, at the time of their most recent abortion and follow-up visit(s), if applicable, responses to the question *"Did anyone talk to you about family planning methods during any of your visit(s)?"*

	n	%
Yes	7	25.0
No	9	32.1
NA[1]	12	42.9
Total	28	100.0

[1] Not applicable because the abortion happened without a medical provider.

Among women who have ever had an abortion, when discussing their most recent abortion, responses to the question *"Did you use any method within a month after ending the pregnancy?"*

	n	%
Yes	12	42.9
No	16	57.1
Total	28	100.0

In three cases where women were counseled, they were also provided contraceptives immediately after performing the abortion procedure. All three were given injectables:

Respondent: Yes, they gave me injectable on that same day when I had my abortion. They used to give the injectable shot on the same day of abortion. We consulted about it and got the shot right away.
Interviewer: Ok. Did they suggest you to use family planning methods or contraceptives in future?
Respondent: Yes, they suggested.
-R#069(17.027.01), age 27, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

Even though one woman stated her intentions to abstain in the next few days following the abortion, she said the nurses gave her injectables:

Respondent: After curate they put DEPO and after that they did my check up the next time and gave me injectable again.
Interviewer: Were you fine with the DEPO?
Respondent: Yes, I felt good.
Interviewer: When did you wear this? After a month?
Respondent: They put it on me during the curate. They usually give DEPO during the curate, some gives pills. Even though we told her that we don't have these sexual contact, she gave me DEPO.
-R#085 (19.116.01), age 26, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

Another woman was convinced to start using injectables right away to prevent another unwanted pregnancy:

Interviewer: You had the curate and were given the injectable right away?
Respondent: Yes.
Interviewer: Did anyone talk to you about family planning methods during any of your visit(s)?
Respondent: Yes, they talked to me about it.
Interviewer: Who talked to you?
Respondent: The nurses said that I should start using injectables otherwise it will happen again, I said then I wanted it so I was given it.
Interviewer: Did she tell you only about injectables or also about other methods?
Respondent: Not about others, she said injectables are more convenient to use.
-R#167 (43.159.03), age 36, rural resident of Sunsari district (Terai belt), resident husband, using the pill

Another woman was offered information about using pills but not about any other method:

Interviewer: During your health checkup, did they suggest you about the contraceptives and family planning methods?
Respondent: Yes.
Interviewer: Who told you about it?
Respondent: Sisters from there told me to use this method.
Interviewer: Did they tell you about all types of family planning methods?
Respondent: They did not tell me about every product. They just informed me about pills, told me that pills will work good and will avoid pregnancy.
-R#056 (12.086.01), age 39, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

The majority of women, however, indicated that no one had discussed family planning with them during any visit. As one respondent said:

> *Interviewer: Did you do your health checkup after your abortion?*
> *Respondent: Yes.*
> *Interviewer: While going for an abortion did anyone tell you about the family planning methods?*
> *Respondent: No one told me anything about that.*
> -R#126 (35.046.02), age 22, rural resident of Jhapa district (Terai belt), nonresident husband, using condoms

Another respondent said the advice she was given was only vaguely related to family planning:

> *She told me not to get pregnant until the next 6 months, it won't be good for you. She had told me that earlier as well.*
> -R#171 (43.238.01), age 31, rural resident of Sunsari district (Terai belt), nonresident husband, not using family planning

One woman who had undergone a curettage procedure said that she received no counseling about family planning during abortion service at a licensed health facility:

> *Interviewer: Did anyone suggest you about the family planning methods or contraceptives during while abortion?*
> *Respondent: No.*
> *Interviewer: No one told you anything?*
> *Respondent: No, I did not ask and nobody told me about it too.*
> *Interviewer: Didn't anyone tell you anything about family planning methods at [provider]?*
> *Respondent: No one told me anything. Also, my husband was not here at that time; he'd returned right after 4 years. After his return, I used these contraceptives by my own understanding.*
> -R#063 (12.180.01), age 28, urban resident of Morang district (Terai belt), nonresident husband, not using family planning

In sum, the majority of respondents who received an abortion were not counseled about method use.

6.3 Community Health Personnel

Female Community Health Volunteers (FCHVs) are an integral part of Nepal's public health outreach program. The community-based trained volunteer acts as a linkage to health services for communities with limited access to wider health care services. These women function as health educators, advocates, community mobilizers, and service providers in their communities. They work to improve the community's use of family planning, maternal, and neonatal health services (Ministry of Health [Nepal] 2015).

In remote areas of Nepal, where hospitals and even health posts are not conveniently close by, the FCHV's ability to make door-to-door visits makes them a visible representative of health institutions in the community. As women in the NDHS follow-up study reported, they are also an important resource for knowledge about family planning and counseling about the right method to use. The FCHVs also provide women with pills and condoms in the privacy of their home.

In the follow-up study, 35 of 194 women mentioned interactions with community health personal regarding family planning outside of services for birth and abortion. Besides health institutions, many respondents referred to FCHVs as their major service provider with regard to family planning knowledge dissemination and occasionally as a source of pills or condoms.

During conversation, besides mentioning doctors and nurses, respondents also reported being informed and counseled by FCHVs about family planning use, particularly about modern contraceptives including injectables, implants, and pills. For example:

> *Respondent: There is this one person who goes around talking to people, she told me what to do to avoid getting pregnant.*
> *Interviewer: Was it a FCHV who visited you at home?*
> *Respondent: Yes, she visits households and asks those women who do not want to conceive more to use such methods. My friends got this (Norplant) implanted. I also did not want to have any more child, so got this implanted.*
> *Interviewer: Do you mean FCHV visited in the houses and she also told you about this?*
> *Respondent: She used to ask everybody and recommend getting it implanted for those who want to use it.*

The FCHV also alerted her about the possible side effects of using implants:

> *Respondent: Yes, she suggested that this implant is effective for 5 years, it needs to be removed after 5 years as keeping it beyond the expiry date can cause harm to your health.*
> *Interviewer: Did they say what to do you if you experience side effects?*
> *Respondent: She said that it might not suit some, and can cause heavy bleeding in some women. Things like that. She has told me that nothing may happen, but if any such things happen, just visit the health post.*
> -R#019 (02.186.02), age 28, urban resident of Jhapa district (Terai belt), resident husband, using implants

Similarly, other respondents who had used modern methods on the advice of a community health worker said they were also counseled about possible side effects and alerted to signs to look out for with use of their method.

> *Respondent: [She said] that this will affect, menstruation is mostly delayed, if your hands and feet get weak or if you get critical/unconscious suddenly, then please visit. Or else menstruation is usually delayed; there might be times when you notice you are bleeding, you should only be alert if your hands and feet get weak, and if you get critical/unconscious. If your lower stomach hurts, then also you should visit again.*
> -R#100 (22.096.04), age 25, urban resident of Dhankuta district (Hill belt), resident husband, using injectables

Women who received proper counseling regarding modern methods were thus well prepared to handle the side effects when they did occur:

> *Interviewer: Have you experienced any side effects or health concerns with using the injectable?*
> *Respondent: I do get my menstruation but it's very light, there is only spotting.*
> *Interviewer: How did you handle these?*

Respondent: I did nothing. The FCHV told me that it is quite normal occurrence and does not really matter.
-R#028 (04.118.06), age32, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Besides counseling about modern methods, women who experienced severe side effects from modern method use also reported being encouraged to use natural methods by the community health workers, sometimes called 'sisters':

Interviewer: Have you and your husband ever talked about the withdrawal method?
Respondent: No, we just came to know about it from the health post.
Interviewer: Was he with you at that time?
Respondent: No, he was not. Sister told me to ask my husband to use this method and see if he agreed in this. I told her he would agree. She suggested me to use this and that this would not affect my health. After going home I asked him that sister suggested this and he agreed with me. Since then we have been using this method.
-R#119 (32.161.02), age 32, rural resident of Ilam district (Hill belt), resident husband, using withdrawal

Some women in the study also cited FCHVs and doctors for imparting misleading/alarming information about side effects of modern contraceptives. They implied that this information has lead them to mistrust modern family planning methods, thereby leading them to be more inclined toward natural methods.

