CAUSES AND IMPLICATIONS OF INDUCED ABORTION

A Social and Economic Analysis

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Causes and Implications of Induced Abortion in Pakistan:

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Acronyms

ANC	Antenatal care
CBR	Community-based researchers
D&E	Dilation and evacuation
Dai	Untrained midwife
Hakim	Traditional healers
IAS	Induced Abortion Survey
IUD	Intra-uterine device
LHS	Lady Health Supervisors
LHV	Lady Health Visitors
LHW	Lady Health Workers
MSSP	Marie Stopes Society of Pakistan
OPD	Out-patient department
PAC	Post-abortion complications
PDHS	Pakistan Demographic and Health Survey 2006-7
Pirs	Faith-based healers
R/L	Ringer's Lactate
SIUT	Sindh Institute of Urology and Transplant
SRH	Sexual and reproductive health
UARMM	Unsafe abortion-related morbidity and mortality
WIQ	Women's In-depth Questionnaire

Key terms

Stochasticity	Outcomes that result from random variations within the population.
Induced abortion	An abortion that is brought about intentionally, also called an artificial or therapeutic abortion.
Ever-married persons	Women or men who have been married at least once in their lives although their current marital status may not be "married".
Mohalla	Term used to describe informally demarcated neighborhoods or localities in cities or towns. Demarcation can be on the basis of caste, religion, political influence, and so on.
Deh* or *Mouza	The smallest revenue estate in the records of the Revenue Department of Pakistan. Each such unit has a unique name and number and is officially demarcated.
Watta Satta	Customary practice of exchanging brides between families for marriage, reciprocal marriages.

Wani/Swara	*Swara* (Pushto term) is when a girl is given in marriage to a hostile family to compensate for a relative's crime. Like *swara*, *wani* (Punjabi term) is the custom of exchanging girl in marriage to solve a dispute between two parties.
Laparotomy	Surgical incision into the abdominal cavity through the loin or flank.
Tubal ligation	A method of female sterilization in which the fallopian tubes are surgically tied.
Urine d/r test	Urine daily routine test

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EXECUTIVE SUMMARY

This is the final research report for the project 'Economic Analysis of Unsafe Abortion Related Morbidity and Mortality in Pakistan'. The main aim of the project was to carry out an economic analysis of the determinants and consequences of unsafe induced abortion. Specifically, the project intended to probe the significance of demand, supply, agency and behavioural factors leading to unsafe abortion, post-abortion complications (PACs), morbidity and mortality. It also intended to estimate the relative economic costs of unsafe abortion and its alternatives, to households and public health systems. The broader policy context of this research project is premised on the widely-held assumption in the reproductive health (RH) community in Pakistan that unsafe induced abortion is used as an alternative to safe family planning in Pakistan. A rigorous analysis of the factors leading to unsafe abortion related morbidity and mortality, therefore, could lead to more effective policy interventions towards its prevention and mitigation.

The main empirical insights come from the Induced Abortion Survey 2010 (IAS). This community-based survey is the first nation-wide quantitative survey conducted with women on the subject of unsafe abortion-related complications and related health seeking behaviour in Pakistan. Its purpose was to provide empirical data that would enable us to explore our hypotheses vis-à-vis the strategic decision points, for a woman, along the event cycle of an unwanted pregnancy.

Community based researchers (CBRs), who were trusted and knowledgeable professional local women such as social mobilizers, Lady Health Visitors (LHV) and women councillors, were pivotal in the sampling methodology. CBRs were identified with the help of partner non-government organizations (NGOs) that had operations in the geographical regions of interest. A CBR's professional catchment area was treated as a cluster. Each CBR was asked to identify 17 ever-married women with a recent history of induced abortion in their cluster. In addition, 8 ever-married women who did not have a history of an induced abortion but had at least 3 living children were selected for the control group. Enumerator teams also tried to identify families of women who had died as a result of post-abortion complications in each cluster for detailed verbal autopsies. Data were collected from 28 survey sites across five regions of Pakistan. This yielded a total of 699 interviews, 477 from the target and 222 from the control group.

The IAS sample was broadly comparable to nationally representative data in terms of women's marital status. The IAS respondent women were relatively more urbanised – and those classified as rural were also in areas with greater access to public infrastructure – than the national population as a whole. They were also more educated than their counterparts in the Pakistan Demographic and Health Survey (PDHS) 2006-7. This difference between the IAS sample and the PDHS was due to the different sampling methodologies. The reliance on CBRs in the IAS meant that the survey was limited to those areas where reliable and high quality CBRs could be found. This meant that even in districts selected, *a priori*, on the basis that they were in relatively under-developed regions, the IAS sample represented somewhat better off segments.

