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Structured Observations of Pre-Abortion Contraceptive Counseling within the Comprehensive
Abortion Care Unit of the Paropakar Maternity and Women's Hospital in Kathmandu, Nepal

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An abstract of
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Abstract

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By Margaret Mary Bertram

Introduction. Nepal's legalization of abortion in 2002 dramatically changed the country's availability and access to safe abortion services. The national framework for comprehensive abortion care is built on three key elements: choice, access, and quality. This study explores the quality of post abortion contraceptive counseling being received by clients of the Comprehensive Abortion Care (CAC) Unit in the Paropakar Maternity and Women's Hospital in Kathmandu, Nepal, by evaluating the current counseling strategies, methods available, and assessing the strengths and weakness of care among first-trimester abortion clients.

Methods. Structured observations of thirty-one pre-abortion family planning provider-client interactions were conducted over a three week period in June, as part of a larger programmatic study to evaluate the quality of contraceptive counseling conducted in the CAC Unit of the Paropakar Maternity and Women's Hospital. The observation checklist used was developed to collect information about the knowledge and skills of reproductive healthcare workers and to assess client-provider interaction. Data was analyzed to assess providers' competencies.

Results. The evaluation identified five areas of interest in the current counseling, representing both strengths and gaps in the current contraceptive counseling. Providers were most successful in their communication with clients, with over 75% of counselors maintaining eye contact, listening attentively, and using appropriate body language and tone of voice while interacting with a client. Areas in the most need of improvement were the frequency of informed choice and availability of a full range of methods, individualized care, and assurance of the clients' understanding of her method and potential need for follow up.

Discussion. These results indicate that the provision of family planning services post abortion needs to be strengthened in order to allow for the integration of high quality, comprehensive family planning services within safe abortion services. The results of this study have already begun to be used by Ipas/Nepal to inform future interventions. Through the promotion of more comprehensive family planning services, these targeted interventions will result in the reduction of method discontinuation and need for repeat abortions.

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Definition of Key Terms

| | |
|--------------------|--|
| AVSC International | EngenderHealth |
| CAC | Comprehensive Abortion Care |
| DMT | Decision Making Tool |
| FP | Family Planning |
| FP / MCH | Family Planning and Maternal and Child Health |
| FPAN | Family Planning Association of Nepal |
| ICPD | International Conference on Population and Development |
| IEC | Information, Education, and Communication |
| IUD | Intrauterine Device |
| KTM | Kathmandu |
| LARC | Long Acting Reversible Contraceptives |
| MA | Medical Abortion |
| Maternity Hospital | Paropakar Maternity and Women's Hospital |
| MMR | Maternal Mortality Ratio |
| MOHP | Ministry of Health and Population |
| MSI | Marie Stopes International |
| MVA | Manual Vacuum Aspiration |
| NESOG | Nepal Society of Obstetricians and Gynecologists |
| NGOs | Non-governmental Organizations |
| NPC | National Planning Commission |
| NWO | Nepal Women's Organization |
| PAC | Post Abortion Care |
| PAFP | Post-Abortion Family Planning |
| RCT | Randomized Control Trials |
| SLC | School Leaving Certificate |
| SPN | Sunaulo Parivar Nepal |
| SRH | Sexual Reproductive Health |
| TFR | Total Fertility Rate |
| USAID | United States Agency for International Development |
| USPSTF | US Preventive Services Task Force |
| WHO | World Health Organization |

I. INTRODUCTION

Recent decades have marked an evolution in the priorities of reproductive health care, with governments, international organizations, and investors valuing an increased emphasis on the quality of family planning services [1, 2]. This shift has led to the global implementation of policies and programs designed to improve family planning and maternal health services.

Despite improvements in maternal mortality, contraceptive prevalence, and unintended pregnancy, fifty-five million unintended pregnancies occur every year in developing countries to women not using a contraceptive method, while another twenty-five million occur as a result of incorrect or inconsistent use of contraceptive methods [3]. Yet, if contraception were accessible and used both correctly and consistently by women seeking to avoid pregnancy, maternal deaths would decline by 25% to 35% [3, 4].

As of 2008, women in 56 countries had legal access to abortion without restriction (representing 39% of women of reproductive age worldwide) [5]. Nepal joined the consortium of progress in 2002, changing the country's availability and access to abortion, and shifting the landscape in which reproductive health decisions are made and services are accessed. "Until recently, Nepal reported one of the highest maternal mortality ratios in the world, with a significant proportion of maternal deaths and injuries attributable to unsafe abortion" [6].

Background

On March 14, 2002, with the approval of Nepal's former monarchy, the Nepalese National Parliament passed the Muluki Ain 11th Amendment Bill, thereby modifying the national legal code, the Muluki Ain of 1963. This change effectively legalized abortion and expanded

women's rights in divorce, property ownership, and education --- the upshot of a reform movement spanning nearly three decades [3, 5, 7, 8].

Based on ancient Hindu scriptures, traditions, and practices, the Muluki Ain was first introduced in 1854, amended several times, and extensively revised in 1963. The national legal code did not allow the termination of pregnancies even if they were the result of rape, incest, or threatened a woman's life. The law equated abortion with infanticide; the Muluki Ain did not recognize any mitigating circumstances under which abortion was not a crime of murder [9].

Physicians and other medical practitioners were prohibited from recommending or performing abortion without exception [7]. Anyone who performed a consensual abortion on a pregnant woman would be imprisoned up to a year and a half, along with the offending woman. Often the duration of the sentence would be dependent on the fetus' age and the consent of the woman. If a person performed an abortion on a woman without her consent, causing her to miscarry, the punishment ranged from two to three years of imprisonment, depending on the gestational age of the fetus [9]. Hence women who sought abortions and those who provided them did so clandestinely, often resulting in unsafe abortion procedures [7]. Few urban women were able to access and pay for safe procedures conducted by trained medical practitioners [7].

This environment fostered the common practice of misclassifying induced abortions, and sometimes even spontaneous abortions (miscarriages) were classified as criminal, in order to have a woman incarcerated and lose her rights to family property. Studies conducted in Nepal, found that women imprisoned for abortion were often charged for murder or homicide, because

they carried much higher penalties, including life imprisonment. Often the law did not distinguish between abortion and murder, and injustice was perpetrated by greed. There are reports of in-laws working in collusion with the prosecution to keep property from being passed to their daughter-in-law. Many women prosecuted under the old law remained incarcerated, until November 2004, when the King of Nepal granted the first amnesty [7].

Family Planning in Nepal: A Timeline

Abortion & Fertility Control

Efforts to liberalize the restrictive abortion law in Nepal began in the 1970s, and marked the beginning of a reform that would span three decades. During this time, abortion was framed as a means to control fertility; it would become a matter of maternal health and rights in subsequent decades. The path of family planning, however, began much earlier.

The Family Planning Association of Nepal (FPAN), a nongovernmental organization focused on increasing knowledge of sexual and reproductive health (SRH), was the first to bring the need and importance of family planning to the forefront [10]. When FPAN was established in 1959, the idea of family planning was considered adverse to religious, cultural and social norms. Despite these norms, FPAN began educating people through print and electronic media in the 1960s [10, 11].

Until the establishment of the Third Development Plan by the Nepalese government in 1965, all of the family planning activities were undertaken by the FPAN [12]. The Third Development Plan (1965-1970) initiated policies where family planning was a major component of planned

development activities [13]. The Nepal Family Planning and Maternal and Child Health (FP/MCH) program was subsequently launched under the Ministry of Health. With the establishment of the government's Maternal and Child Health Division in 1969, FPAN took on a supplementary role to the national health and population programs [11].

Under the Fourth Development Plan (1970-1975), a target goal was established to provide family planning services to 15% of all married couples by 1975 [12]. During that time, FPAN organized a catalytic conference in 1974, bringing together key stakeholders to discuss the rationale of making abortion legally accessible and available for women. This conference was promptly followed by a regional seminar, jointly organized by the FPAN and the Transnational Family Research Program of the American Institutes for Research, to review the current status of abortion, related research in the region, and potential implications. These meetings underscored the restrictions place on women's health and well-being, and served as the springboard for subsequent reform-oriented activities [7].

During the 1970s, the government of Nepal initiated two national level conferences on the need to regulate population growth through maternal and child health programs, with assistance from the United States. During the conferences, abortion was discussed as an effective method of regulating fertility; later recommendations were made by the National Commission on Population to the government to legalize abortion for pregnancies resulting from contraceptive failure [7].

Meanwhile, AVSC International, later known as EngenderHealth began working with FPAN to deliver family planning services with USAID funding (1973) to expand access to and use of family planning services in Nepal [13].

Nepal's Fifth Development Plan implemented from 1975-1980, attempted to reduce birth rate through the initiation of a family planning services expansion, by means of outreach workers. Also in 1975, a population policy coordinating board was established under the National Planning Commission (NPC) to coordinate the government's multi-sectorial activities in population and reproductive health; the board was later upgraded to become the National Commission on Population in 1978 [12].

In the mid-1980s, the Nepal Women's Organization (NWO) convened forums with stakeholders and advocated that abortion should be made legal and available in cases of rape, incest, or when the woman's life may be in danger. However, the issue was considered too sensitive and lacked political will to prompt legislative action. The United States' Mexico City Policy of 1984, (often known as the Global Gag Rule), which restricted NGOs receiving federal funding from promoting or performing abortion services as a method of family planning with non U.S. government funds in other countries, may have further discouraged the Nepal government from supporting the reform movement [7, 13, 14]. Given the US government's position as a donor to Nepal's health and family planning programs, this policy may have influenced political will and the reproductive health services available. Likewise, the rescinding of the Mexico City Policy by President Clinton in 1993 may have also influenced the government's support of later reforms [7].

In 1994, Sunaulo Parivar Nepal (SPN), a non-government organization, was established as a Marie Stopes International affiliate (MSI Nepal), and opened its first clinic in southern Nepal to provide health care for factory and industry workers. SPN provided a wide range of sexual and reproductive health services for men, women, and young people of Nepal [13].

Safe Motherhood, Safe Abortion

In the early 1990s, Nepal became involved in the WHO's international Safe Motherhood initiative and with that influence, abortion took on a different dimension. With technical support from WHO, the Ministry of Health's Family Health Division took responsibility for developing a Safe Motherhood policy and plan of action as part of the National Health Policy. Furthering the movement was the 1994 International Conference on Population and Development (ICPD) and the 1995 Beijing Conference on Women, which "provided international impetus and greater legitimacy to the women's rights movement in Nepal" [7].

In mid-1995, manual vacuum aspiration (MVA) was introduced into the Kathmandu Maternity Hospital as part of the post abortion care (PAC) services, to treat incomplete abortions. The PAC program was initiated with USAID funding, with a training site established with the technical support from EngenderHealth and JHPIEGO, an affiliate of Johns Hopkins University. The site was located within the Maternity Hospital in Kathmandu. The establishment of PAC services helped to bring abortion-related issues to the forefront of maternal health service delivery in the country [7, 13].

The formation of the Safe Motherhood Network in early 1997 served as an important advance for reform, providing continued momentum to Safe Motherhood-related issues by involving the government, NGOs, and private sector organizations. The mid-1990s also saw the implementation of a fairly large-scale government program focusing exclusively on Safe Motherhood in several districts, which was expanded to ten additional districts with funding from the UK. The Ministry of Health and Population (MoHP) also developed guidelines for maternal health care services, with the objective of helping to improve quality of care. This was the first active involvement of the Ministry of Health in the Safe Motherhood initiative, and led to consensus building and political commitment towards the restructuring efforts. These efforts reframed the reform in the larger context of saving women's lives and helping to reduce the high levels of maternal mortality and morbidity from unsafe abortions in the country, and finally found an ally in the government sector whereas the long-standing reform efforts had been mainly emanating from the NGO sector previously [7].

Alongside the Safe Motherhood policy were efforts to educate legislators and other stakeholders regarding the plight of Nepalese women and the feasibility and necessity of improving their status and conditions through policy, legislative and programmatic interventions. In this connection, several workshops were organized for policymakers, legislators, international and national NGOs engaged in the health sector, citizens groups, physicians, nurses and the media. In the symposium jointly organized in January 1996 by the Population and Social Committee of the National Parliament, Nepal Medical Association, Nepal Society of Obstetricians and Gynecologists (NESOG) and the FPAN, the participants endorsed the view that first trimester abortions should be made legal, if performed by registered and trained medical practitioners [7].

Democratic Changes in National Governance

Changes in the political system were important to the abortion reform movement. “Monarchical rule gave way to a constitutional monarchy in 1990, and by 1991, the country had a democratically elected government.” Political reform gave stakeholders a stronger voice in governance and the legislative system. These changes coincided with the intensifying international campaigns for women’s rights. In this new political environment, newly founded women’s rights groups put pressure on the government to protect and promote many rights for women [7].

“Reproductive rights, including the right to safe abortion, and human rights together provided yet another dimension to the rationale for reform of the abortion law, prompting the establishment of the Ministry of Women and Social Welfare (subsequently renamed Ministry of Women, Children and Social Welfare) in 1995” . In July of 1996, the FPAN President introduced a private bill to reform the current abortion law to the National [7].

The Ministry of Law, Justice and Parliamentary Affairs brought the Muluki Ain 11th Amendment Bill, before Parliament in 1997. The Bill included extensive amendments to the legal code, included were amendments aimed at abortion reform, “removing gender-based discrimination in provisions on inheritance of property, citizenship, divorce and marriage, and increasing the punishments for rape, particularly for rape of minors, pregnant and disabled women”. Many components of the Bill were hotly debated. The House of Representatives initially approved the Bill in October 2001, but the National Assembly rejected it, due to disagreements over provisions on women’s property rights. In March of 2002, the House of

Representatives reconsidered the Bill and passed it [7].

In September of 2002, the Bill received Royal Assent, and the Ministries of Health and Justice, Law and Parliamentary Affairs implemented the law. The first government abortion services officially began at the Kathmandu Maternity Hospital on March 18, 2004. In all, the parliamentary process took approximately four years, and the development of operational policies, regulations and guidelines took another six months [7].

Manual vacuum aspiration (MVA) was the main procedure used for safe abortion in Nepal; however, in recent years, the government has encouraged promotion of medical abortion (MA). The successful pilot test of Medical abortion was conducted from December 2008 through June 2009 [12].

Nepal's Abortion Law Provisions

As amended, the Legal Code grants the right to termination of pregnancy to all women without regard to their past or present marital status, under the following conditions:

- The right to terminate a pregnancy of up to 12 weeks voluntarily.
- The right to terminate a pregnancy of up to 18 weeks of gestation if the pregnancy is a result of rape or incest.
- The right to seek abortion upon the recommendation of an authorized medical practitioner at any time during a pregnancy, if the pregnancy poses a danger to the woman's life or her physical or mental health, or in cases of fetal abnormality or impairment.

- The law prohibits abortion done without the consent of the woman. Abortion on the basis of sex selection is also prohibited. Amniocentesis is prohibited for purposes of sex determination for abortion. Anyone found guilty of conducting or causing to be conducted such an amniocentesis test is to be punished with imprisonment of 3–6 months. Anyone found guilty of performing or causing to be performed an abortion on the basis of sex selection is to be punished with one additional year of imprisonment.
- Abortions performed outside of the legally permissible criteria are prohibited [7, 12].

The regulations specify that for pregnancy up to 9 weeks MA can be used, up to 12 weeks MVA can be used, while beyond 12 weeks, MVA and dilatation and evacuation (D&E) can be used [12].

The provision of safe abortion services was guaranteed by the formation of a national safe abortion policy in 2002, and the first Comprehensive Abortion Care (CAC) unit was created at the Paropakar Maternity and Women's Hospital in Kathmandu, in 2004. Between 2004 and 2007, one hundred and seventy-six CAC service sites, including government, non-governmental organizations, and private facilities, were established in Nepal; almost every district (71 of 75) had at least one government registered facility offering CAC services [15]. Comprehensive abortion care sites offer counseling, provide manual vacuum aspiration (MVA) to terminate pregnancies, provide post-abortion contraceptive methods and other reproductive health services, and identify and manage complications. The establishment of abortion services nationally, has resulted in the rise of safe, legal abortions. During the forty-four month period between March 2004 and October 2007, a total 158,188 first trimester abortions were recorded in Nepal [15].