Interviewer: So you'll be using the withdrawal method?
Respondent: Yes.
Interviewer: So you don't want to use contraceptives. Why not?
Respondent: You have to…you have to take pills, we haven't done it till now, but the risk is there.
Interviewer: So you'll be using it?
Respondent: No.
Interviewer: Why? Is it because you are afraid of getting side effects?
Respondent: Yes, if you use injectables then it affects you I heard.
Interviewer: You earlier mentioned using Copper T?
Respondent: You have to take it every 3 months but later on you can get cancer from using it …
Interviewer: Who told you?
Respondent: The FCHV.
-R#168 (43.167.04), age 32, rural resident of Sunsari district (Terai belt), resident husband, not using family planning

Another respondent who had experienced side effects from using a modern method said she stopped trusting contraceptives to the point that she prefers to practice abstinence rather than use any method, natural or modern. On probing, she alleged that it was the doctors who had validated her fear of using contraceptives by citing use of modern contraceptives as a possible cause for women's health problems.

Respondent: Yes, it was my idea [to abstain], I don't use injectable and it is different now-a-days. Everywhere we have these problems for women like uterus problems. How did it happen? Those problems are arising because of taking oral pills and/or injectables; this is what they say. This is the reason for it. There are very few women who have not removed their uterus, most of the women have removed their uterus, even women in old ages have to

undergo operation and get uterus removed. Even older women have different problems related to uterus, like uterus prolapsed, filling of water in uterus, or so on and they have to go for operation in this old age, the doctors would just tear us up.
Interviewer: How did you know that these problems were caused by contraceptives?
Respondent: Doctors said so. We had taken one of our relatives (aunty) to [city] for the stone operation and one old woman had visited this hospital to remove her uterus. She looked like around 50 years old, we asked why would she do so and you see; old women also need to remove their uterus at such old age is not a big deal and [they] said using different types of contraceptives to avoid pregnancy might have caused such problems.
-R#066 (12.234.02), age 37, urban resident of Morang district (Terai belt), resident husband, not using family planning

It was also common for women to have more than one interaction with health workers during their fertile period; women who interacted with FCHVs for information regarding family planning might visit the hospital or private clinic to get family planning services. While health personnel and FCHVs frequently provided information about modern methods and even supplied methods, in a few cases women reported that FCHVs steered them away from modern methods. Overall, women in the communities seemed to trust community health workers, doctors, and nurses to provide them with the right guidance and service in accessing family planning use.

7 DISCUSSION AND CONCLUSIONS

The government of Nepal is committed to meeting its family planning goals. While fertility rates in Nepal have declined substantially over the past 2 decades, the use of modern contraception has not varied significantly in the last 10 years. Nepal has high rates of work-related migration. Nationwide, over a third of married women had nonresident husbands at the time of the 2016 NDHS (Ministry of Health [Nepal], New ERA, and ICF 2017). For women whose husbands are away from home for long periods of time, discontinuation of family planning use during his absence is both common and normative; contraception while the husband is away may imply unfaithfulness. For women using a contraceptive method, a living arrangement in which the husband has extended absences may play an important role in method choice. Other geographic, method availability, psychosocial, and cognitive barriers can also affect decisions and beliefs related to family planning and can hinder use of effective methods.

This follow-up study provided an in-depth exploration of barriers to family planning among 194 NDHS respondents who were systematically selected from among NDHS respondents in 17 clusters in Terai and Hill belts of Province 1. The design and CAPI implementation of the follow-up study enabled some checking of responses against the women's original NDHS responses. All respondents permitted audio recording of their interviews, and these recordings were transcribed, translated, and analyzed to better understand their barriers to contraceptive access and to learn ways in which DHS could improve data collection.

7.1 Key Findings

In Nepal, contraceptive nonuse and unmet need for family planning cannot be disentangled from the pattern of labor migration. The overwhelming reason respondents cited for nonuse of family planning was that their husbands were away. Moreover, 86% of the follow-up study respondents classified by the NDHS as having unmet need had nonresident husbands at the time of NDHS; among women considered to have an unmet need for family planning, husband's nonresidence was overwhelmingly cited as the reason for not using contraception. That husband's absence is the main reason for nonuse of family planning in Nepal and highlights an important issue with regard to measurement of family planning use: The majority of respondents with nonresident husbands reported that they had used a contraceptive method during last sex and intended to use a method when their husband returned. This suggests that classifying them as nonusers because they were not using contraception at the time of the survey may not fully represent their pattern of engagement with family planning. It would be nearly impossible for the usage of a coitus-dependent method to coincide with the time of interview; self-declared current usage of these methods tends to indicate a routine rather than an immediate fact. Indeed, some women with nonresident husbands classified themselves as current users of a coitus-dependent method. As with most standard household surveys, the DHS relies on self-reports of family planning use and does not probe further as to how frequently or effectively women use their declared method.

While avoiding family planning during a husband's long-term absence may be a logical strategy to avoid side effects during months or years when there is no exposure to the risk of pregnancy, social norms in Nepal that discourage family planning use while husbands are away appear to have the unfortunate spillover effect of also discouraging adequate preparation for his return. The overwhelming majority of study

respondents with routinely migrant husbands reported being informed in advance of their husband's return date, but our study found a pattern of poor planning for husband's return home because of a seeming taboo against openly discussing family planning with him prior to his arrival. At least half of women with migrant husbands who intended to use the pill or injectables when their husbands returned reported that they would start their method 1 to 3 days before his return or after he arrived. In some cases respondents said that simply taking two pills at once would provide immediate protection. Such myths about the immediate efficacy of hormonal methods leave many women and couples at risk of unintended pregnancies.

Respondents to the follow-up study expressed little opposition to family planning. Instead, the main concern was the suitability of a method. The theme of method suitability emerged spontaneously in over a third of all interviews. Respondents said that certain methods suit some but not others, and the central challenge was finding a method that they felt suited themselves and their partners. In order to be suitable a method could not cause overly burdensome side effects and typically should not disrupt menstruation. Suitability was frequently invoked as the reason why respondents and their husbands had discontinued or eschewed modern methods in favor of a traditional method.

Husbands have an important influence on contraceptive decisions and in many cases are women's primary source of information or decision about method use. Additionally, side effects and health concerns, while rarely cited formally as a reason for nonuse, emerged as a key theme in 50 of 151 interviews with women who were not using contraception or were using only traditional methods. In many cases the respondents said their husband was opposed to modern methods due to side effects. Frequently, this meant that women and their husbands preferred withdrawal to one of the available modern methods.