Unwanted pregnancy plays a crucial role in defining unmet need for family planning, which in turn is a pivotal concept in the policy framework in reproductive health. The IAS confirmed a number of

existing hypotheses about factors that influence fertility preferences. A woman's age, the number of children she has already had, and the sex of previous children, affect whether or not the next pregnancy is wanted. An educated woman, and one with greater agency in other areas of her life, is more likely to declare a pregnancy to be unwanted, other things being equal.

The IAS data allow the computation of the rate of spontaneous and induced abortions in a reference 'population' of pregnancies. Three-fifths of pregnancies that are reported as ending in miscarriages might be attributable to induced abortions.

The probability that a pregnancy was aborted was positively correlated with some expected demographic variables. Pregnancies established at later ages were more likely to be aborted, as were those that were preceded by more previous births. Moreover, the age at pregnancy did not simply act as a proxy for parity, and had an effect on the probability of abortion even after taking parity into account. Abortion was used to influence the gender composition of the family: pregnancies preceded by a high number of male births were more likely to be aborted than those preceded by female births. A woman's level of schooling was also positively correlated with the probability of her pregnancy being aborted.

Nearly nine-tenths (88%) of pregnancies that were ended using an induced abortion were terminated due to unmet need for family planning or contraceptive failure. A majority of abortions were induced in hospitals, private as well as government, and folk methods accounted for a small fraction (1.5%) of all induced abortions. Very few women in the sample reported going to NGO facilities or community health centres.

The rate of post-abortion complications is high at over 30 per cent. Around a third of the PACs can be classified as showing more severe symptoms and very few among these are extreme cases such as organ failure or sepsis. Around one in ten of the induced abortion cases in Pakistan will result in more severe symptoms.

While factors such as gestation period, the facility where the abortion was induced, the service provider and the method of abortion all appeared to influence the rate and severity of complication, the evidence was neither clear-cut nor decisive. Folk methods and traditional birth attendants were associated with higher rates of complications, and NGO and community health facilities appeared to relatively safe. The bulk of the cases, however, went to hospitals and other clinics where the overall rates of complication remained high with few discernible variations.

Most women in the IAS abortion sample decided themselves on where to go for their induced abortion. Prior knowledge of the service provider was the common reason for choosing a particular facility, and explicit concern for safety did not rank highly among reasons for the choice. Even when women relied on someone's advice for their choice of service provider, the most common source of such advice was a friend or neighbour.

Over four-fifths of the women who suffered a PAC were treated for the complaint, and there was a positive correlation between the severity of symptoms and the woman's agency in other areas of her life and the probability of treatment. Women who did not receive treatment did not recover quickly. A majority suffered from their symptoms for several months. The promptness with which treatment was sought seemed to depend partly on the woman's agency, but also on the level of schooling of her husband.

Many of the women who sought treatment went back to the original service provider, who had likely been responsible for the PAC in the first place. The details of the six mortality cases underscore the finding that the most serious complications are associated with the untrained abortion providers and herbal/instrumental methods.

The management of PACs in hospitals consisted of standard packages, or combinations of medicines, which included pain relief, vitamin and mineral supplements, antibiotics, and oxytocin. The discharge medication for most patients consisted of a follow up package of the same medicines. Investigations and procedures ordered by doctors include urine and blood tests, ultrasounds, and D&Es, among others.

The economic cost of induced abortion related morbidity to households was considerably lower than that of unwanted pregnancies taken to term. The difference is partly due to the high costs of deliveries and treating delivery related complications, and partly because despite its high rate of complication induced abortion is not substantially less safe than a delivery. Induced abortion is most costly in terms of out of pocket expenses than the alternative, which is contraceptive use. What households are willing to pay to procure better health chances for women depends on their wealth, but also on a range of issues related to intra-household gender dynamics. Women's agency in other areas (education, marriage decision) leads to greater outlays for maternal health, even after accounting for household wealth.