Abortion Today

Since 2002, Nepal's maternal mortality rate has shown evidence of decline; however, reducing women's risk of death and injury from unsafe abortion remains a top priority. Abortion care is provided at service delivery points with surgical facilities and medicines located at district hospitals, some primary health care centers, health posts, and private hospitals [12]. The Nepal government, through the Ministry of Health and Population, has prioritized the national safe abortion program, and significant efforts have been made in the last five years to expand services. In collaboration with Ipas, an international, non-governmental organization (NGO), the Family Health Division has scaled up service facilities. Nepal's government-sponsored services first available in March of 2004 have rapidly expanded: by mid-2011, nearly 500,000 women had obtained abortion services from 487 Ministry of Health-certified abortion clinics; and a total of 1,276 doctors and nurses had been trained in safe abortion services, including post abortion family planning [16].

Introduction & Rationale

An exploratory study conducted by Family Health International (FHI) in 1999 examined family planning client method selection and the factors influencing clients' ability to obtain their desired method, found that 93% of women received their preferred method of contraception [17, 18]. Despite receiving their method of choice, contraception discontinuation rates are staggering: 51% of users report discontinuing their method within 12 months of starting use [19]. This may lend itself to explaining rates of unintended pregnancy in Nepal --- presently 35% of all pregnancies and 41% of current pregnancies are unintended [12]. Researchers report that unintended pregnancies result from deficient contraceptive uptake, lack of correct use,

contraceptive failure, and situation specific causes [19, 20]. Reasons identified for non-use of contraception included health conditions, dislike of the methods, perception of low risk of pregnancy, and non-compliance [7, 21].

Unmet Need for Family Planning

Twenty-seven percent of currently married women have an unmet need for family planning services, with 10% having an unmet need for spacing and 17% having an unmet need for limiting [12].

Almost three-quarters of currently married women, aged 15-49, and two-thirds of men identified wanting no more children or are already sterilized. Married women have increasingly identified a desire to stop childbearing in the past 15 years, from a 59% desire in 1996 to 73% in 2011. Nepalese men and women report an ideal family size of about two children. Among currently married women, the mean number of ideal children has declined by nearly one child in the last 15 years, from 2.9 children in 1996 to 2.2 in 2011. Overall, Nepalese women have one child more than their ideal number; this “implies that the total fertility rate of 2.6 children per woman is 44% higher than it would be if unwanted births were avoided” [12].

Contraception Knowledge and Use

Knowledge of contraception is universal in Nepal; one in two currently married women report using a method of contraception, with 43% of women using a modern method. Use of modern methods has increased by 66 percent in the past 15 years. However, there has been little change in the last five years. The government sector remains the major provider of contraceptive

methods (providing 69% of users) [12].

Overall, 51% of contraceptive users discontinued using a method within 12 months of starting its use [12]. Twenty-six percent of episodes of discontinuation occurred because the woman's husband was away. One exploratory study that examined FP client method selection and the factors influencing clients' ability to obtain their desired method found that most women have a particular method in mind when they come to FP clinic, and that most women in these clinics are receiving their method of choice (93%). The study suggested that provider misinformation is at play in keeping women from attaining their method of choice and that dissatisfaction with new methods and concern over side effects contributes to discontinuation of contraception [17, 18].

Reasons for Abortion

Married women reported that the primary reason for pregnancy termination was having already having reached their desired number of children. Currently married women represent the population most often seek abortions (>95%) [19]. Of women who had an abortion in the five years preceding the DHS survey, one in five cited the main reason for their most recent abortion was that they did not want any more children (20.3%); 12.3% said that their husband/partner did not want the child; 9.9% of women said that they wanted to space their births; 7.4% wanted to delay childbearing; 10.4% reported that they had an abortion because of their health; and 12.4% cited that there was no money to take care of the baby [12].

Nationally, 41% of women reported using a method of contraception after their abortion [12, 22].

Research studies indicate that a large percentage of women having abortions have been

contraceptive users; the most commonly used methods by women having abortions are withdrawal or periodic abstinence, followed by condom and the pill. Contraceptive method failure is cited as the main reason for accessing abortion services. Reasons identified for non-use of preventive method included health conditions, dislike of the methods, perception of low risk of pregnancy, and non-compliance; in this context, family planning programs tailored to individual women's needs could play a more effective role in preventing unintended pregnancies [19].

Contraception Use Following an Abortion

The most common methods provided to women immediately following the abortion are male condoms, hormonal injectables (Depo Provera), and oral contraceptive pills (commonly referred to as pills); however, approximately one in five women leave the clinic without a contraceptive method [20]. After abortion, Depo Provera injections (13%) and the oral contraceptive pills (11%), are the modern methods of contraception most often chosen. Methods with lower rates of failures, such as implants (2%), female sterilization (1%), and IUDs (1%), are less often chosen [23]. Lack of family planning, counseling, and services may quickly lead to another induced abortion [20]. Repeat abortion is emerging as a public health issue in Nepal, nearly one third (32.3%) of all the abortion clients are "repeat" abortion cases, and the incidence of repeat abortion is predicted to increase with service availability and as abortion cases increase [5, 20]. This reflects the inadequate provision and use of contraceptives and has implications for counseling and provision of abortion and illustrates the need for integration of high quality, comprehensive family planning services with safe abortion services [5, 7, 20].

Decision-Making

Traditionally in Nepal, as is true for most developing countries, men are the primary decision-makers of family-size and family planning [24-28]. Husbands play a major role in contraceptive and abortion decision making in Nepal, only 25% of currently married women mainly make decisions about their own health care [5, 12]. Men are the main decision makers in reproductive health matters, including family planning, and the degree to which they share contraceptive decision-making with their wives can have a definite impact on their contraceptive behavior [29]. “Male partner’s approval can be important predictor of contraceptive use by women. Family planning programs are likely to be more effective for women when men are actively involved” [30]. Therefore, it is necessary to involve men in post-abortion family planning (PAFP); little research has been done on this topic, however, the inclusion of husbands in general family planning programs has been found to result in increased acceptance and continuation of modern contraceptives [24-28].

Knowledge that Abortion is Legal in Nepal

According to the 2011 Nepal Demographic and Health Survey, only 38% of women of reproductive age, 15-49 years old, believe that abortion is legal. Women, aged 45-49 years, are least likely to know that abortion is legal. Urban women and women who reside in the Far-western region, particularly in the Far-western Terai subregion, are more likely than their counterparts to identify abortion in Nepal as legal. Women with elevated wealth and education levels are more likely to correctly identify abortion as legal: 64.8% of women with a school leaving certificate (SLC) and higher education, 50.2% of women with some secondary education, and 53.9% of women in the highest wealth quintile knew that abortion was legal [12].

Among women who believe that abortion is legal in Nepal, approximately one-third (35.5%) stated that it is legal for pregnancies up to 12 weeks, and one-fifth (21.0%) stated that it is legal for pregnancies of 18 weeks duration if they were a result of rape or incest. Fewer than ten percent of women believed that abortion is legal if the mother's life is in danger (8.4%), if the mother has a physical or mental condition that would make a pregnancy a health risk (9.1%), or if there is a fetal abnormality (6.9%). Nearly two-fifths of women (38.4%) could not identify under what circumstances abortion in Nepal is legal; this was particularly evident among women in rural areas, those with no education, and those in the lowest wealth quintile. Without adequate information, many Nepalese women still seek clandestine procedures from unqualified providers, rather than safe, government-sponsored services [12].

Knowledge about Places That Provide Safe Abortions

Six out of ten (59%) Nepali women age 15-49 report knowing of a place where they can seek a safe abortion. Knowledge of places to obtain safe abortions are higher among urban, educated, and wealthy women, than among their counterparts. Knowledge is also higher among women in the Terai zone than in the hill or mountain zones, and higher in the Western and Mid-western Terai than in the other subregions. Women who report knowing places for safe abortion are more likely to mention the government sector (71.4%), than the private sector (57.8%), or the nongovernment sector (29.1%) [12].

Pregnancy Outcomes

In Nepal, the majority of pregnancies (84.8%) end in a live birth; while 7.5% of pregnancies are aborted, 6.8% result in a miscarriage, and 0.9% are stillbirths. Abortions are proportionately higher among women over twenty years old and pregnancies of order three and higher. The percentage of pregnancies ending in abortion is more than twice as high in urban (14.7%) as in rural areas (6.7%) [12].

Abortions are relatively higher in the hill zone (8.2%) and Terai (7.3%) than in the mountain zone (4.9%). The Western region has a higher proportion of pregnancies ending in abortion than the other development regions, and abortions are particularly high in the Western Terai subregion, where 15.1% of pregnancies are aborted. Approximately 10% of pregnancies among women with at least some education end in an abortion. The proportion of pregnancies ending in abortion rises with household wealth, from 3.3% among pregnancies in the poorest households to 17.5% in the wealthiest households [12].

Type of Abortion Procedure

The most common methods for abortion procedures in Nepal among women who had an abortion in the last five years were dilation and curettage (D & C) (38.5%), followed by manual vacuum aspiration (24.1%), unspecified tablets (19.5%), and medical abortion (MA) (9.1%). Other actions to end a pregnancy taken by less than 5% of women each, included injection, catheter, and other unspecified reasons [12].

Place and Provider for Abortion

In patriarchal societies such as Nepal, having an abortion has been associated with women losing morality and status in the community, cultivating a feeling of guilt among women. Because of the stigma attached to abortion, some women end up using traditional remedies, which can be unsafe and, in some cases, even fatal. However, with legalization of abortion, services are now available in health centers where women can access better and safer care [12].

Safe abortion services are provided at government referral-level hospitals, district hospitals, clinics, and health posts. They are also provided by nongovernmental organizations and certain private-sector hospitals and clinics. Doctors, nurses, and auxiliary midwives trained as skilled birth attendants typically provide these services [12].

Most women who report having had an abortion in the five years preceding the survey went to a doctor (61.9%) or a nurse/midwife (27.4%) for the last abortion. Few women sought services from a medical shop or from a pharmacist (5.3%), a health assistant or other health workers (2.9%), or from friends and relatives (0.9%); 1.6% of women did not receive any assistance in aborting their pregnancy [12].

About one in five women who had an abortion in the last five years went to government health facilities (18.7%), while one in three went to nongovernment health facilities such as Marie Stopes and FPAN (34.4%). Another one-third went to private-sector facilities (36.3%). 9.7% of women had their abortion at home [12].

Among those who went to government facilities and nongovernment facilities, all accessed government-listed sites for their abortion. However, among those who visited private-sector facilities, only 19% went to listed sites. Notably, about 8% of women went to India for abortion services [12].

Complications during and after Abortion and Contraception

Women were also asked whether they experienced complications either during their last abortion or following the abortion. One in four women who had an abortion in the five years preceding the survey mentioned that they had complications during the last such procedure, and another 24 percent mentioned experiencing post-abortion complications (i.e., complications within one month following the abortion [12].

Abortion and Post-abortion Cost

Nearly one in two (48%) women with an abortion in the five years before the survey said that they paid more than Nepalese Rupees 1,500 for their most recent abortion, while 36 percent paid 1,000-1,500 and 10 percent paid less than 1,000. Only 6% of women mentioned that they had obtained free abortion services [12].

The majority of women (69%) who had an abortion in the five years preceding the survey did not use post-abortion care services, even when they suffered from complications after their most recent abortion. Twenty-seven percent of women with an abortion in the five years preceding the survey paid less than Nepalese Rupees 1,000 while 4% paid more than 1,000 for post-abortion care services [12].

Fertility

Nepal's total fertility rate for the three years preceding the 2011 Demographic Health Survey was 2.6 births per woman, with rural women having about one child more than urban women. The country experienced a two-child fertility decline in the last fifteen years, with a decreased fertility from 4.6 births per woman in 1996 to 2.6 births per woman in 2011. Many factors could be contributing to this rapid decline in the last two decades, including: improved communication and greater access to modern methods of contraception. Extended spousal separations due to migrants seeking work in foreign countries, especially the Gulf countries and other Southeast Asian countries, may be another reason for the fertility decline. A decline in the ideal number of children, increasing age at marriage, and increasing use of safe abortion services are other factors that could potentially affect fertility [12].

Age at Marriage

Evidence indicated that age at first marriage is shifting later for both Nepali men and women: the overall median age at first marriage for Nepalese women is 17.2 years, and this increased during the last five years. The median age at first marriage among urban women declined between 1996 and 2001 but rose by nearly one year from 17.2 years in 2001 to 18.1 years in 2006. There was a gradual increase in the median age at first marriage among rural women [12].

The percentage of never-married women and men has increased in the past 10 years. Among women age 15-19 years old, this proportion has grown from 60 % in 2001 to 71% in 2011, and among men in the same age group, it has increased from 89% to 93%. The demographic health survey also demonstrated marked increases in median age at marriage among women 20-49 over

the last 15 years, from 16.4 years in 1996 to 17.8 years in 2011. In case of men age 25-49, the median age at marriage increased over the last 5 years, from 20.2 years in 2006 to 21.6 years in 2011 [12].

Age at first Birth

Despite the shift in marriages ages, there has been no change in women's overall age at first birth in Nepal over the last ten years. The median age at first birth among rural Nepalese women remained at around 20 years while it increased by nearly one year among urban women, from 19.8 years in 1996 to 20.4 years in 2006 [12].

Teenage Pregnancy

Childbearing begins early in Nepal, almost one quarter of women give birth by age 18 and nearly half of women have a child by age 20. Among adolescent women, age 15-19, 17% are already mothers or pregnant with their first child. Teenage pregnancy has fallen by 10% in the last five years (2006-2011) [12].

Maternal Mortality

Nepal's maternal mortality ratio (MMR) has declined substantially in recent years from an estimated 539 to 281 deaths per 100,000 live births, during the time period from 1996 to 2006.

Improvements in maternal health services, including increased antenatal care services and a reduction in unsafe abortions, have been key in reducing the country's MMR [12, 15].

Approximately 6 in 10 mothers receive antenatal care from a skilled provider, compared to 24% in 1996. Fifty percent of women attend at least four antenatal care visits during their pregnancy;

this statistic represents a five-fold increase in the past 15 years. The median gestation at first antenatal visit is 3.7 months, and 82% of expectant mothers were protected against neonatal tetanus. Skilled providers have assisted with more than a third of deliveries, doubling the presence of skilled birth attendants present at birth in the past five years. Nationally, 45% of women received postnatal care for their last birth in the first two days after delivery [12].

In order to understand these reproductive health behaviors and outcomes, it is important to consider how the family planning services delivered in post-abortion settings influence Comprehensive Abortion Care (CAC) clients' contraception choices. Previous literature has identified the need to strengthen and recalibrate existing family planning services in Nepal, in order to better establish linkages between abortion and family planning services. Therefore, identifying the strengths and shortcomings of current services may act as a step towards addressing these known issues.

Evaluating the family planning services within the CAC unit of Maternity Hospital will allow for the identification of gaps between the national guidelines and how contraceptive counseling is being conducted. Identification of these gaps will provide opportunity for future strengthening of the family planning services.

In light of the history of abortion in Nepal, this study, sponsored by Ipas/Nepal, a reproductive health NGO, aims to explore the quality of post abortion contraceptive counseling being received by clients of the Comprehensive Abortion Care (CAC) Unit in the Paropakar Maternity and Women's Hospital in Kathmandu, Nepal. Ipas, in its role as a technical advisor to the Ministry

of Health and Population, seeks to gather information about current counseling strategies in place, the methods available, and where the counseling gaps were present; the assessment will aid Ipas in further strengthening the services available at this government facility.

The key study objectives were developed from recurrent themes in the checklist and existing literature, these objectives are as follows:

1. Evaluate the quality of contraceptive counseling, focusing on the interpersonal relations between the CAC provider and client.
2. Assess the provider's ability in providing informed method choice and how the client's understanding of her chosen method is being ensured.
3. Identify what is being done to ensure the adoption of efficacious methods, and how reasons for contraception discontinuation and method failure are being addressed.
4. Evaluate helping the woman choose a method of contraception that was best suited for her individual needs, and whether the provider referred her client to other resources as needed.