While only a fifth of respondents indicated that it was difficult to access contraception, discussion revealed that for many women easy access to their method of choice for free or at low cost was an important barrier to commodity-based methods. Sometimes the barriers were simply geographic or administrative: women reported having to walk long hours to reach a clinic, or upon reaching the clinic would not find a provider available. Given Nepal's rough terrain, a significant number of respondents in Hill belts said that accessing family planning services required an extra effort: they had to allocate a few hours or even a half day to reach the nearest health post, hospital, or pharmacy, at the cost of a day's work, or they faced difficulties with child care, as well as travel expenses. But often, a less visible but seemingly substantial barrier was that the respondents were not able to obtain their method of choice from a favored source, either because the health service provider was absent, their chosen contraceptive method was out of stock, or a long-term method was not offered anywhere in the area. Typically, this meant either changing their method or having to buy a method at a pharmacy.

In line with an earlier similar study in Ghana (Staveteig 2017, 2016), we found an underreporting of traditional methods among women surveyed in the DHS survey. In Nepal, the follow-up study found that, upon specific probes about use of traditional methods, 1 woman in every 11 who was classified in the NDHS as a contraceptive nonuser reported currently using a traditional method. Only one respondent indicated that the reason for the discrepancy between the follow-up study and the NDHS was that they had started a method in the interim. The remainder simply had not considered it a method when asked by the NDHS. Fertility preferences were also slightly inconsistent between the two surveys, but changed fertility preferences were rarely cited as the reason for nonuse.

Among 12 respondents with resident husbands who were classified by the NDHS as having an unmet need for family planning, six reported in the follow-up study that they were using traditional methods, and another stated that she and her husband were intentionally abstinent in order to avoid pregnancy. Among the remaining five, three reported different fertility preferences upon follow-up: one who said she was dependent on her husband, another said she had just married and had not thought about it before the NDHS interview, and a third had fertility preferences contingent on being accepted for a job abroad. The remaining two respondents had been using a modern method at the time of NDHS but did not report it—one had not understood the question, and the other was using pills but menstruating at the time of the NDHS interview and thus perceived herself to be "off pills" at the time.

Women reported that providers rarely mentioned family planning at the time of delivery or post-delivery, or at abortion or abortion follow-up. For abortion, a key issue seemed to be a lack of follow-up visits; either the woman declined a visit, the provider said it was not necessary, or the woman achieved abortion through pharmaceutical means. At follow-up visits after delivery, which were more common, women reported that providers may have cautioned them to space their births but rarely mentioned or suggested contraceptive methods.

Overall, respondents reported limited availability of long-acting reversible methods in their areas. Female Community Health Volunteers were the most frequently cited external source of advice, and even a major source of modern methods, but only for pills and condoms.

While a number of the mentioned factors were part of the calculus of costs and benefits of using commodity-based family planning, affordability did not appear to be a major barrier to use. Respondents were generally aware of a location where contraceptives were provided free or heavily subsidized. However, they were frustrated when these free channels were difficult to access or had uncertain hours and they instead had to pay for their method at a pharmacy. Respondents who were not using contraceptives due to concerns about side effects or other reasons typically stated that receiving them for free would not matter.

7.2 Limitations

The follow-up study took place only in Province 1, most of the former Eastern region, in Nepali-speaking clusters in the Terai and Hill regions. The sample was selected systematically from 17 clusters in Province 1 that approximately represent the urban-rural and Terai and Hill makeup of the 44 eligible clusters. However, due to sample size there are some minor variations in background characteristics of the participants compared with the full provincial sample. The follow-up sample is somewhat more educated, wealthier, and more likely to have a nonresident husband. Also, due to undersampling of modern method users, women in the sample were more likely to use withdrawal versus injectables than comparable NDHS respondents in Province 1. Thus, while it is diverse and comprehensive, the study sample cannot be considered perfectly representative of Terai and Hill belts of Province 1.

While respondents were selected from among those interviewed by the NDHS in Nepali, there were two cases in the Terai region where the follow-up interview had to be conducted in Hindi as the respondent could not fluently speak and understand Nepali. In both cases an interviewer who was fluent in Hindi made an impromptu translation of each question. This impromptu translation may have resulted in slight non-conformity of responses for these two respondents.

The questionnaire used for the study was highly structured, and the three interviewers for the study were rigorously trained, but there may have been some minor variations in probing questions and subsequent discussions during open-ended questions. Also, despite well-defined boundaries for identifying themes and convergence on our individual coding scheme for sample transcripts, qualitative analysis of 3,400 pages of text may have undoubtedly introduced some subjectivity. In addition to systematic analysis of qualitative data, when possible, qualitative responses were also quantified using internally consistent definitions in order to improve balance and accuracy.

7.3 Policy Implications

7.3.1 Implications for Nepal

This follow-up study demonstrates the importance of supply-side interventions through ensuring greater availability of health posts and health centers in rural and small urban areas, especially in Hill belts and remote areas of Nepal. It also suggests a need for strong policy to ensure consistent operating hours of the health institutions, with presence of trained service providers and sufficient supplies of the contraceptive method-mix to avoid stock-outs. We found that women and couples who are motivated to use contraception will generally devote the necessary time, energy, and funds to obtain a method, but greater availability and consistent operating hours would undoubtedly help ensure full coverage. There appears to be an underlying demand for long-term methods that is unsatisfied by the current landscape of pharmacies, FCHVs, and health posts in rural areas.

Private pharmacies are a key source of contraceptives such as pills, injectables, and condoms in Nepal. But this study shows that, while many women are easily able to obtain these methods from nearby pharmacies, they are often given contraceptives without any counseling whatsoever. Respondents reported feeling uncomfortable discussing contraception with male pharmacists. As a result, many women who obtain methods from pharmacies could be unaware of how to use them effectively. Similarly, women who obtain medical abortion from a pharmacy are rarely counseled on contraception. Therefore, in order to increase contraceptive user's knowledge about their method of choice or to ensure informed method choice, it should be encouraged, or potentially made mandatory, that private pharmacies providing family planning methods over the counter should receive training about family planning methods and routinely offer consultations that provide correct information and counseling to their clients.

FCHVs are also an important source of contraceptive counseling, referrals, and even provision of condoms and refills of pills in rural communities. Occasionally, FCHVs offer advice on birth spacing that women do not receive after delivery from the traditional health system. While improving medical service delivery is essential, refresher training of FCHVs to ensure they have the most up-to-date information and resources is an important part of improving reproductive health in Nepal, particularly in remote areas of the country.

This study also reveals the strong influence of husbands in making decisions about contraceptive method choice and use. Opposition of husbands to modern methods, particularly due to their perceived side effects, appears to be an important factor in using withdrawal or abstaining from family planning. There also appear to be some misconceptions that nulliparous married women should not use a contraceptive method as it affects their future fecundity, and so many rely on less efficacious methods such as withdrawal and periodic abstinence. Overall, the findings indicate a need for more education and contraceptive awareness among

men as well the importance of women's education and empowerment in family planning and health as a whole.

Additionally, the study reveals a lack of communication between husbands and their wives about contraceptive preparation, exposing women and couples to the risk of unintended pregnancy. As such, one of the major policy implications of the study findings is a need to provide more education and effective counseling and outreach services on family planning methods to both men and women. Two messages are key: First, awareness campaigns—potentially through pharmacies and FCHVs—should educate couples with a migrant spouse about the importance of starting methods such as pills and injectables within the appropriate timeframe prior to intercourse, and to keep a backup method on hand. Most women reported having regular contact with their nonresident husbands through various electronic means and that they were generally given advance notice of when the husband would return. However, they did not feel comfortable broaching the issue of contraception prior to his arrival, which was the main barrier they faced to contraceptive preparation. Additional messaging around preparing for a husband's return could be valuable in helping husbands and wives discuss contraceptive preparation. Second, mass campaigns and public service announcements could impart how soon fecundability resumes after discontinuation of modern method use. This would help combat false rumors that modern contraceptives permanently affect fecundity and thus are inappropriate for nulliparous women.