The notional cost of PACs to the public health budget amounts to around Rs. 1.343 billion, or 1.7 per cent of the total public outlay on health 2009-10. Given that budgets are allocated on the basis of historical patterns, the most likely outcome of a decline in PACs is the ability of a hospital to treat more maternal health cases that might be unrelated to abortion. The impact, therefore, will be some improvement in the availability of public health facilities to non-PAC conditions. Conversely, any increase in PAC cases will not lead to increased budgetary expenditure, but a crowding out of other maternal health cases.

While the reduction of unwanted pregnancies and induced abortions is an inarguable policy objective, some factors such as female education and empowerment which will lead to their eventual reduction may in the interim result in the opposite. The decline in unwanted pregnancies and unsafe abortions may follow a non-linear trajectory as a result of greater education and agency, particularly if contraceptive usage lags behind the articulation of clear fertility preferences by women. Policy interventions that improve conditions of service provision in maternal health across the board are likely to lead to a decline in complication rates related to induced abortion.

Women need information about how to identify safe providers and safe abortion methods. The private sector is the main source of all abortion related services, but these are not necessarily safe and women are mistakenly using unsafe services. Introducing/re-energizing community-based reproductive health education programs: the reliance on other women, possibly in similar age groups is a useful insight into the transmission of knowledge. Public sector services need to offer safe induced abortion services, since women are already using them for induced abortions, and the complication rate is unacceptably high. The main burden of UARMM is on the health of women who suffer high rates of complication, long periods of morbidity and the danger of mortality. Measured against the economic costs and even the health costs of the alternative – that is taking an unwanted pregnancy to term – induced abortion would appear to be a cheaper and safer option.

INTRODUCTION

This is the final research report for the project 'Economic Analysis of Unsafe Abortion Related Morbidity and Mortality in Pakistan'. The main aim of the project was to carry out an economic analysis of the determinants and consequences of unsafe induced abortion. Specifically, the project intended to probe the significance of demand, supply, agency and behavioural factors leading to unsafe abortion, post-abortion complications (PACs) and morbidity and mortality. It also intended to estimate the relative economic costs of unsafe abortion and its alternatives, to households and public health systems. The broader policy context of this research project is premised on the widely-held assumption in the reproductive health (RH) community in Pakistan that unsafe induced abortion is a common alternative to safe family planning in Pakistan. A rigorous analysis of the factors leading to unsafe abortion related morbidity and mortality, therefore, can lead to more effective policy interventions towards its prevention and mitigation.

This report builds upon the concept paper entitled *Measuring the Economic Costs of Unsafe Abortion Related Morbidity and Mortality in Pakistan: A Review of Methodology and Approaches* (Gazdar et al: 2008) and an extensive literature review of abortion-related research in Pakistantitled *Unsafe Abortion-Related Morbidity and Mortality in Pakistan: Findings from a Literature Review* (Khan 2009). Further, it builds upon a review of secondary data pertaining to health, and qualitative fieldwork in communities and hospitals (Gazdar et al 2010). It presents findings from a quantitative study, the Induced Abortion Survey (IAS) that was conducted in 2010 to determine the burden of post abortion complications (PACs) and their outcomes and to identify strategic points of intervention to reduce this burden on patients and service providers.

In this Introduction we summarize the conceptual approach to the subject. Chapter 1 presents the design and methodology of our community-based in-depth women's survey. Chapter 2 describes the sample characteristics, i.e. the characteristics of our respondents and their households. Chapter 3 presents the data on fertility preferences, e.g. contraceptive use/non-use, and wanted vs. unwanted pregnancies. Chapter 4 focuses on the data directly pertaining to induced abortions. Chapter 5 discusses the proportion of post-abortion complications and their details. Chapter 6 presents women's health-seeking behaviour for treatment of these complications. Chapter 7 is an analysis of cost-related data pertaining to the events leading to post-abortion complications, their treatment in health facilities, both public and private, as well as the cost burden to hospitals. The Conclusion will summarize the research findings and highlight their policy implications.

Our preparatory work on this study included the review of various strands of literature (including abortion incidence and costing studies, medical studies, and health economics). The definition of unsafe abortion[1] that is used by the World Health Organization was the one selected for the purposes of our research.

[1] WHO refers to it as "the termination of an unintended pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards or both" (Ahman et al 2000:1).