By evaluating the current counseling, this study will contribute to understanding of the quality of the comprehensive abortion care services being provided, and how it influences the family planning and maternal health behaviors of CAC clients; thereby identifying the gaps and informing the redesign of future family planning programs and policies to improve the health and rights of women. The findings can inform future interventions to reduce method discontinuation and need for repeat abortions, promoting quality care that leads to an increased demand and

acceptability of family planning post abortion. Although the results of this analysis are limited in their applicability to other settings, the findings will further aid the integration of safe abortion care with Nepal's family planning services, and increase access to high-quality reproductive health services, improving the reproductive health of Nepalese women.

II. LITERATURE REVIEW

Recent decades have marked an evolution in the priorities of reproductive health care, with an increased emphasis on the quality of family planning services both in response to the needs of clients and in the understanding that quality care leads to an increased demand and acceptability of family planning.[1, 31] Client centered approaches have been adopted to meet necessary reproductive health needs more holistically, addressing the medical, behavioral, and social issues that underlie reasons for visits.[2]

The International Conference on Population and Development (Cairo, 1994) and Fourth World Conference on Women (Beijing, 1995), framed the shift towards comprehensive care and expanded range of family planning services [2, 3]. The International Conference on Population and Development declaration that comprehensive care was a human right brought heightened attention to the rights of clients, the quality of care, informed choice, gender sensitivity, and increased recognition of clients interrelated sexual and reproductive health needs, and the changes required of the health system in order to meet them. This focus in turn has brought improved quality of family planning and reproductive health to developing countries through the establishment of better quality services.

Enabling this movement further was the International Planned Parenthood Federation's (IPPF) "Client's Bill of Rights"; a declaration establishing what family planning clients should expect from their provider, including the rights to information, access, choice, safety, privacy, confidentiality, dignity, comfort, continuity, and opinion [1, 31]. Complementary of IPPF's Bill of Rights was Huezo and Diaz's framework (1993), which supported simultaneously catering to

clients' rights and providers' needs. The framework defined the client's rights to information, access, choice, safety, privacy, confidentiality, dignified treatment, comfort, continuity of care, and to express opinions about the quality of care received. It also established that providers have a need for training, information, infrastructure, supplies, guidance, back-up, respect, encouragement, feedback, and self-expression. The establishment of providers' right was especially important because service providers are often perceived as the most responsible for fulfilling the clients' rights, because they are in direct contact with the clients. Decisions regarding sexual and reproductive life often have a major impact on personal and family life, both long and short term, and involve biomedical, cultural, socioeconomic and ethical considerations, some of them new and unknown to the client.

Interaction between the client and the provider is one of the most important components in the success of the program and as essential component of quality of care. However, the definition of quality of care is nebulous and changing. Bruce (1990) was one of the first to define quality of care, creating a framework to assess delivery of good quality services, identifying six elements of quality: interpersonal relations, information given to clients, technical competence, mechanisms to encourage continuity, choice of contraceptive methods, and appropriate constellation of services [32, 33]. The Bruce/Jain framework was later "operationalized into the Situation Analysis (Miller et al., 1997), to assess facility functioning and quality of care" [1]. Miller et al.'s Quality of Care Conceptual Framework (1998) targeted facility readiness, quality of care, and client outcomes [1, 34].

Quality is often linked to client outcomes, including client knowledge, satisfaction, and contraceptive use, and program readiness; a program's ability to supply contraceptives and supplies, facilities and equipment, staff training and attitudes, information, education, and communication (IEC) materials, and supervision. The impact of the care can be measured through client knowledge, satisfaction, health, and contraceptive use (acceptance, continuation, TFR, contraceptive prevalence) [1]. While there are accepted measures of quality, there is no gold standard of contraceptive counseling [35]. Instead there are commonly accepted components of the client-centered family planning counseling, which will be outlined below.

Contraceptive counseling is often presented as a dynamic, two-way interaction between a client and provider for the purpose of confirming or facilitating a decision by the client, or helping the client address problems or concerns [2, 36]. The goal of integrated, client-centered sexual and reproductive health counseling is to provide comprehensive health care services on site, promote linkages between these services, and helps clients make best use of the range of services available [2].

In order to be successful, family planning services should be available where and when individuals need them; a choice of methods should be offered; options should be affordable; referral mechanisms should be in place for other methods and health services [36]. The best contraception method is often defined as the method that is safe and medically appropriate and fits the individual's personal lifestyle and needs. Individual who are happy with their choice of method are more likely to use it correctly and consistently [37-39].

Counseling acts as the main safeguard for the client's right to informed choice; therefore, the contraception decision-making process must be voluntary, where an individual is free to decide whether or not to use services, without coercion or constraint. Clients should be free to choose among available methods, with a range of service options accessible to all clients, including adolescents and unmarried individuals. Service providers are objective regarding all clients and methods, supporting and respecting the individual's right to choose [2, 36].

Counselors must provide appropriate and accurate information available about services and options. Care should be tailored to individualized wants and needs, addressing the client's circumstances and concerns, and include information about the client's risk for STI/HIV/AIDS and the protection that FP method options provide. During counseling, service providers should assess clients' knowledge, fill any gaps, and correct misinformation. Clients should understand "their options, the essential information about their chosen method or treatment (including benefits and risks, conditions that would render it inadvisable for use, and common side effects), and the way their choice may affect their personal circumstances", while avoiding information overload [2, 36, 37]. Informed choice must be pragmatic, ethical, and legal, with clients demonstrating competence to choose environment [40].

Clients should be encouraged to actively participate in discussions and to ask questions. Staff should answer clients' questions fully and clearly [36]. Staff should maintain interactions that are empathetic, respectful, and nonjudgmental toward values, behaviors, and decision that differ from their own [2, 36]. Staff should remain patient during the interaction with the client and express interest, and allow for plenty of time [2, 37].

The counseling environment should be organized, clean, and cheerful to put clients at ease, with adequate seating available during counseling for counselors, clients, and anyone else the clients choose to ensure that the environment is comfortable [36]. Comprehensible posters, flipcharts, and samples of FP methods should be in client's view. Staff must maintain clients' privacy and confidentiality [36]. Auditory and visual privacy should be ensured for counseling, regardless of setting [2].

Additionally, other considerations in choosing a method of contraception should be taken into account, including the client's pattern of sexual activity, access to medical care, cost of contraceptive, cooperation between men and women, a woman's needs during reproductive life, choosing method for a program [40].

Frameworks and tools have been created to assure that counselors adequately cover each of these components during a family planning counseling session; the REDI and GATHER frameworks are two client-centered processes "that focus on the woman, her expressed needs, situation, problems, issues and concerns [2]. The goal of the contraceptive counseling component is to provide accurate, unbiased information about all contraceptive methods to help the woman assess her needs and make an informed decision". REDI acts as a guide for the provider during their interaction with the client through four over-arching components: RAPPOR building, EXPLORATION, DECISION-MAKING, and IMPLEMENTING the decision. The GATHER framework has been more broadly used and includes the following components: GREET the client in a polite and friendly way, in order to build trust. ASK the client about themselves with simple open-ended questions, taking the lead from the client. TELL the client about what kinds

of services the facility offers, options for family planning and dual protection, basic information about each family planning method, and ways of preventing HIV and STIs within the context of their lives and preferences. **HELP** the make the decision that is best for her, including developing a plan for reducing risk of unintended or mistimed pregnancies within the context of their lives and preferences. **EXPLAIN** whatever needs explanation or clarification (how method works, effective), including everything about the client's chosen method, how to use it, benefits, and possible side effects. And schedule a **RETURN** visit or follow-up appointment [2, 41-43].

Through counseling, providers help clients make and carry out their own choice about reproductive health and family planning [43]. Central to contraceptive counseling is the belief that good counseling helps clients choose family planning methods that suit them, leading to more satisfied clients, and longer and more successful use of family planning methods [38, 43]. Counseling has succeeded when clients feel they got the help they wanted, feel respected and appreciated, know what to do and feel confident that they can do it, return for a follow-up if necessary, and use their methods effectively and with satisfaction [38].

These beliefs also shape the family planning guidelines and medical standards in Nepal. The principles and components of contraceptive counseling outlined above, act as a guiding framework for reproductive healthcare and post-abortion family planning services in Nepal.

National Medical Standards: Reproductive Health in Nepal

The national medical standards for reproductive health in Nepal define family planning counseling as a two-way interaction in which the counselor assist their client in making a

decision about their fertility and contraceptive options. Nepal's reproductive rights are rooted in ICPD's (1994) principles of individual's and couple's rights to "decide freely and responsibly the number, spacing and timing of their children". The national guidelines seek to establish mechanisms to provide the necessary information to allow decisions concerning reproduction to be made free of discrimination, coercion, and violence in order to allow Nepali women to attain the highest standards of reproductive health possible [44].

The national guidelines explicitly state that reproductive health services' clients have rights to information, access to services, informed choice, safety to services, privacy and confidentiality; dignity, comfort and expression of opinion; and continuity of care. Nepal's principles of family planning counseling are based on: meeting the client's individual needs and acknowledging the influence of their own norms, values, beliefs, culture and attitudes; voluntary choices based on complete and accurate information without pressure, intimidation, enticements, coercion or incentives; enabling client to understand and exercise individual rights; confidentiality; and acknowledgement of understanding of the method choice by the client, before receiving the method [44]. The medical standards state that information should be given to aid a client's choice, and counseling should be provided wherever family planning methods are available. Only staff who have completed a certified counseling training or are certified in providing family planning contraceptive services may conduct counseling sessions.

The guidelines emphasize the importance of treating each client with respect, tailoring interactions to individual client's needs, circumstances, and concerns, and encouraging clients' clients active participation during client-provider interaction. Avoiding information overload,

providing the client's preferred method for FP, and using and providing audio-visual aids are presented as the principles of a good provider-client interaction. These principles are rooted in the belief that verbal interactions and sharing of information between the provider and client during each step of a family planning procedure help alleviate client fears and concerns. And that educating the client about potential side effects and relieving concerns correlate positively with long-term use of temporary family planning methods.

The Nepal medical standards also explicitly state that providers must: treat each client with respect, exhibiting friendly, calm behavior and an unrushed manner. Healthcare providers should treat all clients as equals, without preferential treatment by age, gender, religion, values, caste, languages, economic status, or marital status. Staff should speak in a language understood by the client or arrange for a translator to help communication. When interacting with clients, staff should assure confidentiality concerning the client's information and assure that client's modesty is maintained. Staff may describe how the client can be helpful during the procedure and what to expect before, during, and after the procedure. Staff must provide the client an opportunity to ask questions and address concerns, and address doubts, fears or misconceptions held by the client [35].

Linking post-abortion care with family planning services is also framed by the Nepal medical standards as a way to increase access to family planning and help to prevent future unwanted pregnancies. Counseling in this setting is seen as a way to prevent yet another episode of abortion care services [44].

The national post-abortion care medical standards further build off of the reproductive health guidelines.

National Medical Standards: Post-Abortion Care in Nepal

The national medical standards for post abortion clients declare the acceptance of contraception must not be a prerequisite for post abortion care services or treatment of complications. Family planning counseling may occur at any time, either before or after receiving treatment. The service provider should determine whether the client's decision-making ability is limited by either physical or emotional factors (sedation, severe pain and trauma). If the client's ability to make a clear decision is compromised, the client and/or partner should be given condoms, instructions for use, and referral and follow-up information. PAFP educational counseling should include information about the client's rapid return to fertility (after two weeks) and potential for future pregnancies to before menses resumes. Additionally, the provider should ascertain whether the unintended pregnancy was due to contraceptive failure; if so, counseling must include education on the effectiveness of available methods.

Nationally, post-abortion family planning should include counseling about contraception in terms of the client's reproductive needs and goals. Post-abortion family planning should provide choices among various methods, the assurance of contraceptive supply, and access to follow-up care. Post-abortion family planning services should also include information about the need for protection against STIs. The services should also be based on an individual assessment of each woman's situation, including her personal characteristics, clinical condition, and the service delivery capabilities in the community where she lives. "Even if clients cannot receive

comprehensive post-abortion care at a given facility, or if assessment suggests complete abortion and therefore uterine evacuation is not necessary, counseling and family planning should be offered.” Additional counseling should be provided to prevent future unwanted pregnancy[44].

Comprehensive Abortion Care in Nepal

In Nepal, comprehensive abortion care services are intended to address multiple facets of a woman’s health needs, targeting her individual circumstances and ability to access services. The national medical standards delineate comprehensive abortion care to include affordable, accessible abortion and other reproductive health services, such as counseling and informed consent for the termination of pregnancy; informed choice for post-abortion contraception; identification and treatment of sexually transmitted infections and reproductive tract infections; and other similar aspects of reproductive health, including providing referrals for services that are unavailable at the present health facility. The services provide woman-centered comprehensive abortion care includes a range of medical and related health services that support women in exercising their sexual and reproductive rights [44, 45].

Nepal’s woman-centered model for abortion is comprised of three key elements: choice, access, and quality. Having safe, affordable timely services that are tailored to women’s medical and personal needs, receiving both respectful and confidential care, and guaranteeing the rights to information, privacy and a range of choices epitomizes this model.

It is these elements and in this context that past abortion family planning counseling is evaluated. In Nepal, the quality of care framework applied to abortion, gives a “structure for the intersection

between woman having choices about abortion and having access to services, and those services being high quality”. High quality abortion includes many factors, some which will vary given the local contexts and available resources. However, tailoring each woman’s care to her social circumstances and individual needs, and providing accurate, appropriate information and counseling that supports women in making fully informed choices are fundamental aspects of high quality care. In Nepal, high quality care includes internationally recommended medical technologies (manual vacuum aspiration and medical abortion). The Ministry of Health and Population’s CAC Participant Handbook, designed for providers, also goes on to define a hallmark of high quality care as the “services that ensure confidentiality, privacy, respect and positive interactions between women and staff of the health facility. The QOC framework must include wherever possible post-abortion contraceptive services, including emergency contraception, to help women prevent unwanted pregnancies, practice birth spacing and avoid repeat abortions. Moreover, it should refer women to or provide reproductive and other health service” facilities as necessary [45].

The provision of contraceptive counseling during comprehensive abortion care represents an important opportunity to increase the uptake of highly effective methods of contraception, to improve contraceptive use, and to increase continuation and satisfaction. The provision of contraceptive information and services is an essential part of abortion care as it helps the woman avoid unintended pregnancies in the future. During this time women are educated about their next ovulation and her risk of pregnancy unless an effective contraceptive method is used [45]. This CAC visit represents one of the few occasions when a woman (and her partner) may come into contact with the health care system, further emphasizing the importance of capitalizing on

the chance to promote effective contraception and improve contraceptive adherence [44]. However despite this potential, prior studies of contraceptive counseling have demonstrated inconsistent results [41].

Women's healthcare professionals have long "regarded counseling as an important component of improving contraceptive" [46]. The World Health Organization (WHO) has supported the practice of contraceptive counseling, with the intention that patients will be able to make informed decisions in conjunction with their provider, choosing the best family planning option for the client [45, 46]. These beliefs have contributed to the fact that improving access to contraception information, services, and supplies has been increasingly "advocated by policymakers as the best way to reduce the demand for abortion and thus lower maternal mortality and morbidity overall" [47].

Despite these beliefs and practices held by many providers, organizations, and policymakers that contraceptive counseling is necessary and effective, there is limited evidence supporting the efficacy of contraceptive counseling [46, 48-50]. In fact, in 1996 the U.S. Preventive Services Task Force (USPSTF) recommended contraceptive counseling, but withdrew this recommendation in 2002 due to insufficient evidence [46]. The studies that are available have found contradictory evidence, the results of which are outlined below.