The study, which excluded sterilization users and undersampled modern method users, found that a majority of respondents rely on natural methods, especially withdrawal. This finding is partly the consequence of a sampling strategy designed to reduce the size of the reference group, but is also partly the effect of additional reports of traditional method use upon prompting. Study respondents using modern methods mainly used short-acting methods including injectables, oral pills, and male condoms, the only methods available at the health posts and through the FCHVs. Long-acting reversible contraceptive methods are an important source of long-term protection, and there is a need to ensure greater availability and awareness of such methods, as is planned under FP2020 goals. Yet it is clear from the discussions that respondents often perceive pills, condoms, and injectables as the universe of reversible modern methods available to them. Upon probing, respondents often said they need to travel long distances to obtain desired methods. Long-acting reversible methods carry the potential not only to help couples achieve their desired birth spacing but also to help migrant couples mitigate the risk of frequent or unexpected returns, as well as their own inhibitions about discussing a plan for contraception when their husbands return. Access to long-acting reversible methods should be improved.

In Nepal, although family planning has been integrated with safe motherhood, safe abortion, and post-abortion care programs of the government, family planning counseling services in the survey area appeared to be poorly-integrated with abortion and delivery services. Only a minority of respondents reported being provided with family planning counseling at the time of or after the last delivery, or at the time of abortion. Service providers should be encouraged to provide counseling on family planning methods at or after delivery and on ways to space and limit births during safe abortion and post-abortion care, as per Nepal's National Medical Standard guidelines.

The present study shows that some women perceive that taking a few birth control pills at a time would be an effective method of contraception when their migrating husbands return home without prior notice, or could be an effective way to mitigate risk when their husband provides their pills. Given these

misperceptions of how pills work, and the relatively small percentage of people nationwide who are aware of emergency contraception (36% of women and 55% of men) (Ministry of Health [Nepal], New ERA, and ICF 2017), family planning counseling services should incorporate counseling on emergency contraception and on correct use of the pill.

7.3.2 Implications for other low-income settings

Nepal's challenging terrain and high levels of labor migration make it a somewhat distinctive setting for family planning. Nonetheless, several study themes have broader applicability worldwide. Notably, while Nepal has one of the highest levels of labor migration in the world, the phenomenon is not unique to Nepal: spousal migration or routine absence is prevalent in many parts of the world. Additionally, the situation of women with migrant husbands parallels the situation of postpartum and other sexually inactive women worldwide who need to devise a strategy for future contraceptive protection. Social norms dictating that women cannot broach the issue of contraceptive preparedness or should not procure contraception by themselves leave many women at risk of unplanned pregnancy. Messaging aimed at men and women concerning preparing for a partner's return or for resuming intercourse during the postpartum period would be valuable in a number of global contexts, as couples worldwide face challenges in planning for contraception upon resumption of intercourse.

Resistance to modern contraception, particularly hormonal methods, is not unique to Nepal. Fear of side effects is a frequent reason given for nonuse worldwide (Machiyama et al. 2017); evidence from a follow-up study in Ghana (Staveteig 2016; 2017) and from the present study indicates that surveys may underestimate fears about contraceptive side effects. In some cases this resistance is based on rumors of side effects or myths about subsequent infecundity after using modern methods. In other cases women and couples base their resistance to modern methods on an adverse reaction to a single hormonal method, combined with rumors or secondhand information about other hormonal methods. These doubts about modern methods appear to lead many couples interested in birth spacing or having no more children to use a traditional method instead.

Most women in the study could readily access condoms and pills but had a harder time obtaining injectables and a very difficult time procuring a long-acting reversible method. The phenomenon of partial access to contraception observed in the study is not unique to Province 1 in Nepal, nor to low-income countries as a whole. In many contexts, particularly in rural and isolated areas, people frequently face geographic barriers to contraception, must choose from a limited number of methods, pay substantially more than expected for a method, and make difficult tradeoffs between work, childcare, and contraceptive access. Strengthening health systems, addressing service gaps, and improving integration of contraceptive services and counseling with routine health care is an important strategy for increasing contraceptive uptake in Province 1, Nepal, and other low-income settings.

7.3.3 Implications for future follow-up surveys

This study benefited from lessons learned during a similar follow-up study to the 2014 Ghana DHS. In both studies close coordination between the main DHS team and the follow-up team was essential. In Ghana, while the speed of data entry was aided by computer-assisted field entry, the follow-up sample selection had to be done after the hard-copy questionnaires were received and checked in the home office. Going back out to the field to relocate original respondents in Ghana was a challenge. Occasionally, it was difficult

to relocate the exact cluster, and within each cluster it was often difficult to find original survey respondents. Structure numbers had sometimes washed away or been painted over in a matter of days, and it was time-consuming to relocate respondents in the absence of clearly demarcated roads or when households had been numbered in a serpentine pattern (Staveteig 2016; Staveteig et al. 2017). In Nepal, because the 2016 NDHS fieldwork was done using computer-aided personal interviewing (CAPI), it was possible for a filter program to determine which women had consented to and were eligible for reinterview immediately after the NDHS field team closed the cluster. Relevant data from NDHS could then be securely transferred in a matter of minutes via Bluetooth to tablets for follow-up study interviewers.

Although the NDHS asked follow-up interviewers to not be in the cluster while main survey fieldwork was taking place, the CAPI format meant that it was mostly possible for the follow-up field team to meet the NDHS teams as they were departing the cluster. This meant that the NDHS field supervisor for the cluster could often give the follow-up team a quick tour of the area and point out any specific issues they had encountered, which substantially helped the follow-up team relocate NDHS respondents.

The NDHS questionnaire included over a thousand questions for women of reproductive age. While not all questions were asked of all respondents—in some cases, entire sections are skipped—the interview can take more than an hour or even two. As is standard practice, respondents are not compensated for their time. It can be difficult to approach respondents so soon after a DHS interview for yet another interview. One of the strengths of the follow-up study was that working closely with the NDHS study team helped in building rapport with the study respondents and local authorities, as well as physically locating the selected follow-up respondents. However, the consecutive interviews made respondents wary and fearful about being held for more long hours of interviews. We hypothesized that this follow-up questionnaire would be no more burdensome than the follow-up verbal autopsy study, particularly since the latter involves recalling a painful incident (child death). However, since the follow-up study covered topics already discussed in the main interview it was often necessary to assure respondents that the interview would take no more than 40 minutes. Future follow-up studies might consider compensating respondents for their time. In the absence of compensation, the field team should be prepared to convince follow-up participants of the importance of the study, and the interviews should be kept as short as possible.

Another challenge of fieldwork was that, as is standard DHS practice, the study sample included household visitors. This sometimes meant that arriving for a reinterview even only a few days after NDHS meant that the respondent was no longer at the original residence and could not be traced.