The Pakistani law states that induced abortion is illegal unless it is for the purpose of saving the woman's life or providing her with necessary treatment before the baby's organs have been formed. The term "necessary" is not further defined in the law. If a woman induces abortion after the limbs or organs of the baby have been formed it is illegal unless it is for the purpose of saving the woman's life.[2] The stipulation regarding limbs and organs of the unborn fetus is based on Islamic law, which states that induced abortion is permitted until the "quickening" of the fetus,which is up to 20 weeks gestation according to medical practice in Pakistan. However, our literature review found that medical practitioners either refuse to perform induce abortions or do so in secret, in the belief that it is against either religious or Pakistani law, or both. Women, on the other hand, are clearly seeking induced abortions and the level of social or family stigma around the practice has not been established through research.

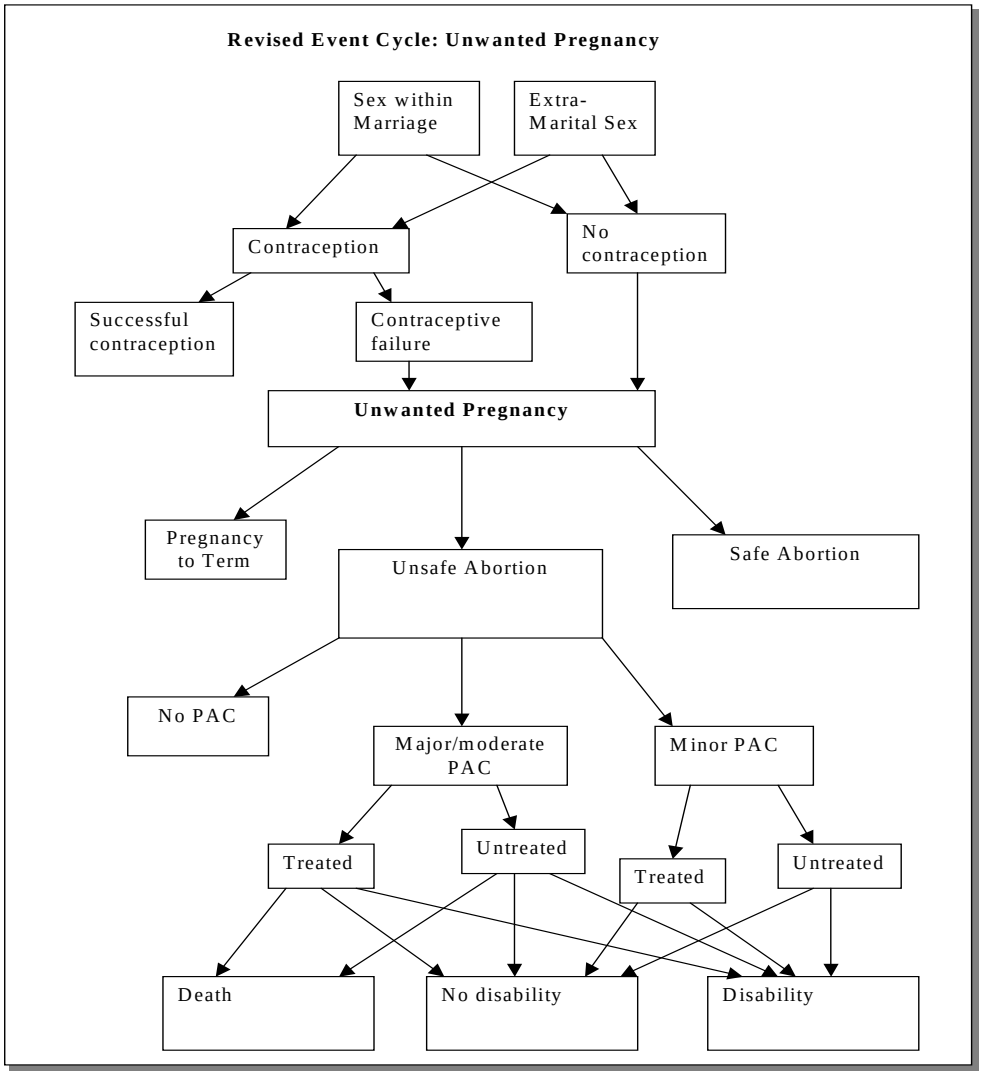
Our preliminary work provided valuable insights into induced abortion practices, unsafe abortions, and barriers to safe abortion in Pakistan. However, we concluded that the available national estimates of unwanted pregnancies and induced abortions would not form the basis for our analytical approach (Gazdar et al, 2008: 31-8). Instead, we found that the key value of economic analysis was in identifying strategic points of intervention for reducing the burden of such morbidity and mortality on women and their households. It was argued that by focusing on choice and agency issues in interpreting the event cycle of unsafe induced abortion, important contributions relevant to wider reproductive health (RH) analysis and advocacy could be made.