In 2005, the WHO developed a series of family planning guidelines and tools, including the Decision-Making Tool for Family Planning Clients and Providers (DMT), in order to meet reproductive health demands [46]. The DMT is a double-sided flipchart: one side is designated

for the client to aid in decision-making, and the other side for the provider to aid in the counseling process by giving information and guidance. The DMT tool was studied for improving communication with clients in limited resource settings (Nicaragua and Mexico), and was found to improve communication, particularly with clients choosing a new contraceptive method (Kim et al., 2007) [46, 51, 52].

However, a later study (Langston et al., 2010) evaluated the DMT's structured, standardized contraceptive counseling, for its influence on abortion clients in choosing "a very effective contraceptive method at the time of first trimester vacuum aspiration, method initiation, and 3 months and 6 months method continuation" [46]. The trial did not show any increase in the uptake of very effective contraceptive methods (implant and IUD) or to initiate their method compared to the usual care group, who received typical counseling. Langston et al. found in this setting that the "structured counseling had little impact on contraceptive method choice, initiation, or continuation". While adding structured counseling did not increase the proportion choosing or initiating very effective contraception in a practice setting where physicians already provide individualized counseling, a limitation of the study was that the typical counseling was provided by family planning specialists, which may have diminished the effect of the structured counseling [41, 46].

Recently, the Contraceptive CHOICE Project (2012) developed a standardized, comprehensive contraceptive counseling program to ensure that women enrolling into CHOICE were knowledgeable about all reversible contraceptive options including effectiveness, advantages, and disadvantages. The counseling framework for CHOICE was modeled after the GATHER

process for counseling. Half of the counselors had no prior clinical experience, and 96% did not have a professional health care degree; however, with training the counselors successfully implemented and performed the standardized contraceptive counseling process on a large-scale in a clinical setting. The uptake of LARC at both study sites was substantially higher than that seen in the general population (less than 9%). In this setting, the Contraceptive CHOICE Project found that contraceptive counseling emphasizes effectiveness of contraceptive methods and may increase the uptake of the most highly effective methods of contraception, such as IUDs and implant [41].

Limited data has also suggests a possible benefit to using structured, audio-visual materials with standardized information for contraceptive counseling: two randomized controlled trials (RCTs) utilized structured audio-visual educational material with standardized information about contraceptive methods. The results from both studies showed increased contraceptive use or continuation of effective contraceptive methods (pill and injection) 1 year later [40, 46, 53].

Individual case studies, like an intervention in Nigeria designed to improve the quality of service delivery by family planning workers, found that the likelihood that clients will attend follow-up visits was also found to improve when trained professionals attended them. Trained nurses were found to perform better than their untrained counterparts in regards to interpersonal relations, information giving, counseling, and mechanisms for encouraging continuity. Short-term counseling training significantly improved the quality of care provided and client compliance with follow-up appointment [54]. Similarly in a post-abortion population, a “RCT of counseling performed by a contraceptive specialist along with advanced provision of contraceptive methods

compared to routine counseling found increased uptake of long acting reversible contraceptives and increased continuation at 4 months but no difference in repeat abortion rates at 2 years”[46].

Another study of the impact of contraceptive counseling in primary care, also found that women who received counseling about hormonal contraception were more likely to report use of that method at last intercourse [55].

A recent Cochrane Review examined the effectiveness of ancillary techniques, advanced counseling techniques or other client-provider interventions, “to improve adherence to, and continuation rates of, hormonal methods of contraception” found little evidence from RCTs that supported “the hypothesis that counseling improves contraceptive use”[56]. The RCTs on this topic provided limited evidence on whether different counseling strategies improved adherence to, or continuation of, hormonal contraceptives. Halpern et al. found that most of the studies to date demonstrated no benefit of strategies to improve adherence and continuation, calling instead for the use of a combination of intensive counseling interventions and multiple contacts and reminders to improve adherence and acceptability of contraceptive use. One experimental intervention demonstrated improved overall continuation and indications that the intervention group was less likely to discontinue contraception due to menstrual disturbances (Canto De Cetina, 2001); these findings support a benefit of pre-emptive counseling about contraceptive side effects. “In another trial, the intervention group was less likely to discontinue due to dissatisfaction with the contraceptive method” (Andolsek, 1982). This finding did not affect overall continuation, which was similar across the study groups. “These results suggest that enhanced counseling, while having limited effect on contraceptive continuation, may change the

reasons why women stop using contraception.” This review suggests that while effective client-provider communication is typically touted as an important factor for successful use of hormonal contraception, the randomized controlled trials do not reveal evidence to support this. The review concluded “that enhanced counseling or intensive reminders of next appointment or dosing” does not improve contraceptive use, suggesting that a combination of “intensive counseling interventions and multiple contacts and reminders may be needed to improve adherence and acceptability of contraceptive use”. Notably this review did not evaluate whether contraceptive counseling impacted the choice of contraceptive method, and the trials had important limitations, including small sample sizes, high losses to follow up, and variation across interventions and their intensity [56].

Other reviews of the literature have found limited evidence regarding contraceptive counseling’s effectiveness; one review of the literature, which examined the effectiveness in counseling in a clinical setting, found limited evidence regarding its effectiveness to reduce rates of unintended (unwanted, mistimed) pregnancies [49]. A systematic review of the effectiveness of contraceptive counseling of women following an abortion in high income countries, concluded that there was no evidence indicating that its effect in increasing acceptance and use of contraceptive methods after an abortion [50].

A meta-analysis that synthesized the available research evidence on the impacts of post-abortion family planning counseling and services on women in low-income countries, as defined by the World Bank, found that no study (published in English from 1994 to 2010) provided evidence on the effectiveness of post-abortion family planning counseling and services on maternal morbidity

and mortality. Of 2,965 potentially relevant records, eligible interventions were those which offered counseling to women (or couples) about the use of contraception to implement plans for birth spacing and limiting the number of births, provided information and advice about different types of methods, and supplied and fitted contraceptives. One controlled study found that, compared to the group of non-beneficiaries, “women who received post-abortion family planning counseling and services had significantly fewer unplanned pregnancies and fewer repeat abortions during the 12-month follow-up period. All 15 studies examined contraception-related outcomes. In the seven studies which used a comparative design, there was greater acceptance and/or use of modern contraceptives in women who had received post-abortion family planning counseling and services relative to the no-program group” [47]. The primary outcomes of interest were maternal mortality and morbidity. The secondary outcomes were repeated induced abortions, repeat unplanned/unintended pregnancies, and acceptance and/or use of a modern contraceptive method.

Literature Limitations

These studies are not without their share of limitations. The main weakness of the reviews’ findings, stem from the lack of rigorous evaluations on this topic [47, 50]. “Existing studies suffer from appreciable threats to internal validity and loss to follow-up and are extremely heterogeneous in terms of populations studied and outcomes measured” [49]. The quality of the existing research does not provide strong guidance for recommendations about clinical practice but does suggest directions for future investigations.

Tripney et al.'s systematic review was the first of its kind to evaluate the effectiveness of post-abortion family planning counseling and services in low-income countries where abortion-related maternal morbidity and mortality are high; and the review was based on low quality studies (one medium-quality controlled study measuring this outcome, and six comparative studies which, rated low, all showed a positive effect) [47]. This review, initiated and funded by the UK Department for International Development, provided an important "contribution to efforts to address the gap in the provision of a systematic and unbiased assessment of evidence specific to developing countries". The lack of conclusive evidence on the efficacy of family planning interventions provided to women following an abortion is of serious concern, especially given the wide-ranging impacts of unsafe abortion on maternal health.

Contraceptive counseling is valuable. The exact amount and extent of counseling appropriate for each patient likely varies though a common minimum should be standard to give patients the opportunity to make an informed choice [46]. As structured contraceptive counseling has not demonstrated irrefutable beneficial impacts on method choice, method initiation, adherence, and continuation, interventions to improve contraceptive use deserve continued study.

III. MANUSCRIPT

Structured Observations of Pre-Abortion Contraceptive Counseling within the Comprehensive Abortion Care Unit of the Paropakar Maternity and Women's Hospital in Kathmandu, Nepal

Introduction. Nepal's legalization of abortion in 2002 dramatically changed the country's availability and access to safe abortion services. The national framework for comprehensive abortion care is built on three key elements: choice, access, and quality. This study explores the quality of post-abortion contraceptive counseling being received by clients of the Comprehensive Abortion Care (CAC) Unit in the Paropakar Maternity and Women's Hospital in Kathmandu, Nepal, by evaluating the current counseling strategies, methods available, and assessing the strengths and weakness of care among first-trimester abortion clients.

Methods. Structured observations of thirty-one pre-abortion family planning provider-client interactions were conducted over a three week period in June, as part of a larger programmatic study to evaluate the quality of contraceptive counseling conducted in the CAC Unit of the Paropakar Maternity and Women's Hospital. The observation checklist used was developed to collect information about the knowledge and skills of reproductive healthcare workers and to assess client-provider interaction. Data was analyzed to assess providers' competencies.

Results. The evaluation identified five areas of interest in the current counseling, representing both strengths and gaps in the current contraceptive counseling. Providers were most successful in their communication with clients, with over 75% of counselors maintaining eye contact, listening attentively, and using appropriate body language and tone of voice while interacting with a client. Areas in the most need of improvement were the frequency of informed choice and availability of a full range of methods, individualized care, and assurance of the clients' understanding of her method and potential need for follow up.

Discussion. These results indicate that the provision of family planning services post-abortion needs to be strengthened in order to allow for the integration of high quality, comprehensive family planning services within safe abortion services. The results of this study have already begun to be used by Ipas/Nepal to inform future interventions. Through the promotion of more comprehensive family planning services, these targeted interventions will result in the reduction of method discontinuation and need for repeat abortions.

Introduction

Recent decades have marked an evolution in the priorities of reproductive health care, with an increased emphasis on the quality of family planning services both in response to the needs of clients and in the understanding that quality care leads to an increased demand and acceptability of family planning [1]. Client-centered approaches have been adopted to meet necessary reproductive health needs more holistically, addressing the medical, behavioral, and social issues that underlie reasons for visits [2]. Nepal has adopted this client-centered approach within the context of the country's family planning services [45].

The services provide woman-centered comprehensive abortion care – includes a range of medical and health related services that support women in exercising their sexual and reproductive rights. Nepal's women centered model for abortion is comprised of three key elements: choice, access, and quality. Having safe, affordable timely services that are tailored to women's medical and personal needs, receiving both respectful and confidential care, and guaranteeing the rights to information, privacy and a range of choices epitomizes this model.

The International Conference on Population and Development declaration that comprehensive care was a human right has brought improved quality of family planning and reproductive health to developing countries through the establishment of better quality services. Enabling this movement further was the International Planned Parenthood Federation's (IPPF) client's Bill of Rights; a declaration establishing what family planning clients should expect from their provider, including the rights to information, access, choice, safety, privacy, confidentiality, dignity, comfort, continuity, and opinion [1, 31]. Complementary of IPPF's Bill of Rights was Huezo and

Diaz's framework (1993), which supported both clients' rights and providers' needs. The framework defined the client's rights to information, access, choice, safety, privacy, confidentiality, dignified treatment, comfort, continuity of care, and to express opinions about the quality of care received. It also established that providers have a need for training, information, infrastructure, supplies, guidance, back-up, respect, encouragement, feedback, and self-expression. The establishment of providers' right was especially important because service providers are often perceived as the most responsible for fulfilling the clients' rights, because they are in direct contact with the clients. Decisions regarding sexual and reproductive life often have a major impact on personal and family life, both long and short term, and involve biomedical, cultural, socioeconomic and ethical considerations, some of them new and unknown to the client.

This shift has led to the global implementation of policies and programs designed to improve family planning and maternal health services. Nepal's legalization of abortion changes the country's availability and access to safe abortion services, shifted the landscape in which reproductive health decisions are made and services are accessed. This movement towards comprehensive care and expanded range of family planning services has already influenced a significant reduction in the proportion of maternal deaths and injuries attributable to unsafe abortion [6].

In March of 2002, responding to public health and human rights imperatives, the Nepalese National Parliament passed landmark legislation, thereby modifying the national legal code and effectively legalizing abortion and expanding women's rights in divorce, property ownership,

and education --- the upshot of a reform movement spanning nearly three decades.[3, 5, 7, 8]. Following Royal Assent, the Ministries of Health and Justice, Law and Parliamentary Affairs implemented the law. The first government services for safe induced abortion officially began at the Paropakar Maternity and Women's Hospital (otherwise referred to as Maternity Hospital) in the capital city of Kathmandu on March 18, 2004 [7, 12, 16].

Under the amended law, women are permitted abortion for up to 12 weeks of gestation on request and under certain conditions thereafter [6]. Abortion services are provided at service delivery points with surgical facilities and medicines located at district hospitals [12], some primary health care centers, health posts, and private hospitals. The Nepal government, through the Ministry of Health and Population, has prioritized the national safe abortion program, and significant efforts have been made to expand services. Nearly 500,000 women received abortion services from one of the 487 Ministry of Health-certified abortion clinics by mid-2011. By the same date, a total of 1,276 providers were trained in safe abortion services, which include post abortion family planning [16].

Women's healthcare professionals have long "regarded counseling as an important component of improving contraceptive use, and access to counseling services has been considered an integral part of informed choice" [46]. The World Health Organization (WHO) has supported the practice of contraceptive counseling, with the intention that patients will be able to make informed decisions in conjunction with their provider, choosing the best family planning option for the client [45, 46].

Contraceptive counseling is often presented as a dynamic, two-way interaction between a client

and provider for the purpose of confirming or facilitating a decision by the client, or helping the client address problems or concerns [2, 36]. The goal of integrated, client-centered sexual and reproductive health counseling is to provide comprehensive health care services on site, promote linkages between these services, and helps clients make best use of the range of services available [36].

Central to contraceptive counseling is the belief that good counseling helps clients choose family planning methods that suit them, and leads to more satisfied clients, longer and more successful use of family planning methods. These beliefs also shape the family planning guidelines and medical standards in Nepal. The principles and components of contraceptive counseling outlined above, act as a guiding framework for reproductive healthcare and post abortion family planning services.

In Nepal, comprehensive abortion care (CAC) services are intended to address multiple facets of a woman's health needs, targeting her individual circumstances and ability to access services. The national medical standards delineate comprehensive abortion care to include affordable, accessible abortion and other reproductive health services, such as counseling and informed consent for the termination of pregnancy; informed choice for post abortion contraception; identification and treatment of sexually transmitted infections and reproductive tract infections; and other similar aspects of reproductive health, including providing referrals for services that are unavailable at the present health facility. The services provide woman-centered comprehensive abortion care – includes a range of medical and related health services that support women in exercising their sexual and reproductive rights [45].

Interaction between the client and the provider is one of the most important components in the success of the program and as essential component of quality of care. Bruce (1990) was one of the first to define quality of care, creating a framework to assess delivery of good quality services, identifying six elements of quality: interpersonal relations, information given to clients, technical competence, mechanisms to encourage continuity, choice of contraceptive methods, and appropriate constellation of services [32, 33]. Quality is often linked to client outcomes, including client knowledge, satisfaction, and contraceptive use, and program readiness; a program's ability to supply contraceptives and supplies, facilities and equipment, staff training and attitudes, information, education, and communication (IEC) materials, and supervision. The impact of the care can be measured through client knowledge, satisfaction, health, and contraceptive use (acceptance, continuation, total fertility rate, and contraceptive prevalence) [1].

In Nepal, the quality of care framework applied to abortion, gives a “structure for the intersection between woman having choices about abortion and having access to services, and those services being high quality” [44]. High quality abortion includes many factors, some which will vary given the local contexts and available resources. However, tailoring each woman's care to her social circumstances and individual needs, and providing accurate, appropriate information and counseling that supports women in making fully informed choices are fundamental aspects of high quality care. In Nepal, high quality care includes internationally recommended medical technologies (manual vacuum aspiration and medical abortion). The Ministry of Health and Population's CAC Participant Handbook, designed for providers, also goes on to define a hallmark of high quality care as the “services that ensure confidentiality, privacy, respect and

positive interactions between women and staff of the health facility. The QOC framework must include wherever possible abortion contraceptive services, including emergency contraception, to help women prevent unwanted pregnancies, practice birth spacing and avoid repeat abortions. Moreover, it should refer women to or provide reproductive and other health service facilities”, as necessary [45].