Unfortunately, due to the timing of the main survey the follow-up study had to begin fielding in the Terai (lowland area) during peak monsoon season. While the NDHS judged the timing necessary due to other factors, monsoon season obviously made transportation difficult, and even hazardous where paths and roads were washed away. The interviewers fielded the study largely on foot, as roadways were limited, and interviewers sometimes had to wade through flooded terrain to reach their destination. A local supervisor was either onsite with the field team or in close contact to help ensure their safety. The weather conditions were an added burden to an already strenuous fieldwork process. After the monsoon season, fieldwork was conducted during prime planting season, which made it difficult to locate respondents who were engaged in agriculture and spent long days in the fields. While fieldwork for future follow-up studies will necessarily depend on the timing of the main study, improved scheduling would help both types of surveys.

Most respondents freely discussed their most recent sexual activity and use of family planning. However, a few were naturally reluctant to discuss these personal matters with a stranger, and it was difficult to help them feel comfortable. While we trust the veracity of respondents, these differences led to a wide variation in interview length.

It helps to send interviewers conversant in alternate local languages. Although we selected respondents whom the NDHS had interviewed in Nepali, two women appeared unable to understand Nepali, and interviews had to be conducted in Hindi. Fortunately, one of the interviewers was fluent in Hindi and could conduct the interview in that language, but translation issues always remain a concern.

7.3.4 Implications for survey measurement of key contraceptive outcomes

Recommendations to improve national household surveys are the topic of a forthcoming DHS report about the implications of mixed methods studies for household surveys. Based on our experience with the Nepal follow-up study and the earlier Ghana study, we offer a few suggestions here toward that end. First, additional probes on natural methods, particularly traditional methods, but also modern methods that are formalizations of a natural method, such as LAM, seem important. One in every 11 follow-up respondents who declared themselves to be nonusers in the NDHS were actually using traditional methods, and nearly all of them had not considered their method to be covered by the standard DHS question on family planning use. A similar result was obtained in Ghana (Staveteig 2016; 2017). Interestingly, there were also a few instances of underreporting of modern methods in the NDHS survey. One respondent said in follow-up that she had forgotten about her method, and another respondent did not consider herself to be a pill user because she was menstruating at the time of NDHS and thus not taking pills on the day of the interview.

For some respondents, fertility preferences changed even over a short time period. And, as we might imagine, preferences were not necessarily fixed on a single point in time. When offered an opportunity to give a range of time when they desired the next birth, half of the respondents provided a range rather than a single point in time. It may be difficult to implement in quantitative studies, as the standard definition of unmet need relies on a single point-in-time preference, but how the range translates into a point-in-time estimate could be better established. Additionally, given the importance of husband's preferences on fertility decisions in Nepal and many other countries, it also might be helpful to clarify whether the question on fertility preference is asking for the woman's opinion alone, or her impression of her husband's opinion or a joint agreement, as many women seem to default to the latter two definitions.

We find that in areas where a substantial proportion of women have husbands who migrate for months or even years at a time, measures of current contraceptive use and of unmet need are of limited value unless they are disaggregated by husband's residence. The present study and the earlier study in Ghana suggest that it may be worth developing alternate ways to measure current contraceptive use and unmet need to take into account periods where women lack exposure to the risk of pregnancy within marriage, including postpartum abstinence, as well as extended abstinence for the purposes of preventing or avoiding pregnancy (see Staveteig 2016; 2017). We also know that the definition of current use for coitus-dependent methods is not well defined. If a woman used the method at last sex and intends to use it at next sex, should she be considered a current user? If so, should it matter that the gap between periods of sexual intercourse may be a few weeks, months, or years? Policymakers and stakeholders may wish to consider whether previous and intended users of a coitus-dependent method should be grouped with nonusers simply because of a nonresident spouse. If not, how do we accurately gather that information?

We find that, for women who are currently sexually inactive, asking about plans for the resumption of sexual activity can be extremely valuable. In Nepal and other countries, social taboos on contraceptive preparedness can be harmful to women and couples who wish to delay or stop childbearing. When women intend to start a hormonal method only a few days before the resumption of sex or wait to decide after their husband returns home, it puts them at risk of unwanted pregnancy. Some couples surveyed tried to mitigate this risk by using stopgap methods such as condoms or withdrawal, while other women seemed to believe that taking a few pills at once would provide immediate protection. Contraceptive preparedness for a husband's return may be an important line of questioning to include in countries and areas where male migration is frequent, such as Nepal.

Given the risks of unpreparedness upon a husband's return, programs may encourage women to consider using modern methods during their husband's extended absence—for example, a multiyear method such as the IUD. But waiting for him to return before using a hormonal method reduces a woman's exposure to undesirable side effects, and waiting for him to return before using a coitus-dependent method is, by definition, unavoidable. We believe that programs should not place the desire to report increased numbers of contraceptive users over the patient's individual well-being, which may include suspending usage of short-term methods that cause undesirable side effects during extended periods of absence. Instead, we would encourage programs to continue to respect individual voluntary choices and to counsel women and couples on the importance of contraceptive preparedness for his return, including how early hormonal methods need to be started and what short-term backup methods could be used in case of his unexpected early arrival.

For most contraceptive methods, DHS and similar surveys make no efforts to determine the consistency and correctness of usage. There is no requirement that a respondent be using a method correctly and consistently in order to report it; even so, one user of periodic abstinence reported that the NDHS interviewer told her that, because she did not correctly identify the fertile period, she would not be counted as a current user. It is unknown how widespread this phenomenon is. While there may be some scientific rationale for counting ineffective use of a method as nonuse, applications of this standard run counter to survey protocols that typically allow contraceptive users to self-identify based on their own understanding and probe for knowledge of a woman's fertile period separately.

Standard survey questions on reasons for contraceptive nonuse appear to only scratch the surface. Both in Nepal and in Ghana, women tend to give only one reason for nonuse even when their reasons are multilayered. Additionally, reasons such as fear of side effects may only apply to modern methods and not to any traditional methods. Notably, in Nepal, once newly-identified traditional method users were disqualified from the question about reasons for nonuse, the number who reported a fear of side effects dropped. Yet in Province 1 of Nepal, as in Ghana, fear of side effects was a prominent theme of the interviews. Together, these findings suggest at least two ideas. First, perhaps there are ways to improve reporting of multiple reasons for nonuse. This topic will be explored in a future DHS report. Second, if modern family planning use is indeed the new international goal, then perhaps traditional method users should also be asked their reasons for nonuse of modern methods. Additionally, given the frequency of citing side effects as a reason for nonuse of modern methods, particular attention should be given to whether fear of side effects stems from personal experience, secondhand information, rumors, or other factors such as perceived ill health.