The unsafe abortion event cycle, reproduced in Figure 1 below, includes alternatives that can take place at various stages of the event cycle. Contingent events can take place at three different levels: alternatives to the unwanted pregnancy, alternatives to the unsafe abortion, and alternatives to the adequate treatment of PACs.

Qualitative research in the second stage of our project, combined with the analysis of data from the *Pakistan Demographic and Health Survey 2006-7* (PDHS 2006-7) further refined our understanding of the way forward for economic analysis in this area. We have also probed the various segments of the event cycle – through detailed individual interviews, health facility observations, health professional interviews, and analysis of PDHS data.

[2] Pakistan Penal Code (Act XLV of 1860). This law was amended through enactment of a series of laws and ordinances between 2002-2006.

Figure 1: Event Cycle for Unwanted Pregnancy



Through this analysis it has been possible to simplify the event cycle and identify key strategic points of intervention. This is represented diagrammatically in Figure 2 below. The event cycle is presented here as a process in which alternative outcomes in each stage are determined through some combination of agency, choice and stochasticity.

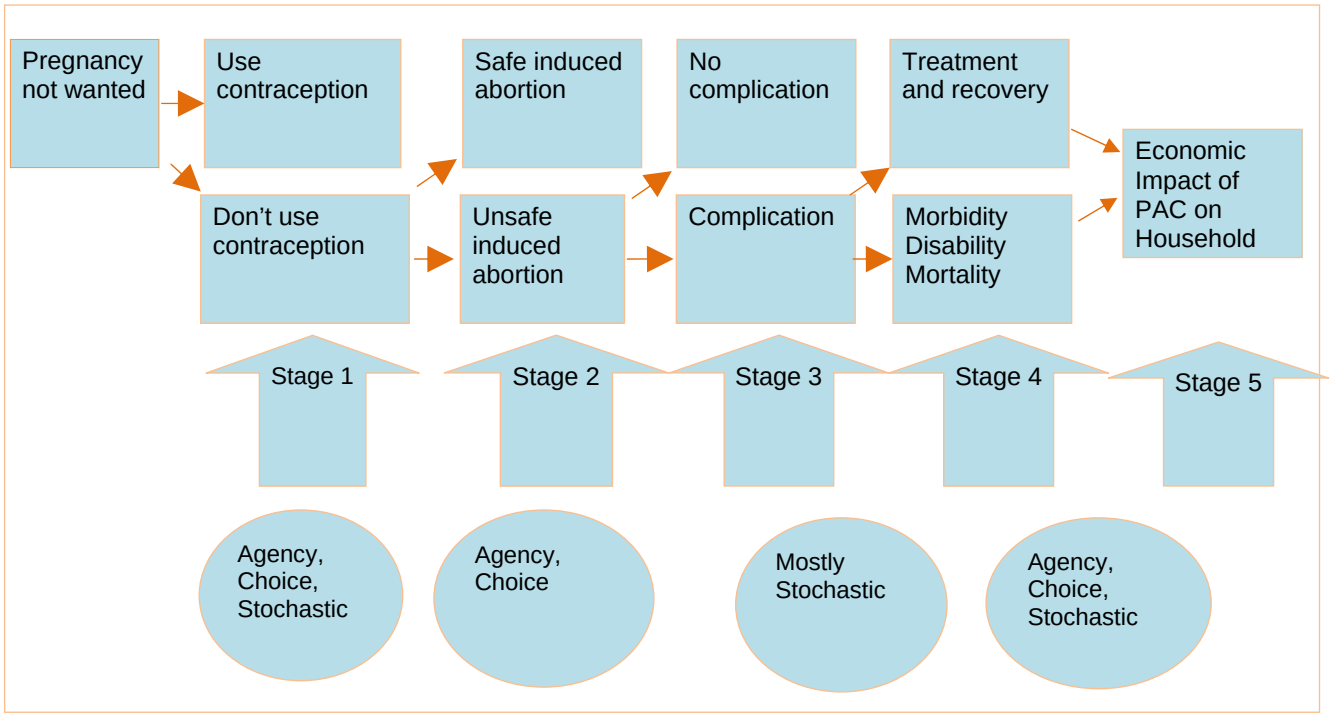
In our concept paper we discussed at length the importance of a woman's agency and its implications for the critical choices that have to be made along the event cycle. For instance, these are the decisions to marry, have sex, use contraception, keep or abort an unwanted pregnancy and whether or not to treat a PAC. These choices are so important to the life and welfare of a woman, that they can be termed "strategic life choices" (Kabeer 1999: 19-20). Women's agency, or ability to exercise such choices, is an important marker of empowerment, as in patriarchal contexts women's power to do so is severely curtailed. The ability to exercise choices requires *access to the resources* (material, human and social) to enable the options, the *agency* (the ability to define one's goal and