The provision of contraceptive counseling during comprehensive abortion care represents an important opportunity to increase the uptake of highly effective methods of contraception, to improve contraceptive use, and to increase continuation and satisfaction. The provision of contraceptive information and services is an essential part of abortion care, as it helps the woman avoid unintended pregnancies in the future. During this time, women are educated about their next ovulation and her at risk of pregnancy unless an effective contraceptive method is used [45].

This CAC visit represents one of the few occasions when a woman (and her partner) may come into contact with the health care system, further emphasizing the importance of capitalizing on the chance to promote effective contraception and improve contraceptive adherence [44].

Recent literature has identified the need to strengthen FP services throughout Nepal, calling out for better integration of family planning in comprehensive abortion care (CAC) and post abortion care (PAC) services [16].

An exploratory study conducted by Family Health International (FHI) in Nepal, examining family planning client method selection and the factors influencing clients’ ability to obtain their desired method, found that 93% of women received their preferred method of contraception [17, 18]. Despite receiving their method of choice, contraception discontinuation rates are

staggering: 51% of users report discontinuing their method within 12 months of starting use [19]. The rate of contraceptive discontinuation and the reasons for doing so reflects dissatisfaction with the method itself, or the quality of services provided [18].

This may lend itself to explaining rates of unintended pregnancy in Nepal --- presently 35% of all pregnancies and 41% of current pregnancies are unintended [12]. Literature reveals that unintended pregnancies result from deficient contraceptive uptake, lack of correct use, contraceptive failure, and situation specific causes [19, 20]. Reasons identified for non-use of contraception included health conditions, dislike of the methods, perception of low risk of pregnancy, and non-compliance [7, 21].

Twenty-seven percent of currently married women have an unmet need for family planning services, with 10% having an unmet need for spacing and 17% having an unmet need for limiting. Contraceptive prevalence rates increased from 45% in 1976 to 50% in 2011, with small decline in modern methods (44.2% to 43.2% from 2006-2011) [12, 57]. Previous research in Nepal has demonstrated that most abortion clients are married women, who identified the desire to avoid having more children as their primary reason for having an abortion [16]. Among CAC clients interviewed in a 2010 survey, reasons for contraceptive failure and non-use were identified to be: actual or perceived health risk (47%), perceived low risk of pregnancy (18%), dislike (either by self or the partner) of the available methods (18%), and forgot to use the method or method not readily available (13%). Injectables were the most common method accepted at discharge (30%), with male condoms and the oral contraceptive pills as other frequently accepted methods (20% and 22%). Approximately one fourth of the women (22%),

left the clinic without accepting a method of contraception. Repeat abortion is an emerging public health issue, with a previous study conducted in Maternity Hospital finding that one in three abortion clients are repeat abortion cases [16].

In order to understand these reproductive health behaviors and outcomes, it is important to consider how the family planning services delivered in post abortion settings influence Comprehensive Abortion Care (CAC) clients' contraception choices. Previous literature has identified the need to strengthen and recalibrate existing family planning services in Nepal, in order to better establish linkages between abortion and family planning services [5, 16, 57]. Therefore, identifying the shortcomings of current services may act as a step towards addressing these known issues.

This study, sponsored by Ipas/Nepal, a reproductive health NGO, aims to explore the quality of post abortion contraceptive counseling being received by clients of the Comprehensive Abortion Care (CAC) Unit in the Paropakar Maternity and Women's Hospital in Kathmandu, Nepal. Ipas, in its role as a technical advisor to the Ministry of Health and Population, seeks to gather information about current counseling strategies in place, the methods available, and where the counseling gaps were present; the assessment will aid Ipas in further strengthening the services available at this government facility.

The key study objectives were developed from recurrent themes in the checklist and existing literature, these objectives are as follows:

1. Evaluate the quality of contraceptive counseling, focusing on the interpersonal relations

between the CAC provider and client.

2. Assess the provider's ability in providing informed method choice and how the client's understanding of her chosen method is being ensured.
3. Identify what is being done to ensure the adoption of efficacious methods, and how reasons for contraception discontinuation and method failure are being addressed.
4. Evaluate helping the woman choose a method of contraception that was best suited for her individual needs, and whether the provider referred her client to other resources as needed.

By evaluating the current counseling, this study will contribute to understanding of the quality of the comprehensive abortion care services being provided and how it influences the family planning and maternal health behaviors of CAC clients, thereby identifying the gaps and informing the redesign of future family planning programs and policies to improve the health and rights of women. The findings can inform future interventions to reduce method discontinuation and need for repeat abortions, promoting quality care that leads to an increased demand and acceptability of family planning post abortion. Although the results of this analysis are limited in their applicability to other settings, the findings will further aid the integration of safe abortion care with Nepal's family planning services, and increase access to high-quality reproductive health services, and improving the reproductive health of Nepalese women.

Evaluating the family planning services within the CAC unit of Maternity Hospital will allow for the identification of gaps between the national guidelines and how contraceptive counseling is being conducted. Identification of these gaps will provide opportunity for future strengthening of the family planning services.

Materials & Methods

Population and Study Setting

The research was carried out in the CAC Unit of the Paropakar Maternity and Women's Hospital in Kathmandu, Nepal. In the 2011-2012, the CAC unit served 3,219 clients, an average of 268 women a month. The health care providers performing the counseling services were trained nurses, who were also responsible for performing the physical examinations and abortion procedures; three of these providers were observed.

CAC Client Demographics

In order to attain descriptive statistics of CAC clients' demographic logbook data for women who visited Maternity Hospital during a three month period between 2-April-2012 and 1-July-2012, (n=645) was analyzed. Of these clients, most (95.2%) had manual vacuum aspiration (MVA) as their procedure method, with the remaining having D&E (2.3%) or medical abortion (MA) (2.5%).

The contraceptive method mix among the contraceptives accepted during pre-abortion CAC counseling illustrates variety of choice. Women chose diverse methods: oral contraceptive pills (28.2%), Depo Provera (22.02%), male condoms (17.7%), female sterilization (6.7%), IUDs (6.4%), subdermal implants (3.0%), and male sterilization (0.3%). The logbook did not list a method of contraception for 16.0% of clients.

During this time, upper caste groups, including Brahman (Hill), Chhetri, Thakuri, Sanyasi, Brahman (Terai), Rajput, Kayastha, Baniya, Marwadi, Jaine, Nuraang, and Bengali, represented

half of the clients during this time period (49.9%). The remaining 50.1 of CAC clients were distributed among disadvantaged Janajaties (29.0%), relatively advantages Janajaties (16.0%), Dalit (5.0%), and disadvantaged non-Dalit Terai caste groups (0.2%).

The average recorded age of CAC clients was 27.8 years old; 58.8% of clients were over 25 years of age, 35.8% were between 20-25 years old, and 4.5% were under 20 years old.

On average, CAC clients had completed 6.5 years of education. Slightly over a third (36.7%) had no formal education. Of the clients who had had some schooling, 7.3% of women had only 1-5 years of school, a third (32.7%) had 6-10 years of education, and two in ten women (20.6%) had attended 11-15 years of school, 1.7% had 16-20 years, and less than one percent (0.9%) had twenty one years of schooling or more.

Of 644 CAC clients, the average gestation weeks at the time of procedure were 8.0 weeks. One in four women (39.3%) had abortions at eight weeks gestation, 36.3% sought an abortion at six weeks gestation, and 13.8% at ten weeks.

On average, 644 CAC clients reported having 1.7 living children, with a median and mode of two children.

Ethics

Before implementation of this programmatic evaluation, the Institutional Review Board at Emory University assessed the study design and plan, declaring it Not Human Subjects

Research. In country, program staff received permission for the assessment in the hospital from both the ministry of health and hospital officials prior to the project's initiation.

Research Design

Structured observations of pre-abortion family planning provider-client interactions were carried out for thirty-one visits over a two month period to as part of a larger study to evaluate the quality of care of contraception counseling conducted in the CAC Unit of the Paropakar Maternity and Women's Hospital. The goal of the observations was to gather information about current counseling strategies in place, the methods available, where the counseling gaps were present, and assess for overall quality of care. Individual counseling sessions were also timed. The study procedures were initiated within a three-week period in June 2012, using a convenience sampling methodology.

Recruitment

In order to collect valid data on provider-client interactions by direct observation, subjects were not aware of the precise nature of the data that was being collected, as so not to bias the provider-client interaction. Rather, the study subjects were told that the counseling was being observed in order to make future improvements. Upon registration, CAC staff sought clients' verbal consent to allow observers in the counseling consultation.

Instruments

The primary investigator developed the observation tool, with content validation provided by Ipas/Nepal. Items in the evaluation tool were generated based on the national FP guidelines and

training materials, Ipas/Nepal's existing Counseling Skills Checklist, and the 'ABHIBADAN' FP checklist, a derivative of the GATHER methodology [Appendix A].

An observational checklist was developed to collect information about the knowledge and skills of the reproductive health workers, while capturing information on the client-provider interaction. The checklist consisted of yes/no questions to capture skills relating to quality of care. We trained the research team in conducting observations and completing a structured checklist, to evaluate whether the provider performed a variety of counseling components, including: Counseling Communication; Established Rapport; Assessed the Woman's Needs, Determines Desire to Delay or Prevent Pregnancy; Explains Characteristics of Available Methods; Helps the Woman Choose Her Method; Ensures Understanding of Chosen Method; Refers to Other Resources as Needed; questions specific to Sterilization Clients; Method Chosen; Duration of Counseling Session; section to capture what methods were available that day; and a section for Notes.

Two female field workers, the primary investigator and her Nepali counterpart, an Ipas consultant, carried out the observations. Since the counseling sessions were conducted solely in Nepali, the consultant had the responsibility of filling out the checklist. Therefore the Ipas consultant was accountable for recording whether or not a provider performed a particular action during the counseling session. Meanwhile, the primary consultant observed non-verbal behavior, recording notes on body language, the counseling environment, and the length of the consultation.

The observers studied the providers' counseling skills, how the sessions were organized, provider performance. Nonverbal aspects of service delivery were noted, including whether the counselors made eye contact, listened attentively, and used visual aids. The structured checklist captured the content of the session, focusing on: interpersonal relations, the aspects of client-provider interactions that involve communication, privacy, confidentiality, and respect; information given to clients; mechanism to encourage continuity; choice of methods; and appropriate constellation of services.

Data Analysis

Data management was conducted in Microsoft Excel. Data were analyzed using the SAS software, version 9.3. Descriptive statistics were used to summarize the data and were presented using frequency tables and percentages. In order to assess providers' competencies, relevant portions from the structured checklist were analyzed individually to create a composite score for each competency. SAS was also used to analyze means, standard deviations, frequencies, and percentages for the baseline demographic characteristics of the CAC clients recorded in the Maternity Hospital logbook.

Data Quality and Limitations

Data from the study can be viewed from the perspective of the following quality-of-care elements: interpersonal relations and counseling, information giving, and mechanisms to encourage continuity. The size and convenience sampling strategy decreases the strength of the findings. Bias may have been introduced into our data collection, since both clients and counselors were aware they were being observed, which may have influenced the sincerity of

their interaction. While the checklists were structured, there may be subjectivity in the observations, and we could not validate the recorded observations' or check for consistency.

Results

We observed 31 pre-abortion contraceptive counseling sessions, evaluating the interpersonal relations between CAC provider and client, abortion procedure information, choice of contraceptive methods, and mechanisms to encourage contraceptive continuity. During this time, we identified strengths and gaps in counseling services in order to adapt and introduce a new model of contraceptive counseling.

The average consultation lasted 6.5 minutes, ranging from 2 to 15 minutes. Providers obtained relevant reproductive histories, counseled clients on family planning methods and on their elected abortion procedure and possible complications.

Method Choice

Of the 31 observed women in counseling sessions, nine (29%) were counseled for Depo Provera¹, three (9.7%) for male condoms, three for intrauterine contraception devices (IUDs)², and three for subdermal implants (9.7%) [Table 1].

¹ Depo Provera is a progestin-only hormonal contraceptive injection that is highly convenient and private. Injections are required every three months to avoid unintended pregnancy 39.

Hatcher, R.A., et al., *Contraceptive Technology*. 20 ed. 2011, Atlanta, GA: Arddent Media, Inc..

² In Nepal, intrauterine devices, or IUDs, are commonly referred to as IUCDs.

TABLE 1: Percentages of Contraception Acceptance among CAC Clients in the Kathmandu Maternity Hospital during Observations, Ordered by Use Effectiveness (N=31)

| Contraceptive Method | Frequency | Percentage |
|----------------------|-----------|------------|
| Sterilization | 4 | 12.9% |
| IUCD | 3 | 9.7% |
| Implant ³ | 3 | 9.7% |
| Depo Provera | 9 | 29.0% |
| Pills | 5 | 16.1% |
| (Male) Condoms | 3 | 9.7% |
| No Method | 4 | 12.9% |

Depo Provera and combined oral contraceptive pills were the two most common methods accepted by clients [Table 2].

TABLE 2: Percentages of Contraception Acceptance among CAC Clients in the Kathmandu Maternity Hospital, during Observations, Ordered from Most Effective to Least Effective ⁴(N=31)

| Contraceptive Method | Frequency | Percentage |
|---------------------------|-----------|------------|
| Sterilization | 4 | 12.9% |
| LARC Methods ⁵ | 6 | 19.4% |
| Depo Provera and Pills | 14 | 45.2% |
| (Male) Condoms | 3 | 9.7% |
| No Method | 4 | 12.9% |

³ Subdermal implants are thin rods or tubes containing a progestin hormone. The implant is inserted under the skin of a woman's arm. Marketed implants can provide contraception for at least three years 39. Hatcher, R.A., et al., *Contraceptive Technology*. 20 ed. 2011, Atlanta, GA: Arddent Media, Inc..

⁴ Women while using more effective method effect methods experience less risk of unintended pregnancy (less than 1 pregnancy per 100 women in a year), compared to women using less effective methods of contraception (18 or more pregnancies per 100 women in one year). Implants, IUDs, and both male and female sterilization are considered "more effective". "Less effective" methods include: male and female condoms, sponges, spermicide, withdrawal, and fertility awareness based methods. Injectables, pills, patches, rings, and diaphragms fall in between the spectrum, with 6-12 pregnancies per 100 women per year 39. Ibid..

⁵ Long-acting reversible contraceptive (LARC) methods, including intrauterine devices (IUDs) and subdermal implants, are not user-dependent and have very low failure rates (less than 1%), which rival those with sterilization39. Ibid..

Counseling Communication

During these 31 observations, CAC providers used excellent communication techniques. They often maintained eye contact, used appropriate tones of voice, exhibited appropriate body language, and listened attentively. Most counselors (67.7%) asked open-ended, closed, and appropriate probing questions. Providers corrected misinformation and dispelled rumors in 12 of 31 counseling sessions. Flipcharts were used in 3 counseling sessions (9.7% of the time). Of the 3 counseling sessions using a flipchart, providers twice used it to discuss IUDs. Counseling communication did not demonstrate any particular deviations by method choice.

[Refer to Table 3.]

TABLE 3: Percentages of Contraception Acceptance among CAC Clients in the Kathmandu Maternity Hospital, during Observations (N=31)

| Counseling Communication Skill | Frequency | Percent |
|---|-----------|---------|
| Provider maintains eye contact with the client | 31 | 100% |
| Uses appropriate tone of voice | 28 | 90.3% |
| Exhibits appropriate body language | 29 | 93.6% |
| Listens attentively | 28 | 90.3% |
| Asks open-ended, closed, and probing questions when necessary | 21 | 67.7% |
| Corrects rumors and misinformation | 12 | 38.7% |
| Used flipchart ⁶ | 3 | 9.7% |

⁶ Defined as any use of flipchart to explain at least one method. Further explained in the Discussion section.

Establishes Rapport

On average, counselors completed slightly over half of the tasks (54.3%) for effectively establishing rapport effectively. Typically during FP counseling sessions, the provider would greet the client in friendly way (64.5%) and offer them a seat (83.9%), and the counselor asked a client for permission prior to including others in session (16.1%) [Table 4].