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APPENDIX A: COMPARISON OF RESPONSES TO REPEATED QUESTIONS ABOUT KEY TOPICS

Table A.1 Fertility preference comparison between NDHS and follow-up survey

	Follow-up			
NDHS	**Have a/ another child**	**Undecided/ DK**	**No more/ None**	**Total**
Have a/another child	67	2	2	71
Undecided/DK	4	3	1	8
No more/None	7	4	104	115
Total	78	9	107	194

Table A.2 Primary method comparison between NDHS and follow-up study

	Follow-up									
NDHS	**Not using**	**IUD**	**Injectables**	**Implants/ Norplant**	**Pill**	**Male condom**	**Lactational amenor-rhea (LAM)**	**Periodic abstin-ence**	**With-drawal**	**Total**
Not using	96	0	3	0	1	0	1	2	8	111
IUD	0	2	0	0	0	0	0	0	0	2
Injectables	1	0	15	0	0	0	0	0	0	16
Implants/Norplant	0	0	0	4	0	0	0	0	0	4
Pill	0	0	0	0	14	0	0	0	1	15
Male condom	0	0	0	0	0	2	0	1	0	3
Lactational amenorrhea (LAM)	0	0	0	0	0	0	0	0	0	0
Periodic abstinence	0	0	0	0	0	0	0	0	2	2
Withdrawal	2	0	0	0	0	1	0	2	36	41
Total	99	2	18	4	15	3	1	5	47	194

Table A.3 Comparison of reasons for nonuse of family planning given in NDHS and in follow-up study

Of the women who cited the listed response(s) as their reason for nonuse of family planning in NDHS, and who were asked their reason for nonuse in the follow-up study,[1] the number who were consistent, partly inconsistent, and fully inconsistent between surveys

NDHS Reason	Consistent	Partly inconsistent[2]	Fully inconsistent	Total	Composition of inconsistent responses:
Not having sex	0	0	1	1	Husband away (1)
Infrequent sex	0	0	1	1	Respondent opposed and husband opposed (1)
Infrequent sex and husband away	0	1	0	1	Husband away (1)
Husband away	22	3	0	25	Not having sex and husband away (1); Infrequent sex and husband away (1); Husband away, knows no method, and knows no source (1)
Not menstruated since last birth	0	1	1	2	Not having sex and not menstruated since last birth (1); Husband away (1)
Breastfeeding	1	0	0	1	
Total (N)	23	5	3	31	
Total (%)	74.2	16.1	9.6	100	

[1] To be asked this question in the NDHS, the respondent must declare that she is not pregnant, does not currently use family planning, and does not desire a birth in the next 2 years. In the follow-up questionnaire, women were asked this question if they met the other criteria and did not desire a birth *after* 2 years; 13 respondents, 5 of whom were asked this question in the NDHS, stated a preference of exactly two years and were skipped out of this question in follow-up. In the NDHS all 5 who were skipped out in follow-up had stated "husband away" as the sole reason for nonuse.

[2] If one reason given in the NDHS, this category means that the respondent gave the same reason in the NDHS but added an additional reason. If more than one reason given in the NDHS, the respondent gave at least one of the same answers but changed or removed the other reason(s) and/or added additional reason(s).

APPENDIX B: RESPONDENTS' SUGGESTIONS FOR IMPROVEMENT OF CONTRACEPTIVE SERVICES IN NEPAL

This appendix contains an edited collection of verbatim responses to the question "In your opinion, how can contraceptive services in Nepal be improved?" and "Do you have any other thoughts on these matters that you would like to share with me?" if the response was not already in the main text and related to improvements in contraceptive messaging or services. Six key themes emerged from women's responses: increase availability of contraceptives; expand method availability; develop new contraceptive options; increase distribution of free contraception; mobilize health workers; and expand awareness programs and public outreach. Responses are grouped accordingly below. Responses that touched on multiple themes are grouped with the predominant theme. We curated the full list of responses to pare down redundant answers while attempting to preserve the full spectrum of opinions.

Increase Availability of Contraceptives

> *Availability of health posts in every places, there are no much in our place. It is really far for us. We have to go far, it takes one day, if it were near it would help us to improve the situation.*
> -R#007 (01.069.04), age 29, urban resident of Ilam district (Hill belt), nonresident husband, using withdrawal

> *The most important is that services should be available in all places… the most important is health posts needs to be made accessible in all places, some people may not know where the health post is located, some need to walk for 3-4 days to reach health post and access services, here we have health posts nearby and the services are easily available, but in remote areas it is not like that. So I think that the services should be made available in all places.*
> -R#027 (04.118.03), age 22, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

> *Here in urban areas, it's not a problem, but in the villages, it's not easily available. You have to travel far, walk for hours, and might not have time to go there to get it. It's difficult in the villages.*
> -R#041 (07.083.01), age 29, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

> *What could be done for improvement?… It would be better if the services are more expanded. More establishments of clinics around villages and remote rural places would be better.*
> -R#068 (17.019.01), age 33, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

> *In most districts it's only available in one place like hospital or health post, so it might not be available all the time and people staying far away may delay in getting the methods thinking they will go and get today or tomorrow, or they may not even visit the hospital on*

time. As a result, there might be time lag in obtaining the methods or discontinuity in method use, thus putting them into a period of unsafe relations.
-R#075 (18.075.02), age 26, urban resident of Sunsari district (Terai belt), husband in resident, using pill

About family planning service in Nepal … there needs to be health posts in different places, especially in remote areas. There are no health posts let alone hospitals in many remote areas. In places where there are no big hospitals, there should be small health posts so that people should have access to health posts. You can get pills for free. If it were placed in many places then it would make life easier for many people.
-R#078 (18.159.02), age 34, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

In the urban places it's ok, but in remote areas, if it were easily available then it would be good for the women. Those of us who live in cities can access it easily but those in rural areas can't get it easily like us, the family planning methods like pills may not be available. So, it should also be made accessible and available to women living in remote areas.
-R#079 (18.177.02), age 39, urban resident of Sunsari district (Terai belt) husband in residence, using withdrawal

Government should provide care and services in every area and should also provide education to people. There are many decent services and facilities in our area and we know a lot of things here. People like you should be going to hilly and remote areas and examine situation there, people out there doesn't know about the usage of contraceptives, they don't know what to use and how to use. Such medicines and services have not reach there yet. People like us in urban areas can limit to only two or three children as we wish, but there are people who want only 2 to 3 children but end up giving birth to 5-6 children, because they are unaware about such services. The medicines and contraceptives have not yet reached to the rural and remote areas.
-R#092 (19.287.01), age 34, urban resident of Sunsari district (Terai belt) nonresident husband, not using family planning

People will need to walk for 4 to 5 hours to reach there. It would be better if these services could reach home to home. If contraceptives for men and women were made easily available in nearby areas at village level and at all localities as when needed and if service providers and health volunteers would provide information about these method precisely, it would be so much better.
-R#102 (22.112.02), age 39, urban resident of Dhankuta district (Hill belt), nonresident husband, not using family planning

Expand the Number of Methods Available

Family planning services, such as inserting Copper T should be made available here locally.
-R#021 (04.027.01), age 32, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Previously they used to do surgery [sterilization] also, but they don't do it now. Previously their services were ok, the health personnel used to come and take with them those couples who would like to have operation [sterilization camps], and nowadays it does not happen

like that here. But the surgery was a permanent solution, if you have an operation, then you won't have to use other methods like injectables and others.
-R#025 (04.083.01), age 37, urban resident of Jhapa district (Terai belt), resident husband, using withdrawal

There are times when these methods go on shortage, you won't get it even though you travel so far. So, it would be good if it is made easily available anywhere.
-R#083 (19.031.02), age 32, urban resident of Sunsari district (Terai belt), resident husband, using IUD

It would be good to have other services like if the 7 years method were easily available. … Apparently, you need seven women who want to use it, you form a user group and write a formal application letter, and only then do you get it. But not all your friends are willing to use it, so what can one person do? Getting operation [sterilization] service would be great [too]. We don't have that service here.
-R#110 (29.077.04), age 23, rural resident of Panchthar district (Hill belt), resident husband, using pill

If other contraceptives like 5 years and 12 years injectables were available, then it would have been better.
-R#112 (32.025.02), age 28, rural resident of Ilam district (Hill belt), resident husband, using injectables