act upon them), leading to the *achievements* (outcomes of choice which will further her future ability to make choices). Our concept of agency builds on this theoretical framework.

We explore the dimensions or determinants of a woman's agency through our in-depth women's questionnaire (discussed in detail in Chapter 1). Through this tool we have tried to observe women's access to resources (including employment, financial savings and proximity to health facilities), their freedom of movement (mobility) and communication, their decision-making ability (vis-à-vis marriage, children's wellbeing, reproductive health, etc.), support of natal family and the incidence of domestic violence. For example at the initial stage in the event cycle, prior to pregnancy, there is a decision taken, whether or not to use contraception. The failure to use contraception in the face of an unwanted pregnancy could be explained as a result of limited agency, or choice. There is also the possibility of contraceptive failure, which could be partly stochastic and not an outcome of lack of agency.

The second stage is the decision to induce an abortion to terminate an unwanted pregnancy, and the choice of service provider. Here too, there is a combination of choice and agency. The third stage is the likelihood of a complication developing once a woman has been to an unsafe provider. This is mostly stochastic, since factors that predispose a woman to developing complications are not observable. At the fourth stage, once a complication has occurred there is the decision to seek treatment, and the final outcome of the process is full recovery, morbidity or mortality. This is partly a question of agency and choice (i.e. health-seeking behaviour) and partly a stochastic outcome (the probability of a treated or untreated case ending up with full recovery, morbidity or mortality). The outcomes of these stages will ultimately determine the economic burden of PACs on women and their households, as well as health service providers (Stage 5).

Figure 2: Simplified Unsafe Abortion Event Cycle (for the purpose of identifying key decision points)



Drawing on the simplified event cycle, Box 1 below sets out our hypotheses regarding the agency and choice factors that are likely to be important in determining outcomes at various stages in the event cycle, in particular those leading to unsafe abortions and their complications.

Box 1: Hypotheses Regarding the Unsafe Abortion Event Cycle

Hypotheses	Determinants (variables to be measured)
1. Fertility Preference *If a woman does not want more children in the future or wishes to space births, she may have an induced abortion in case of an unwanted pregnancy*	- age at marriage - marital arrangement - education - employment - socio-economic status - number of living children - sex of living children (preference for son) - husband's/family's preference for more children
2. Use and Effectiveness of Contraception *A woman who wants to cap or space childbirth is more likely to practice contraception*	- desire for more children - access to and availability of contraceptives - knowledge/awareness/misconceptions regarding contraceptives - contraceptive failure - concern for own health - agency to use contraceptives
3. Pregnancy Termination v Pregnancy to Term *A woman's decision to terminate her pregnancy will depend on whether the pregnancy is wanted or not*	- fertility preferences - change in attitude towards pregnancy once the pregnancy is established - husband's/family's decision to abort - agency to terminate pregnancy - access to providers
4. Choice of Provider for Abortion (safe v unsafe) *The decision to go to a particular provider is more complex than a mere consideration of cost and access*	- relationship with provider - knowledge of safe/unsafe providers - access to health facilities/health service providers - cost - mobility - privacy - concern for own health (general health-seeking behaviour) - agency to choose provider
5. Complication or No Complication Post Abortion *Predisposition to PAC is partly unobservable owing to factors such as genetics, general health and conditions at the time the procedure was performed. However a woman's own choices can affect the outcome.*	- skill/qualification of provider - type of abortion procedure - gestational age - age of woman