Observations where women choose condoms and implants were reported to have lower rapport building scenarios, than those who chose other methods of contraception. CAC clients who chose LARC methods, did so in spite of the poor rapport with the contraceptive counselor.

TABLE 4: The Occurrence of Providers Establishing Rapport during Observations of Pre-Abortion Contraceptive Counseling among CAC Clients in the Kathmandu Maternity Hospital, (N=31)

| Establishes Rapport Skill | Frequency | Percent |
|---|------------------|----------------|
| Greets client in friendly way, demonstrating interest and concern | 20 | 64.5% |
| Provider introduces herself | 9 | 29.0% |
| Offers the client a seat | 26 | 83.9% |
| Establishes privacy | 22 | 71.0% |
| Assures confidentiality | 19 | 61.3% |
| Asks for permission prior to including others in session | 5 | 16.1% |

Assesses Woman's Needs

The majority of providers (74.2%) asked open-ended questions about woman's circumstances and needs, and six in ten (61.3%) explored factors that led to the need for an abortion. If the client was using contraception prior to their unintended pregnancy, only 41.9% of the providers assessed reasons for method failure. On average, CAC counselors completed half of the tasks for assessing woman's reproductive needs (49.7%) [Table 5].

Women who chose IUD, implant, and sterilization experienced counseling where the CAC provider was better at assessing women's needs. This was in comparison to clients who later chose less effective methods of contraception (condoms, pills, and Depo Provera), where less than half of these women received contraceptive counseling where the provider attempted to assess her individual needs.

TABLE 5: The Occurrence of Assessing Women's Needs during Observations of Pre-Abortion Contraceptive Counseling among CAC Clients in the Kathmandu Maternity Hospital, (N=31)

| Assesses Woman's Needs | Frequency | Percent |
|---|------------------|----------------|
| Asks open-ended questions about woman's circumstances and needs | 23 | 74.2% |
| Assess the clients' reproductive needs (short, long term, or permanent) | 19 | 61.3% |
| Explores factors that led to the need for an abortion | 19 | 61.3% |
| If she was using contraception, assesses reasons for failure of method | 13 | 41.9% |
| Explains Human Reproduction (if necessary) | 3 | 9.7% |

Determines Desire to Delay or Prevent Pregnancy

In almost two thirds of the counseling sessions (61.3%), providers explored a woman's current desire to delay or prevent pregnancy. A third of counselors (32.3%) determined if their client's pregnancy was unplanned, unwanted, or wanted. Meanwhile, few women received (22.6%) information on the health benefits of child spacing. Slightly more than half of providers (54.8%) assessed their clients' reproductive needs (short, long term, or permanent).

And almost two-thirds of providers (64.5%) assessed what the client knew about family planning methods, inquiring what method the client was interested in, and assesses the woman's individual situation. Seven out of ten (71.0%) counselors assessed clients' FP medical and

obstetrical history. Less than half of the counseling sessions discussed potential barriers to successful use of contraception and ways to resolve them (41.9%) [Table 6]. On average, CAC providers completed 53.4% of the tasks for determining a woman's desire to delay or prevent pregnancy; however, among women who choose Depo Provera or no method, providers were less likely to determine their desire to delay or prevent pregnancy, than compared to clients who were counseled for condoms, pills, IUDs, implants, and permanent sterilization.

TABLE 6: Percentages of CAC Counselors who Determined Desire to Delay or Prevent Pregnancy among CAC Clients in the Kathmandu Maternity Hospital, during Observations (N=31)

| Determines Desire to Delay or Prevent Pregnancy | Frequency | Percent |
|---|------------------|----------------|
| Determines if the pregnancy was unplanned, unwanted, or wanted | 10 | 32.3% |
| Explores woman's current desire to delay or prevent pregnancy | 19 | 61.3% |
| Provides information on the health benefits of child spacing | 7 | 22.6% |
| Assesses Woman's Individual Situation | 20 | 64.5% |
| Assess the clients' reproductive needs (short, long term, or permanent) | 17 | 54.8% |
| Assesses woman's clinical and personal situation | 21 | 67.7% |
| Assess clients' FP medical and obstetrical history | 22 | 71.0% |
| Assesses what the client knows about family planning methods and asks client what method she is interested in | 20 | 64.5% |
| Discusses potential barriers to successful use of contraception and ways to resolve them | 13 | 41.9% |

Explains Characteristics of Available Methods

Few counselors (22.6%) offered the full range of available methods at the facility to their client.

Approximately half (51.6%) of clients were told about the methods available based on the clients' previous knowledge of family planning. Slightly over a third (35.5%) of counselors explained the characteristics, use, side effects and effectiveness of the chosen method, and an equal proportion explained the need for follow up visits for the method chosen. A client's

medical eligibility for each method was discussed in only one third of the sessions. [Refer to Table 7.]

On average, CAC providers completed 35.5% tasks for explaining the characteristics of available contraceptive methods to clients effectively. Providers did not often discuss the side effects, advantages, or disadvantages of particular methods. However, among women who chose IUDs, providers explained the characteristics of the method two thirds of the time, which was more often than among those CAC clients who picked other methods of contraception (occurring less than half of the time).

TABLE 7: Percentages of CAC Counseling Sessions that Explained Characteristics of Available Methods to CAC Clients in the Kathmandu Maternity Hospital, during Observations (N=31)

| Explains Characteristics of Available Methods | Frequency | Percent |
|--|------------------|----------------|
| Offers full range of available methods at the facility (and within client's community, if applicable) | 7 | 22.6% |
| Tells the client about the methods available based on the clients' previous knowledge of family planning | 16 | 51.6% |
| Discusses her medical eligibility for each method, including contraindications | 10 | 32.3% |
| Explains characteristics, use, side effects and effectiveness of the methods available | 11 | 35.5% |
| Explain the need of F/up visit for the method chosen (if applicable) | 11 | 35.5% |

Helps the Woman Choose Her Method

Less than half of the counselors (45.2%) supported their client in selecting the best method for her individual situation, and 54.9% helped their client make a decision by focusing on the potential side effects of a method she is considering. Half (51.6%) of providers ensured

informed choice of method. On average, CAC counselors successfully completed 50.5% of the criteria to effectively help a woman choose her method of contraception [Table 8].

Counselors were less likely to help women who choose condoms, implants, sterilization, or no method, than those women who chose Depo, pills, and IUDs. Among CAC clients who chose Depo, pills, and IUDs, counselors assisted women in their choice over half of the time.

TABLE 8: Helps the Woman Choose Her Method CAC Clients in the Kathmandu Maternity Hospital, during Observations (N=31)

| Helps the Woman Choose Her Method | Frequency | Percent |
|---|------------------|----------------|
| Supports the woman in selecting the best method for her situation | 14 | 45.2% |
| Helps the client make a decision by focusing on the potential side effects of the method she is considering | 17 | 54.8% |
| Ensures informed choice of method | 16 | 51.6% |

Ensures Understanding of Chosen Method

Providers' assurance of clients' understanding of their chosen method was poor (overall average of 19.4%), when accounting for all of the checklist components constituting the skill. Providers ensured that their clients fully understood their chosen method of birth control slightly more than half of time (54.84%). In ensuring understanding of the methods among clients, CAC counselors were less likely to ensure method understanding among women that chose no method (0%), condoms (10.0%), permanent (17.5%), and Depo (18.9%), than among those clients who chose to subdermal implants (33.0%), pills (34.0%), and IUDs (36.7%) [Table 9].

On average, three in ten of the counseling sessions included aid from a provider to help the client plan for continued use; to ensure she knows where and when to reapply or change method if

necessary; and an explanation to the client how to use the chosen method and warning signs. In a quarter of the sessions, the client verbally accepted her chosen method or referral for her desired method. Not once during the observations was a client asked to repeat instructions in her own words, and not a single counseling session included information on emergency contraceptive (EC) or instructions for use as a back-up method.

Counselors did not politely say goodbye to their clients and invite them to return, and rarely during this session did a provider discuss a return visit and follow up with the client, nor did she explain where to go for more supplies, or what constituted early identification of the problems and what necessitated returning to the hospital or another health facility. A third of the time, counselors ensured that clients understood whether a follow up visits was needed for their chosen method of contraceptive, and 12.9% of the time providers encouraged clients to return at any time if they have a question or problem. Additionally, only 5.3% referred clients to other resources.

TABLE 9: Percentages of CAC Counseling Sessions where Clients' Understanding of her Chosen Method was Ensured, among CAC Clients in the Kathmandu Maternity Hospital, during Observations (N=31)

| Ensures Understanding of Chosen Method | Frequency | Percent |
|---|------------------|----------------|
| Ensures woman fully understands the method she has chosen | 17 | 54.8% |
| Helps her plan for continued use, ensuring she knows where and when to re-supply or change her method if necessary | 9 | 29.0% |
| Correctly explains to the client how to use the chosen method and warning signs | 9 | 29.0% |
| Asks the client to repeat all instructions in her own words | 0 | 0.0% |
| Provides chosen method or referral for method | 8 | 25.8% |
| Provides EC and instructions for use as a back-up method, if available | 0 | 0.0% |
| Discuss return visit and follow up with the client: - Where to go for more supplies - Early identification of the problems - When to return to MH or Health Facility | 3 | 9.7% |
| Ensure she understands the f/up visit needed for the method chosen | 10 | 32.3% |
| Encourages the client to return at any time, if they have a question or problem | 4 | 12.9% |
| Politely say goodbye to the client and invite them to return again | 0 | 0.0% |

Refers to Other Resources as Needed

Referral to additional sources was very low, occurring 4.3% overall. During the 31 observations, 6.5% occurred where the provider managed the needs of special populations. Counselors rarely made referrals to other services (3.23%), when the CAC services were unable to offer specialized counseling or services or meet clients' needs. These findings were consistent across contraceptive methods.

Among the four sterilization clients, 50% of the clients were referred for services and able to schedule post abortion sterilization appointments. For these clients, services were not available at the particular time of day/week. (Information on date and time of appointment was available for 25% of these clients.) Counselors were observed explaining informed consent to a quarter of

the clients, while also informing the client that there are other methods that she can use to meet her reproductive need. And a quarter of the CAC clients who identified sterilization as their intended form of contraception post abortion, were told when to return for routine follow up.

Discussion

We set out to evaluate the quality of pre-abortion family planning counseling received by CAC clients within the Paropakar Maternity and Women's Hospital, by identifying and assessing the information given during contraceptive counseling; the strategies in place to ensure the client's understanding of her chosen method; and the methods available. We identified five areas of interest in the current counseling, representing both strengths and gaps in the current contraceptive counseling. A strength identified was the successful communication among the clients and providers. Areas in need of improvement were in the method choices available to clients, the frequency of informed choice, individualized methods, and the referral system. The results of this study have already begun to be used by Ipas/Nepal to inform future interventions. Through the promotion of more comprehensive family planning services, these targeted interventions will result in the reduction of method discontinuation and need for repeat abortions.

Interpersonal Relations

One of the prominent findings of this study was that the strength of interpersonal relations between the CAC providers and clients. Evaluations of the observations revealed that providers often employed excellent communication techniques, essential in establishing trust and maintaining interactions that are both empathetic and respectful [2, 36].

Encompassed within interpersonal relations is the ability to communicate effectively using visual aids. Studies using job aids, including flipcharts, have proven to be efficacious [51, 52, 58]. However, due to the infrequent use of the tools during our observations, our definition of "appropriate use of flipchart", using the flipchart to explain each available method's

characteristics, advantages/disadvantages, and side effects, was rapidly adjusted. Our data were analyzed using the new definition: any use of the flipchart in defining a solitary method. If a flipchart was used to describe a single method it was recorded --- 9.7% used the contraceptive methods flipchart to explain the benefits and side effects of any single contraceptive method.

Another component of provider-client interactions was correcting misinformation and dispelling myths; data analysis reflects that this happens infrequently (38.7% of the time). However, this measure may reflect a lack of need to correct misinformation. The trends in some of our other results, may also be influenced by situation specific reasons: Often the provider did not introduce herself, this may have been because she was the one to previously conduct the client's the physical examination. Clients were initially consented at the time of registration and which may have influenced our results. Our results also indicated that counselors did not politely say goodbye to their clients and invite them to return; this may be because contraceptive counseling occurred before the abortion procedure itself, where clients may have continued to interact with the same provider.

Another noteworthy mark of the communication between clients and providers were the perceptions of privacy and confidentiality. While auditory and visual privacy should be ensured for counseling, regardless of setting; our results for establishing privacy and ensuring confidentiality are conflicting. The door to the counseling room was very rarely closed permitting the waiting room to see and hear what is being said during the counseling session; this also allowed further opportunity for interruptions by both other providers and clients. Auditory and visual privacy should be ensured for counseling, regardless of setting. The counseling

environment displayed (English) posters, flipcharts, and samples of FP methods were in client's view [Appendix B].

Method Choice

The popularity of Depo Provera and pills corroborates earlier findings that these method choices serve as an indicator of the contraceptive supply and shortages within the CAC Unit. A study conducted in 2010, found that the supply of IUDs and implants was erratic; our findings suggest that this is still the case today: LARC methods, while the most effective, are accepted infrequently due to supply chain issues [16]. Permanent and long acting reversible contraceptive methods, IUDs and implants, were less frequently accepted than less effective methods of contraception. The “clinic’s readiness to provide quality services encompasses whether a facility is prepared to offer quality services and includes aspects such as adequate contraceptives and other supplies; facilities and equipment; staff training and attitudes; health education materials; and supervision and management systems. Choice of methods refers to the variety of contraceptives offered to clients and the program response to their varied needs. A key aspect of offering a spectrum of contraceptive methods is keeping a constant stock of contraceptive supplies”; improvements to the supply system will increase the CAC Unit’s readiness to provide quality services [1].

“Consistent availability of contraceptives is only part of assuring choice of methods. Providers also must describe the range of methods available (through the program or by referral), discuss the client’s preference and provide her with her preferred method (if appropriate)” [1].

Informed Choice

Another important finding of this evaluation is that assurance of informed choice was particularly weak, and in need of improvement. Providers' assurance of clients' understanding of their chosen method was poor, and did not guarantee freedom to choose among all available methods, with a range of accessible service options [2, 36].

The full range of available contraceptive methods was rarely offered to clients, and the characteristics of these methods were not fully explained. According to our observations, a single woman was never counseled on all of the available methods. Instead of tailored counseling for an individual woman, providers counseled clients on one method, normally what a woman comes in asking for. Providers did not often discuss the characteristics, use, side effects and effectiveness of the methods available, advantages, or disadvantages of particular methods. Clients' options, the essential information about their chosen method or treatment, and the way their choice may affect their personal circumstances [2, 36, 37].

Half of CAC clients were counseled for method choice based on their previous knowledge of family planning. CAC clients typically learned about family planning methods from friends and family members, and often came in asking about a particular method that they had heard about. Clients often left with that same method, rather than having a provider encourage consideration towards a more suitable method for her individual needs. While emergency contraception (EC) is available in Nepal, not a single counseling session included information on EC or instructions for use as a back-up method.

The IUCD and implant supply chain issues affected how CAC providers performed contraceptive counseling. Providers may have counseled the client on the method that they wanted, but this shortage dictated what methods clients actually left with. This meant that clients were often encouraged to take pills or injectables, and were not being referred elsewhere to find the methods that they wanted. While these methods served as a temporary fix until the other methods were available, clients weren't necessarily getting additional counseling on injectables or pills. This means that clients were leaving with methods that may not have been appropriate or wanted, and the women may not have received instruction on how to use them during their counseling sessions.

Choosing the Best Suited Method

Care should be tailored to individualized wants and needs, and address the client's circumstances and concerns. Our results found that women who chose more effective methods of contraception, including IUD, implant, and sterilization, experienced better counseling. This was in comparison to clients who later chose less effective methods of contraception (condoms, pills, and Depo Provera), where less than half of these women received contraceptive counseling where the provider attempted to assess her individual needs. These conclusions are particularly poignant, because condoms, pills, and Depo Provera were the methods that were available consistently. While the supply of IUDs, implants, and sterilization was erratic. Tailoring each woman's care to her social circumstances and individual needs, and providing accurate, appropriate information and counseling that supports women in making fully informed choices are fundamental aspects of high quality care.