It would be better if [contraception] was provided in hospitals here. I think we can find condoms here but no other contraception.
-R#122 (32.179.03), age 19, rural resident of Ilam district (Hill belt), nonresident husband, not using family planning

It would be better if all these family planning services including operations [sterilization] were provided at the health post.
-R#193 (57.196.01), age 34, rural resident of Udayapur district (Hill belt), nonresident husband, not using family planning

Develop New Contraceptive Options

There should be that kind of contraceptives made which would not effect on the human body. Even Depo affect like excess bleeding. Some make you throw up and it is different to some people.
-R#186 (57.072.02), age 38, rural resident of Udayapur district (Hill belt), resident husband, using withdrawal

Interviewer: In your opinion, how can contraceptive services in Nepal be improved?
Respondent: I think the services could be made better.
Interviewer: What do you think needs to be done for that?
Respondent: By providing methods that don't give side effects.
-R#160 (43.079.02), age 36, rural resident of Sunsari district (Terai belt), resident husband, using withdrawal

It would be better if they provided medicines that did not cause any side effects… In case couples need to use other family planning methods, then it would be better if the contraceptives do not cause any side effects on our health.
-R#059 (12.125.02), age 30, urban resident of Morang district (Terai bel), resident husband, using withdrawal

Increase Distribution of Free Contraceptives

It should be made available free of cost, those who can afford to buy, will pay. But there are such families, who do not have any source for livelihood, they do not have enough rice to feed their daily meal… Such families, who do not have enough money to buy rice or have too many children, can use the Rs. 100 to purchase 2 kilos of rice rather than getting the oral pills (E-Con tablet). So such contraceptives should be made available free of cost.
-R#029 (04.118.07), age 23, urban resident of Jhapa district (Terai belt), resident husband, using periodic abstinence

Respondent: There are so many people who doesn't know about this. There are so many people whose lives are not easy as ours. They don't have these kinds of facilities. Places like ours, we can at least afford to buy and use. The hospital is nearby too, we can easily purchase it from there. These methods should be available at more remote areas too. It would be easy if these contraceptives were available at free in health posts. Some people might not know if it is available in their places. There might be people who thinks it is not good to use contraceptives. All these things should reach them, it would be better.
Interviewer: We should basically raise awareness in places, right?
Respondent: Production of contraceptives is just enough. Whether there is an availability of these medicines, there should be someone to suggest, that this would do this and that. People should know that these contraceptives could help. There are so many people who does not know anything. There are people who needs to walk for so many hours to obtain these methods. It is easy for us, since it is just here. There are places where we need to walk for 5-6 hours just to purchase Depo.
Interviewer: It would be better if all the places were taken into consideration...
Respondent: Some costs Rs 50- 60, Rs 30 per packet for pills. It is difficult to consume this every month for some people. For some people it might be enough for a month but there are deprived women for whom government should make enough availability of contraception and medicine with a proper awareness and instruction.
-R#114 (32.093.01), age 25, rural resident of Ilam district (Hill belt), nonresident husband, not using family planning

If you get it from the health post and government hospital, then it's cheaper, that I think is good... it would be good for the poor women and those from villages if they can get it from health posts.
-R#043 (07.179.01), age 35, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Everyone should have access and availability to contraceptives for free from government hospitals and clinics, it would save their money, and government services are easy too.
-R#053 (12.054.02), age 34, urban resident of Morang district (Terai belt), resident husband, using withdrawal

For an improvement, there are people who cannot afford to buy these, it would be better if it was free of cost. That is the reason; birth of child is constantly going on. It should be free for those people who cannot afford it. Those who can afford it, can purchase it with ease.
-R#072 (17.175.01), age 30, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

These contraceptives should be free of cost. These injectables like Sangini are free but Copper T should have been free of cost too.
-R#075 (18.075.02), age 26, urban resident of Sunsari district (Terai belt), resident husband, using pill

Poor people look for cheaper methods. So, for the poor it should either be made available for free or at low cost.
-R#076 (18.094.02), age 21, urban resident of Sunsari district (Terai belt), resident husband, using condom

Mobilize Health Workers

Doctors should let people know what is good and which particular product is effective [for family planning].
-R#005 (01.057.02), age 23, urban resident of Ilam district (Hill belt), resident husband, using implants

They don't come here much. There is this volunteer who lives nearby, she does roam around sometimes to talk about this polio and vaccination for the little ones. But I have never seen her helping or advising about pregnancy. It would be better if this advices or suggestions were passed on at 6 months of interval.
-R#149 (36.156.01), age 39, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

The service provider or FCHV should offer door to door services in the villages or make availability of the services in nearby places, somewhere people can access them with ease. Then, people would not have to travel far to access or acquire the family planning methods and could receive services on time.
-R#006 (01.061.02), age 25, urban resident of Ilam district (Hill belt), resident husband, using pill

FCHV's hold meetings and it should be practiced as it's there that women learn a lot but around us the FCHV's don't hold meetings like that. So people remain ignorant about health issues…Those who are educated can learn on their own but those of us who aren't educated, we don't have that skill so sharing knowledge would be invaluable.
-R#016 (02.153.01), age 35, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

They should train service providers and female health volunteers in villages. In that way, they can make people aware about it. That is what government should do.
-R#057 (12.093.04), age 27, urban resident of Morang district (Terai belt), resident husband, using pill

About that, service provider themselves needs to visit door to door, and raise awareness about family planning methods themselves. Advise and suggest the newly married couple about this.
-R#062 (12.156.02), age 40, urban resident of Morang district (Terai belt) resident husband, using withdrawal

There are so many people who do not know about this. They are having problem with this. There are couples who are giving birth every year. For instance; health service providers can visit home to home and aware people about this whether it be by providing medicines or contraceptives. Like the one we can receive at health posts free of cost, if the same services are made available freely at door to door by health service providers or health volunteers, this would make it easier for those people who are in need of the services and they can be aware about the methods or services and use them when they need. So we should be able to receive it at home for free. If this was it, they would not face any difficulties is what I think.
-R#087 (19.169.02), age 34, urban resident of Sunsari district (Terai belt), resident husband, using periodic abstinence

Volunteers normally don't come here. None of the volunteers have ever shared anything to me. I was only told by the nurses from the health post. Volunteers should walk around and suggest people if they have any children they should adopt certain methods.
-R#119 (32.161.02), age 32, rural resident of Ilam district (Hill belt), resident husband, using withdrawal

The FCHVs, they know the in and out of the village so they are the one who should tell the government what is needed and how services can be improved upon. But I can't do it, if I do, they question my credibility and ask me if I am the health worker. But the health worker can go and ask people what they want and need… Women need to be informed in gatherings. There are many women who are uneducated and don't know a lot about. So if the FCHVs interact with them and answers the women's queries, and share their knowledge then it would enable the women to know more.
-R#161 (43.087.03), age 30, rural resident of Sunsari district (Terai belt), resident husband, using withdrawal

It would be good to have a health post and FCHV nearby as it make it easier for the women to access it. If there is someone who's informative then it would be easy for those who don't know to go and ask for information. If you don't know then it is difficult…the FCHVs need to share what they know. The previous FCHV used to do that, tell you about it, but she migrated. We have a new one but she doesn't share much.
-R#165 (43.135.03), age 33, rural resident of Sunsari district (Terai belt), nonresident husband, not using family planning