6. Treatment v No Treatment for PAC *The decision to seek treatment for PAC is, also, an outcome of the interaction of several variables, other than cost and access.*	- severity of complication - agency to make decision - knowledge/exposure - concern for own health - family support - mobility - privacy - access to resources/cost
7. Choice of Provider for Treatment of PAC *The choice of treatment provider at this stage, among other considerations, will reflect a woman's prior experience with induced abortion provider*	- relationship with provider - past experience with provider - privacy - severity of the complication - agency to make decision regarding choice of provider - concern for own health/for safety - mobility - cost - access to safe providers
8. Burden of PAC/PAC Treatment *The cost of treating the PAC and the disruption of household/economic activity, due to a woman's mortality, is a significant burden on the household*	- type/severity of complication - cost of treatment - duration of disability/illness - burden of household activities on the woman - woman's employment status or access to resources - household's pool of resources

We have collected information on the variables identified above from our community-based survey and hospital-based study. The following chapter outlines the study design and research instruments used for data collection.

CHAPTER 1: SURVEY DESIGN AND METHODOLOGY

The purpose of the Induced Abortion Survey (IAS) was to provide reliable empirical data to enable the analysis of the event cycle of UARMM in Pakistan. To recall, the two main sets of questions were:

1. What are the main demand, supply, agency and behavioural determinants of each stage of the overall event cycle of UARMM?

2. What are the relative economic costs of UARMM (to households and health systems) compared to possible alternatives to induced abortion?

The remainder of this chapter describes in detail the survey design and methodology.

A. Community-Based Survey of Women

i. Sample Design

Scope of the Survey

The Induced Abortion Survey is the first multi-community quantitative survey conducted with women on the subject of unsafe abortion-related complications and related health seeking behaviour in Pakistan. Earlier studies have focused on only one community at a time or based on hospital data (Khan, A. 2009). It is important to state here that the purpose of this exercise was not to establish national incidence of induced abortions or of PACs neither was this meant to be a nationally representative survey. Based on assumptions regarding the difficulty of accessing respondents, we wanted to determine whether it was possible to conduct such a study, i.e. to collect a sample of women with induced abortion histories from different parts of the country. Our findings show that it is possible and that with some modifications to the methodology it is possible to carry out a similar study that is nationally representative.

Before actual fieldwork started the survey was pre-tested in three communities; two in Karachi and one in Lahore, between September and November 2009. Fieldwork for this survey commenced on February 17th 2010 and concluded on April 30th 2010 during which data was gathered from 28 survey sites/clusters spread across Sindh, Balochistan and Punjab. 25 ever-married women were interviewed in each cluster; 17 with induced abortion histories and 8 without. In total we interviewed 699 ever-married women across Pakistan. (Initially we had planned to sample from each of the four provinces, however we were forced to drop Khyber Pakhtunkhwa due to security concerns.)

Cluster/Survey Site Distribution

For the purpose of our survey we divided the country into five geographical zones and identified urban and rural clusters within those zones to conduct our survey. Table 1.1 below presents the cluster distribution.

Table 1.1: Geographic Zones and Distribution of Clusters

	Population in 1998	Percent of National Population	Number of Clusters
North-central Punjab	49,817,367	38	8
South Punjab	23,803,923	18	6
North Sindh	15,600,031	12	6
South Sindh	14,839,862	11	6
Balochistan	6,565,885	5	2
Khyber Phakhtunkhwa	20,919,976	16	0
Total	**131,547,044**	**100**	**28**

Target numbers of clusters were assigned to each geographic zone. The provinces of Sindh and Punjab were divided into two zones each to reflect inter-provincial differences in socio-economic conditions. Moreover, the clusters in South Sindh were predominantly in urban areas dominated by Karachi and Hyderabad, while those in North Sindh were relatively more rural areas. The two clusters in Balochistan were both in the eastern floodplains bordering northern Sindh. Out of the 28 clusters altogether, 12 clusters were urban and 16 were peri-urban or rural. The complete list of our survey sites is given in Appendix 2.

Cluster and Sample Selection

Clusters (survey sites) for our study were selected in coordination with organizations as well as individuals who had female community-based contacts in the identified geographic zones. The assistance extended by our partners was invaluable; interviewing so many women from such diverse backgrounds would not have been possible without their support. We were only able to talk to the respondents in such detail because of the relationship of trust that these organizations and individuals have built with the communities over the years. (SeeAppendix I.)

The female community contacts identified through this process (i.e. those who assisted our field teams) will be referred to as community-based researchers (CBRs) from here on. These CBRs included social mobilizers, community health workers, local women councillors, and trained birth attendants. The CBRs were primarily responsible for identifying the respondents we required for our survey (i.e. 17 induced abortion cases and 8 control cases) from their community/catchment area. This strategy was adopted and tested during the survey pre-test phase and proved to be very effective.