Referrals to Other Resources

Previous literature had identified mechanisms for continuity of services was in need of review, as effective referral systems were not in place [16]. Systems to remind providers to discuss important areas of health promotion and follow-up do not exist, which may contribute to the very low percentage of clients referred to other resources. In less than two thirds of counseling sessions, a provider helped the client plan for continued use and ensured the woman knew where and when to reapply or change method, if necessary. Another explanation for the low prevalence of referrals to other health services and facilities may reflect a lack of need. Or a referral system for family planning counseling and contraceptive follow-up may have happened during another point of the visit that was not being observed.

Strengths and Limitations

A strength of the study is that the findings support a prior study reinforcing the need to establish better linkages between abortion and family planning services identified in previous literature [5, 16]. The findings from the checklist and observations corroborate each other. However, a new contribution is that this programmatic evaluation employs a different methodological approach, using observations rather than survey methods to investigate the services available at Paropakar Maternity and Women's Hospital's comprehensive abortion clinic. The study contributes new data, identifying specific areas for improvement in the current contraceptive counseling.

Through observations, the study highlights an important finding, inconsistencies in the method mix. Data reveals that women are using a diverse range of methods; however, based on the observations, the counseling sessions do not contribute to the diversity. Further exploration of the factors contributing to diversity in method choice is needed to explain this phenomenon.

With the limited research available on the topic, this paper is unique to Nepal. The assessment's methodology could be repeated often, with the intention of evaluating the change.

This study has several noteworthy limitations. First, the data used in the analysis was originally collected for another purpose: the structured checklist was designed to assess gaps in counseling, however it was meant to inform the adaptation and implementation of a new counseling methodology, the Population Council's Balanced Counseling Strategy. Had the checklist been intended to be used as a formal study tool, the design may have differed slightly. Second, a convenience sampling strategy was used to conduct the PAFP observations, and this may have affected the representativeness of the CAC client experiences during counseling. Additionally, the beginning of planting season occurred during our observations, meant that the CAC unit saw a decrease in the number of clients they served daily. This may have changed the overall clientele. The majority of our observations were for MVA clients. While the sample seemed to be an accurate representation of the clients at the clinic, this is a self-selecting population. As discussed, the majority of CAC clients at the Maternity Hospital are currently married, in their late twenties, of the upper caste are have had some education, and have approximately two children already. CAC providers may have acted differently towards women with different characteristics.

A methodological limitation of the study, given that independent observers conducted the evaluation of CAC providers' performance, was the potential Hawthorne effect, in which subjects' behavior is influenced by an awareness of being observed [59]. It is likely that the way in which the providers behave while being observed is different to the way they behave

normally. It is probable that the post abortion family planning counseling that was being observed is, if anything, superior to that occurring at other times [60, 61]. However, this methodology was selected for its advantages over self-reporting and for practicality purposes. We worked to minimize Hawthorne effect by employing the same data collectors and techniques throughout all of the observation periods [59].

A final limitation of the study was while the checklists were rigidly structured; there was a nature of subjectivity to observations. Given that the counseling sessions were conducted in Nepali, there was no way for the author to validate the recorded observations' findings or check for consistency. However, the checklists' findings were corroborated with non-verbal observations of the providers' and clients' body language, contributing to the robustness of the interpersonal relationship data.

Nonetheless, this study identified a number of important findings about current contraceptive counseling with significant implications for comprehensive abortion clients' reproductive health needs and outcomes. The poor weaknesses identified suggest a need to address the current post abortion services in order to help women take steps to better protect against subsequent unintended pregnancies. Failure to address these problems will limit progress towards reducing unintended pregnancies and repeat abortions, and will not further Nepal's quest in reducing maternal morbidity and mortality.

The findings can inform future interventions to reduce method discontinuation and need for repeat abortions, promoting quality care that leads to an increased demand and acceptability of

family planning post abortion. Although the results of this analysis are limited in their applicability to other settings, the findings will further aid the integration of safe abortion care with Nepal's family planning services, increase access to high-quality reproductive health services, and improve the reproductive health of Nepalese women.

Conclusion

This study contributes to the existing literature in revealing specific areas of comprehensive abortion care that need to be improved at Paropakar Maternity and Women's Hospital. The provision of informed choice and explanation of the characteristics of available methods need to strengthen so that women are better guaranteed to understand of the methods. Contraception use following abortion has implications of the provision of family planning services, strengthening and recalibrating of the existing family planning delivery system to guarantee improved contraceptive supply, allowing consistent access to IUDs and implants, and adaption of a referral system, will promote adoption of effective methods and combat discontinuation of methods reducing the number of unintended pregnancies among abortion clients [16]. Given the profound implications for health and rights, there is a critical need for well implemented; quality post abortion family planning services in order to address contraceptive needs more effectively and achieve improved reproductive outcomes for abortion clients.

IV. IMPLICATIONS & RECOMMENDATIONS

Public Health Implications

Gaps in the contraceptive counseling within the comprehensive abortion care unit may contribute to the lack of contraceptive adherence and continuation prevalent in Nepal, and to unintended and unwanted pregnancies [12]. This in turn may lead may lead to other induced abortions. This has implications for counseling and provision of abortion and illustrates the need for integration of high quality, comprehensive family planning services with safe abortion services [5, 7, 20]. Interaction between the client and the provider is one of the most important components in the success of the program and as essential component of quality of care. Given the importance of provider-client interactions, high quality service, and informed choice, the CAC unit should focus on improving the family planning components of the comprehensive abortion care services in order to improve maternal and reproductive health.

Recommendations

In order to further evaluate the findings of this research, additional approaches could be implemented to reviewing the quality of PAFP including exit interviews with clients. Exit interviews could be used to collect information about clients' satisfaction with services received and to assess clients' knowledge, attitudes, and behaviors regarding reproductive health and family planning. In depth interviews have been used in other settings, including along the Thailand-Burma border, to identify individual perspectives and opinions of service quality [1].

The contraceptive method mix found in this study, mimicked study results from 2010, in which Depo Provera, injectables, were the most popular contraceptive method accepted at discharge

followed with oral contraceptive pills as the next most common method. As was found in the previous study, this finding serves as an indication of the contraceptive supply and method provision within the CAC unit [16]. While LARC methods were the most efficacious, they were rarely available due to supply chain issues, and thus were infrequently accepted. This further enforces the need to review and adjust the distribution of family planning program supplies within the hospital at large, as was suggested by previously.

A related implication of this analysis is the need to establish a more comprehensive, referral system. Mechanisms for continuity of services were poor according to observations; systems were not in place to remind providers to discuss important areas of health promotion and follow-up. Providers rarely discussed when and where clients should return for follow-up, and there appeared to be few systems in place for referrals. This is consistent in a previous study conducted in 2010 that found that while the comprehensive family planning services are provided in a clinic that is separate from the abortion clinic. As Thapa et al., (2012) discussed although the family planning and comprehensive abortion care clinics are located within the same hospital complex, an effective referral system is not in place. The lack of effective linkages between the existing service delivery system makes it unfeasible to monitor the outcome or assign priority to clients when an abortion client is referred to the family planning clinic. “Consequently, the contraceptive needs of many of the abortion clients may remain unaddressed, going unmet. A comprehensive review of the policy, management, and service delivery issues aimed at identifying better and more effective referral and integration is urgently needed” [16]. The Maternity Hospital’s clinic serves as the lead among all clinics in the government sector, and sets the standard for the care given at other clinics. Therefore, as the

model for other public CAC clinics, Maternity Hospital's services should be recalibrated in such a way that they can be emulated in similar clinics [5, 16].

APPENDIX A: Ipas Counseling Skills Checklist

Date:

Day of Week:

Time of Day:

Location:

Length of Consultation:

Ipas Counseling Skills Checklist

| Skill | Yes | No | Remarks |
|---|-----|----|---------|
| Counseling Communication (throughout) | | | |
| Provider maintains eye contact with the client | | | |
| Uses appropriate tone of voice | | | |
| Exhibits appropriate body language | | | |
| Listens attentively | | | |
| Asks open-ended, closed, and probing questions when necessary | | | |
| Corrects rumors and misinformation | | | |
| Appropriate use of flipchart | | | |
| | | | |
| Establishes Rapport | | | |
| Greets client in friendly way, demonstrating interest and concern | | | |
| Provider introduces herself | | | |
| Offers the client a seat | | | |
| Establishes privacy | | | |
| Assures confidentiality | | | |
| Asks for permission prior to including others in session | | | |
| | | | |
| Assesses Woman's Needs | | | |
| Asks open-ended questions about woman's circumstances and needs | | | |
| Assess the clients' reproductive needs (short, long term, or permanent) | | | |
| Explores factors that led to the need for an abortion | | | |
| If she was using contraception, assesses reasons for failure of method | | | |
| Explains Human Reproduction (if necessary) | | | |
| | | | |
| Determines Desire to Delay or Prevent Pregnancy | | | |
| Determines if the pregnancy was unplanned, unwanted, or wanted | | | |
| Explores woman's current desire to delay or prevent pregnancy | | | |
| Provides information on the health benefits of child spacing | | | |

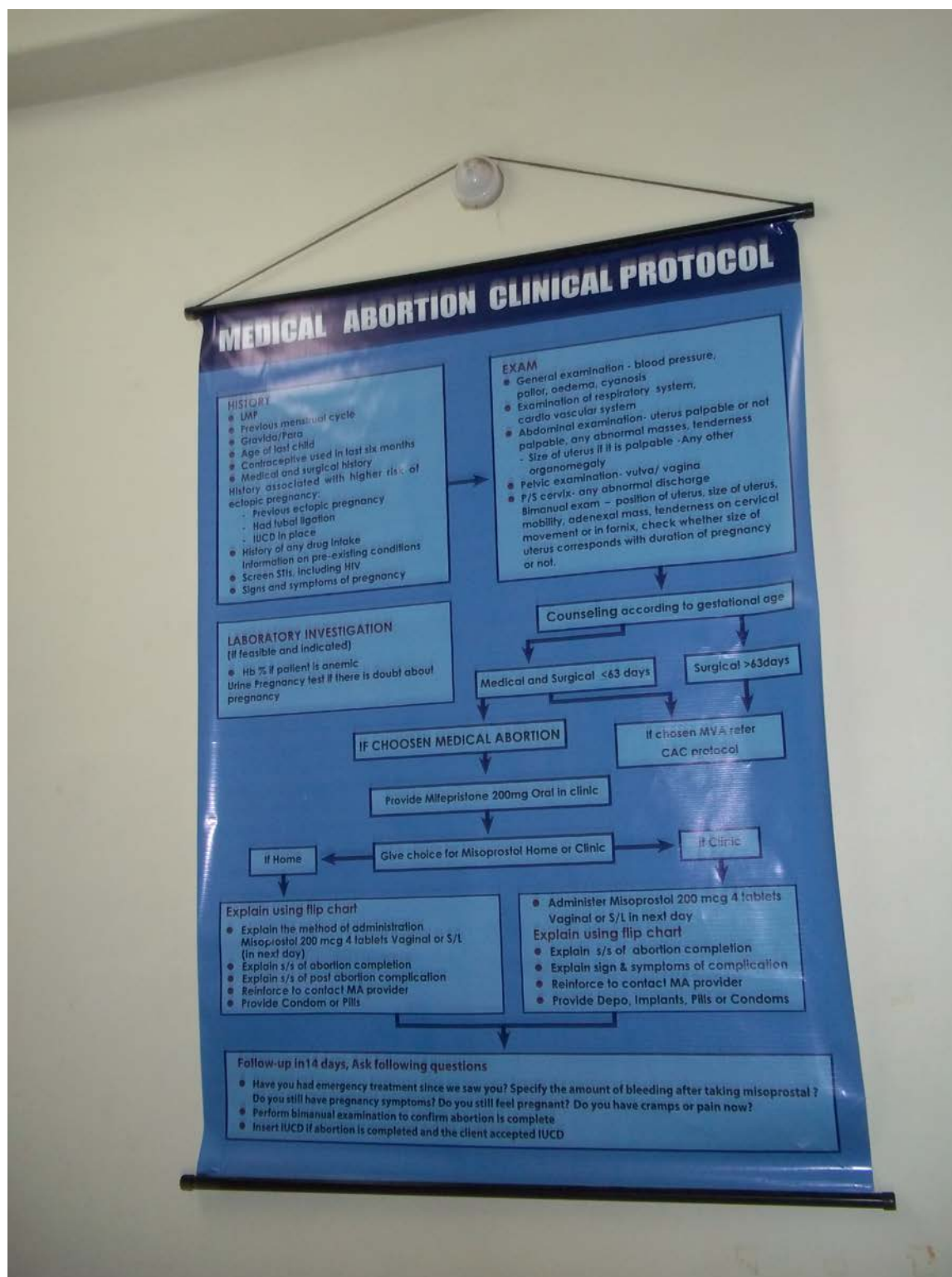
| | | | |
|--|--|--|--|
| Assesses Woman's Individual Situation | | | |
| Assess the clients' reproductive needs (short, long term, or permanent) | | | |
| How does the provider try to assess the client's reproductive needs? | | | |
| Assesses woman's clinical and personal situation | | | |
| Assess clients' FP medical and obstetrical history | | | |
| Assesses what the client knows about family planning methods and asks client what method she is interested in | | | |
| Discusses potential barriers to successful use of contraception and ways to resolve them | | | |
| | | | |
| Explains Characteristics of Available Methods | | | |
| Offers full range of available methods at the facility (and within client's community, if applicable) | | | |
| Tells the client about the methods available based on the clients' previous knowledge of family planning | | | |
| | | | |
| Discusses her medical eligibility for each method, including contraindications | | | |
| Explains characteristics, use, side effects and effectiveness of the methods available | | | |
| Explain the need of F/up visit for the method chosen (if applicable) | | | |
| | | | |
| Helps the Woman Choose Her Method | | | |
| Supports the woman in selecting the best method for her situation | | | |
| Helps the client make a decision by focusing on the potential side effects of the method she is considering | | | |
| Ensures informed choice of method | | | |
| | | | |
| Ensures Understanding of Chosen Method | | | |
| Ensures woman fully understands the method she has chosen | | | |
| Helps her plan for continued use, ensuring she knows where and when to re-supply or change her method if necessary | | | |
| Correctly explains to the client how to use the chosen method and warning signs | | | |
| Asks the client to repeat all instructions in her own words | | | |
| Provides chosen method or referral for method | | | |
| Provides EC and instructions for use as a back-up method, if | | | |

| | | | |
|---|--|--|--|
| available | | | |
| Discuss return visit and follow up with the client: - Where to go for more supplies - Early identification of the problems - When to return to MH or Health Facility | | | |
| Ensure she understands the f/up visit needed for the method chosen | | | |
| Encourages the client to return at any time if they have a question or problem | | | |
| Politely say goodbye to the client and invite them to return again | | | |
| | | | |
| Refers to Other Resources as Needed | | | |
| Manages needs of special populations | | | |
| Has resource lists available to make referrals | | | |
| If unable to offer specialized counseling or services or meet clients' needs, makes referrals to appropriate services | | | |
| | | | |
| METHOD CHOSEN | | | |
| | | | |
| Sterilization Clients | | | |
| Sterilization appointment made? | | | |
| When is the appointment? | | | |
| Explain the informed consent form | | | |
| Tells the client that there are other methods that she can use to meet her reproductive needs | | | |
| Tells the client when to return for routine follow-up | | | |
| Refers the client for method or services | | | |
| Are the services available at the particular time of day/week? | | | |
| | | | |
| TO ASK THE PROVIDER | | | |
| What methods are available (on that day)? | | | |