It would be easier if these female health volunteers were available in villages so that they could visit home to home and to educate people about these things.
-R#180 (50.037.01), age 18, rural resident of Bhojpur district (Hill belt), nonresident husband, not using family planning

Here the FCHVs do not make home visits. Government should make people work hard on this. They are only taking salary. Volunteers should go door to door and suggest new

mothers on taking oral pills or any sort of contraceptives, and taking proper care of newly born babies etc.
-R#189 (57.113.01), age 27, rural resident of Udayapur district (Hill belt), nonresident husband, not using family planning

Increase Awareness Programs and Public Outreach

There should be notice in the form of pamphlets or posters because people are not aware about [family planning].
-R#009 (01.081.04), age 24, urban resident of Ilam district (Hill belt), nonresident husband, not using family planning

Now those people who are uneducated, those living in the villages that are ignorant about family planning need to be reached with awareness messages. If more people talk about it, people [like you and the health workers] reaches those villagers and uneducated people and raise awareness about the family planning, then…. Those areas and people need to be targeted for awareness programs. There should be more information and counseling services about temporary contraceptives. Those who are ignorant and uneducated need to be made knowledgeable about family planning use. Those who get pregnant even when their youngest child is not even 2 years old, they should be reached with the message.
-R#018 (02.173.02), age 32, urban resident of Jhapa district (Terai belt), resident husband, using withdrawal

Respondent: First of all, people need to think positively about family planning. And they shouldn't be embarrassed or about using contraceptives. People are too shy to use it.
Interviewer: So what do you think needs to be done to change people's perception first?
Respondent: First people's thoughts need to change. For that, you have to change yourself first if you want to change someone else. First you have to use it yourself and see what good or bad it has done to you, only then can you recommend what works and what doesn't work to other people. Telling people to use it once is not enough; you have to keep repeating it again and again. You need to give some time and check if they have faced any problem, like about their sexual issues or other matters…for instance, if you get accidental pregnancy, then suggest them how you can solve the problem or how you can have safe abortion … in such cases, you should be able to support them, then people would feel good and build confidence on the methods.
Interviewer: What do you think the government can do to improve family planning services?
Respondent: Government can help improve the services through, for instance, sterilization is done secretly most of the time. If it were done openly then there would be more conversation about it and information would spread as a result. Children need to be exposed and made aware about the family planning methods I feel. Unmarried school children need to learn about it in school, and if they could talk to their parents about it openly then it could leave a deep impression in their parents' mindset as a result. It would revolutionize the society, I feel.
-R#020 (02.192.02), age 30, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

By visiting every village and informing people about family planning. Women in the villages lack awareness about it than women in the urban areas, even if they want to know more,

their families don't send them to a place where they can get the information. So raising their awareness level is important.
-R#026 (04.111.01), age 29, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

I feel that if information was provided through radio and T.V. every week or ten days then those people who are ignorant about it would also learn about it.
-R#028 (04.118.06), age 32, urban resident of Jhapa district (Terai belt), resident husband, using injectables

Respondent: About my opinion, I do not know so much in details…I think that, rather than married women, we need to raise awareness among young adolescent boys and girls, like those aged 18-19 years, about the family planning methods and services.
Interviewer: Do you mean about family planning methods?
Respondent: Yes, about contraceptives – because they usually do not know anything about those methods prior to their marriage and once they get married, they are confused about what should they do to avoid pregnancy, and they would conceive while they are thinking about what should they do. If those adolescent boys and girls are prepared with necessary information before they get married, they need not to face such problems. Both husband and wife (or a couple) can consult and plan for spacing in giving birth… some may want to plan for a baby as soon as they get married or some do not want to have a baby so soon. For example, in my own case, I did not want to have a baby so soon, but I got pregnant within a year of our marriage. So I feel that the adolescent boys and girls should be provided with adequate information about family planning methods, such as, what should they do, which method to use to avoid pregnancy after marriage, what would be possible side effects etc. For example, if you use a contraceptive method before marriage, people may talk bad things about the woman, also the unmarried girls and boys may be ashamed to go and buy the contraceptives as people take it adversely about the character of those young people, also they may not know where to get the contraceptives or counseling about family planning methods soon after their marriage… so it is necessary to raise awareness among young adolescents.
-R#029 (04.118.07), age 23, urban resident of Jhapa district (Terai belt), resident husband, using periodic abstinence

A lot of people might not know about family planning. So I think it would be good to spread information about it in villages, by providing counseling services and through advertisements on TV.
-R#036 (07.016.01), age 23, urban resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Advertising good messages, it should be well deliberated, and easy to understand for village people.
-R#065 (12.227.04), age 36, urban resident of Morang district (Terai belt), resident husband, using periodic abstinence

Rather than improving services, there should be more emphasis on spreading information and knowledge about family planning in rural areas with uneducated people through street dramas. This is happening because of ignorance. Lots of people don't know anything about contraceptives at all and where you can get it due to illiteracy. Women still don't talk about it openly. Because ours is a patriarchal and male-dominated society, what the husband says, the wife has to obey blindly. Therefore there should be greater emphasis on spreading public

awareness about the need to use family planning so that people can analyze what is prevailing and make a correct decision.
-R#081 (18.205.02), age 34, urban resident of Sunsari district (Terai belt), nonresident husband, not using family planning

Every possible improvement is already done by the government but the awareness raising should be made more effective.
-R#086 (19.148.01), age 33, urban resident of Sunsari district in Terai belt, resident husband, using periodic abstinence

Yes, going to villages and making people aware about this. There are people who don't know anything about this, they might use it after a proper instruction.
-R#087 (19.169.02), age 34, urban resident of Sunsari district (Terai belt), resident husband, using periodic abstinence

Should raise awareness of people who lack knowledge about the family planning services through TV, radio, and organizing related street dramas. Sharing more information through radio and TV advertisements and educating people through door to door services. There are many people who are uneducated and unaware about this so, I think these steps could be taken to raise awareness.
-R#090 (19.233.04), age 24, urban resident of Sunsari district (Terai belt), resident husband, using withdrawal

Travelling in villages like these, you see there are so many people who doesn't know about this. There are people who are too shy to purchase it from the pharmacy. There are husbands who do not let their wives to use it since, they doubt on their wives. This is because they are not aware about this.
-R#115 (32.111.02), age 36, rural resident of Ilam district (Hill belt), resident husband, using withdrawal

Programs like organizing dramas about health. Earlier we have seen a lot about life circle. I have seen it here though, but I have seen that a lot before. If that kind of awareness is shown than people will understand a lot. These can be shown through TV too.
-R#141 (36.031.01), age 35, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

Awareness should be raised, people should be aware about the birth spacing, there are so many people in villages who do not know about this, and there are so many people who do not understand this. There are husbands who do not understand.
-R#124 (35.019.04), age 28, rural resident of Jhapa district (Terai belt), nonresident husband, not using family planning

More announcements should be given I think…For instance, you could show this medicine and that on the radio and TV. A person cannot go home to home randomly and talk about these things.
-R#138 (35.177.02), age 35, rural resident of Jhapa district (Terai belt), resident husband, using withdrawal

The thing is that lots of women are ignorant; it's the environment that makes them so. The methods do not reach places; it would be good if methods could be available. But the main thing is raising awareness about family planning and methods available. If they know then

they will go looking for methods to use. After that services has to be better, if you can get services easily then it would be good for everyone.
-R#161 (43.087.03), age 30, rural resident of Sunsari district (Terai belt) resident husband, using withdrawal