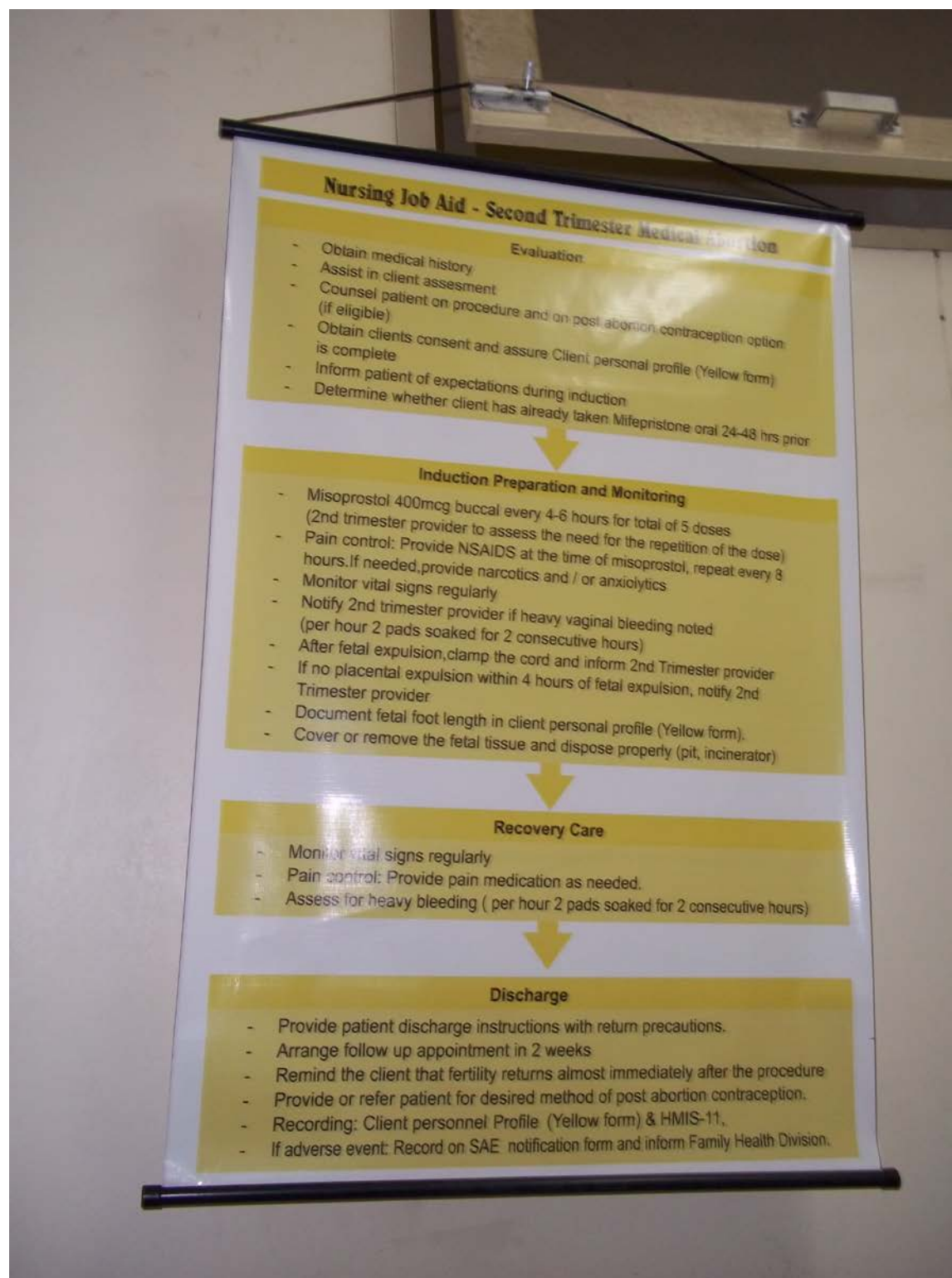
Appendix B: Photos of the Counseling Environment



Counseling Materials: CAC Unit of the Paropakar Maternity and Women's Hospital, Kathmandu, Nepal. Photo taken by primary investigator.



Counseling Materials: CAC Unit of the Paropakar Maternity and Women's Hospital, Kathmandu, Nepal. Photo taken by primary investigator.



Counseling Materials: CAC Unit of the Paropakar Maternity and Women's Hospital, Kathmandu, Nepal. Photo taken by primary investigator.

Doctors Job Aid: Second Trimester Medical Abortion

Evaluation

- Obtain medical history
- Examine and determine gestational age (LMP, abdomen/pelvic exam, ultrasound if available)
- Counsel and consent for medical abortion.
- Pain control: Provide nonsteroidal anti-inflammatories at the time of misoprostol dosing, repeat every 8 hours. If needed, provide narcotics and / or anxiolytics.

Mifepristone and Misoprostol

Mifepristone oral 24 - 48 hours prior to abortion followed by:

- Misoprostol 400mcg buccal
- 18 weeks gestation or less: dose every 4 hours for a total of 5 doses
- Greater than 18 weeks gestation: May use the same dosing as less than 18 weeks or dose every 6 hours for a total of 5 doses.

Other Considerations

Miscellaneous

- If misoprostol related fever, give paracetamol
- If anterior uterine scar consider using 200 mcg misoprostol every 6 hours
- Provide contraception postpartum

No fetal expulsion

- Perform an exam (check for uterine aspirum), then:
- Repeat original misoprostol regimen OR
- Rupture the membranes & continue misoprostol OR
- High dose oxytocin and monitor for uterine distention

No placental expulsion within 4 hrs of fetal expulsion (and not bleeding)

- Perform an exam, then:
- Apply gentle uterine massage OR
- Use misoprostol (strong evidence is weak) OR
- High dose oxytocin
- If still no expulsion, Perform MUA

Counseling Materials: CAC Unit of the Paropakar Maternity and Women's Hospital, Kathmandu, Nepal. Photo taken by primary investigator.

REFERENCES

1. Sullivan, T.M., N. Sophia, and C. Maung, *Using evidence to improve reproductive health quality along the Thailand-Burma border*. Disasters, 2004. **28**(3): p. 255-68.
2. EngenderHealth, *Comprehensive Counseling for Reproductive Health: An Integrated Curriculum Participant's Handbook*. 2003.
3. Curtis, C., D. Huber, and T. Moss-Knight, *Postabortion family planning: addressing the cycle of repeat unintended pregnancy and abortion*. Int Perspect Sex Reprod Health, 2010. **36**(1): p. 44-8.
4. Bank, W. *World Wide Governance Indicators*. Burundi [cited 2011 12 September]; Available from: http://info.worldbank.org/governance/wgi/sc_chart.asp.
5. Thapa, S. and S. Neupane, *Risk factors for repeat abortion in Nepal*. Int J Gynaecol Obstet, 2013. **120**(1): p. 32-6.
6. Samandari, G., et al., *Implementation of legal abortion in Nepal: a model for rapid scale-up of high-quality care*. Reprod Health, 2012. **9**: p. 7.
7. Thapa, S., *Abortion law in Nepal: the road to reform*. Reprod Health Matters, 2004. **12**(24 Suppl): p. 85-94.
8. *Ipas Protecting Women's Health, Advancing Women's Reproductive Rights.*, Ipas/Nepal, Editor. 2008: Nepal. p. 1-2.
9. Ministry of Health and Population (MOHP) [Nepal], W.H.O.W., Center for Research on Environment and H.a.P.A.C. [Nepal], *Unsafe Abortion Nepal Country Profile*. 2006.
10. FPAN, *Family Planning Association of Nepal: Introduction*.
11. Federation, I.P.P., *Nepal: The Family Planning Association of Nepal (FPAN)*
12. (MOHP), N.M.o.H.a.P., *Demographic and Health Survey 2011*, I.M. N.E., and U.S. Agency for International Development, Editor. 2011: Nepal.
13. Project, G.G.R.I., *Access Denied: The Impact of the Global Gag Rule in Nepal*. 2006.
14. Crane, B.B. and J. Dusenberry, *Power and politics in international funding for reproductive health: the US Global Gag Rule*. Reprod Health Matters, 2004. **12**(24): p. 128-37.
15. Andersen, K., et al., *A prospective study of complications from comprehensive abortion care services in Nepal*. BMC Public Health, 2012. **12**: p. 9.
16. Thapa, S., et al., *Women having abortion in urban Nepal: 2005 and 2010 compared*. Kathmandu Univ Med J (KUMJ), 2012. **10**(39): p. 8-13.
17. International, F.H., *Contraceptive method choice in Nepal and Mexico*. 1999.
18. Pathak, L.R. and S. Thapa, *Contraceptive Method Choice in Nepal*.
19. Bajrachrya, L., Basnett, I., Neupane, S., Pratap KC, N., Thapa, S. , *Clients of Abortion Services at the Maternity Hospital: Results of a 2010 Survey*. Valley Research Group, 2010: p. 1-32.
20. Thapa, S., *Abortion and Contraception A Review of Global and Nepal-specific Evidence. Issue brief.* . 2010, Department of Reproductive Health and Research, World Health Organization: Geneva.
21. RamaRao, S. and R. Mohanam, *The quality of family planning programs: concepts, measurements, interventions, and effects*. Stud Fam Plann, 2003. **34**(4): p. 227-48.
22. (MOHP), M.o.H.a.P., *Demographic and Health Survey 2011, Preliminary Report.* , I.M. N.E., and U.S. Agency for International Development, Editor. 2011: Nepal. p. 1-28.

23. Ministry of Health and Population (MOHP) [Nepal], N.E., ICF Macro, and U.S. Agency for International Development, 2011., *Demographic and Health Survey 2011, Preliminary Report*. . 2011: p. 1-28.
24. Amatya, R., et al., *The effect of husband counseling on NORPLANT contraceptive acceptability in Bangladesh*. Contraception, 1994. **50**(3): p. 263-73.
25. Terefe, A. and C.P. Larson, *Modern contraception use in Ethiopia: does involving husbands make a difference?* Am J Public Health, 1993. **83**(11): p. 1567-71.
26. Wang, C.C., et al., *Reducing pregnancy and induced abortion rates in China: family planning with husband participation*. Am J Public Health, 1998. **88**(4): p. 646-8.
27. Shattuck, D., et al., *Encouraging contraceptive uptake by motivating men to communicate about family planning: the Malawi Male Motivator project*. Am J Public Health, 2011. **101**(6): p. 1089-95.
28. Ha, B.T., R. Jayasuriya, and N. Owen, *Increasing male involvement in family planning decision making: trial of a social-cognitive intervention in rural Vietnam*. Health Educ Res, 2005. **20**(5): p. 548-56.
29. Senarath, U. and N.S. Gunawardena, *Women's autonomy in decision making for health care in South Asia*. Asia Pac J Public Health, 2009. **21**(2): p. 137-43.
30. Ha, B.T., R. Jayasuriya, and N. Owen, *Predictors of men's acceptance of modern contraceptive practice: study in rural Vietnam*. Health Educ Behav, 2005. **32**(6): p. 738-50.
31. Huezo, C. and S. Diaz, *Quality of care in family planning: clients' rights and providers' needs*. Adv Contracept, 1993. **9**(2): p. 129-39.
32. Bruce, J., *Fundamental elements of the quality of care: a simple framework*. Stud Fam Plann, 1990. **21**(2): p. 61-91.
33. Bruce, J. and A. Jain, *Improving the quality of care through operations research*. Prog Clin Biol Res, 1991. **371**: p. 259-82.
34. Miller, R., A. Fisher, K. Miller, L. Ndhlovu, B. Maggwa, I. Askew, D. Sanogo, P. Tapsoba *The Situation Analysis Approach to Assessing Family Planning and Reproductive Health Services: A Handbook*. . 1997, New York: The Population Council.
35. Dehlendorf, C., *Assistant Professor in Residence, UCSF*. 2013.
36. EngenderHealth, *Choices in Family Planning: Informed and Voluntary Decision Making. Realizing Rights in Sexual and Reproductive Health Services*, 2003.
37. Ziemann, M. and R.A. Hatcher, *Managing Contraception for Your Pocket 2012-2014* 11 ed. 2012, Atlanta, GA: Bridging the Gap Communications. 166.
38. Johns Hopkins Bloomberg School of Public Health/Center for Communication Programs, W.H.O., and U.S. Agency for International Development, *Family planning: a global handbook for providers*. 2007. 372.
39. Hatcher, R.A., et al., *Contraceptive Technology*. 20 ed. 2011, Atlanta, GA: Arddent Media, Inc.
40. Danielson, R., et al., *Reproductive health counseling for young men: what does it do?* Fam Plann Perspect, 1990. **22**(3): p. 115-21.
41. Madden, T., et al., *Structured contraceptive counseling provided by the Contraceptive CHOICE Project*. Contraception, 2012.
42. Rinehart, W., S. Rudy, and M. Drennan, *GATHER guide to counseling*. Popul Rep J, 1998(48): p. 1-31.

43. Hatcher, R.A., et al., *The Essentials of contraceptive technology: a handbook for clinic staff* 1997, Baltimore, MD: Population Information Program, Johns Hopkins University, School of Public Health.
44. Population, M.o.H.a. and F.H. Division, *National Medical Standard for Reproductive Health, Volume 1: Contraceptive Services*. 4 ed. Vol. 1. 2010, Nepal.
45. Government of Nepal, M.o.H.a.P.M., *Integrated Comprehensive Abortion Care: Participant's Handbook*. 2011, Teku, Nepal: Ipas-Nepal.
46. Langston, A.M., L. Rosario, and C.L. Westhoff, *Structured contraceptive counseling--a randomized controlled trial*. Patient Educ Couns, 2010. **81**(3): p. 362-7.
47. Tripney, J., I. Kwan, and K.S. Bird, *Postabortion family planning counseling and services for women in low-income countries: a systematic review*. Contraception, 2013. **87**(1): p. 17-25.
48. Halpern, V., et al., *Strategies to improve adherence and acceptability of hormonal methods for contraception*. Cochrane Database Syst Rev, 2006(1): p. CD004317.
49. Moos, M.K., N.E. Bartholomew, and K.N. Lohr, *Counseling in the clinical setting to prevent unintended pregnancy: an evidence-based research agenda*. Contraception, 2003. **67**(2): p. 115-32.
50. Ferreira, A.L., et al., *Effectiveness of contraceptive counselling of women following an abortion: a systematic review and meta-analysis*. Eur J Contracept Reprod Health Care, 2009. **14**(1): p. 1-9.
51. Kim, Y.M., et al., *Evaluation of the World Health Organization's family planning decision-making tool: improving health communication in Nicaragua*. Patient Educ Couns, 2007. **66**(2): p. 235-42.
52. Kim, Y.M., et al., *Promoting informed choice: evaluating a decision-making tool for family planning clients and providers in Mexico*. Int Fam Plan Perspect, 2005. **31**(4): p. 162-71.
53. Canto De Cetina, T.E., P. Canto, and M. Ordonez Luna, *Effect of counseling to improve compliance in Mexican women receiving depot-medroxyprogesterone acetate*. Contraception, 2001. **63**(3): p. 143-6.
54. Kim, Y.M., et al., *Improving the quality of service delivery in Nigeria*. Stud Fam Plann, 1992. **23**(2): p. 118-27.
55. Lee, J.K., et al., *The Impact of Contraceptive Counseling in Primary Care on Contraceptive Use*. Journal of General Internal Medicine, 2011. **26**(7): p. 731-736.
56. Halpern, V., et al., *Strategies to improve adherence and acceptability of hormonal methods of contraception*. Cochrane Database Syst Rev, 2011(4): p. CD004317.
57. Shrestha, D.R., A. Shrestha, and J. Ghimire, *Emerging challenges in family planning programme in Nepal*. J Nepal Health Res Counc, 2012. **10**(21): p. 108-12.
58. Leon, F.R., et al., *Providers' compliance with the balanced counseling strategy in Guatemala*. Stud Fam Plann, 2005. **36**(2): p. 117-26.
59. Spector, J.M., et al., *Improving quality of care for maternal and newborn health: prospective pilot study of the WHO safe childbirth checklist program*. PLoS One, 2012. **7**(5): p. e35151.
60. Mertens, T.E., et al., *Observations of sexually transmitted disease consultations in India*. Public Health, 1998. **112**(2): p. 123-8.
61. Mertens, T., et al., *Prevention indicators for evaluating the progress of national AIDS programmes*. AIDS, 1994. **8**(10): p. 1359-69.