The alternative method was to identify PAC patients from hospital records. There were, however, several problems with taking the latter route. The primary reason for not gathering our sample from hospital records was that when we attempted to do so, during pre-testing in government tertiary care hospitals Karachi, we were unable to find an adequate number of respondents because of the fast turnover in hospitals and low number of admitted patients. Moreover the hospital environment, we found, was not conducive to conducting in-depth interviews, particularly with regard to maintaining patient confidentiality. Usually the hospital records were incomplete and hospitals were reluctant to give out patient information. On the other hand when we entered a community with a CBR (our community-based researcher who served as a contact person) the results were much better. The respondents were more at ease since they were in the privacy of their homes and we met them through someone from their community whom the women trusted. The other reason for not tracing

patients through hospitals was that by doing so we would have introduced in our sample a bias against those women who do not go to hospitals for treatment of PAC.

Because we needed to work with a community-based contact, for us a cluster became defined as the geographical area from which one CBR could identify 25 respondents for the survey. At times one cluster included more than one urban neighbourhood/*mohalla*[3] or more than one *mouza*/*deh*[4], in which case the additional neighbourhood or village had to be in close proximity, i.e. within a five kilometre radius.

Justification for Use of Non-Random Sampling Technique

It was not feasible to use a random sampling technique for this survey primarily because there is no list or pool of potential respondents to choose from. Women who have had induced abortions, from safe or unsafe providers, can be said to be part of a hidden population; there are no official records of women with induced abortion histories. Reasons for not using hospital records for selecting our sample have already been discussed in the preceding section.

Since we had in mind a particular group of women we wanted to interview, i.e. women with induced abortion histories, specifically women who have used the services of unsafe providers for the purpose, we had to gather our sample purposively.

Given these limitations and requirements, the sampling technique we used was a mix of 'expert' and 'snowball' sampling methods. Both of these methods are subcategories of purposive sampling. In expert sampling one relies on the expertise or experience of an individual in a particular field. In our case the experts were the CBRs since they knew their areas of residence/work well and had knowledge of women who might have induced abortion histories. Snowball sampling method relies on respondents to identify other respondents from among their acquaintances (snowball/referral technique), thus the sample grows like a snowball. This technique works well in identifying hidden cases, which would otherwise be difficult to identify. Where CBRs did not have a ready list of the required number of respondents they were instructed to use the snowball sampling technique to gather the required sample. Of course there are limitations of using such techniques and we address them in the section on limitations.

Sample Size and Sample Composition

Although the IAS sample was selected non-probabilistically, in order to ensure that our sample size was sufficient it was important for us to get an idea of what the hypothetical size of the total national population of women with induced abortion histories would be, had this population been randomly distributed across the country. To do so we turned to two sources: the *Pakistan Demographic and Health Survey (2006-07)* and a study done by the Population Council to estimate the incidence of induced abortions in Pakistan (Population Council: 2004).

[3] *Mohalla* is term used to describe informally demarcated neighbourhoods or localities in cities or towns.
[4] *Deh* or *Mouza* is the smallest revenue estate in the records of the Revenue Department of Pakistan. Each such unit has a unique name and number and is officially demarcated.

According to the PDHS 2006-07, the total population of Pakistan stood at 166.14 million in 2009[5] and almost a quarter of this population, 41.5 million, were women of reproductive age (i.e. between the age of 15 and 49 years). We can safely assume that more than 95% of these women were currently or ever-married (given that more than 95% of the PDHS sample population of women of reproductive age were also the same). Using the estimate of induced abortion incidence given in the PDHS, i.e. 1.5% of the ever-married women of reproductive age, the total population of women who have had induced abortions (in the five years preceding the survey) comes to 622,500. The Population Council (2004) estimated a higher incidence of 890,000 cases annually in 2002.

We conducted a power analysis for sample size under the hypothetical assumption that random sampling was possible. This yielded a sample size of around 400 for a range of assumptions about the population (using the PDHS figure as a lower bound), for statistical significance of 5% and a confidence interval of 5%. Our final sample is comparable in size with a total of 477 induced abortion cases; i.e. from each of the 28 clusters we interviewed 17 women who had had induced abortions in the past five years.

We also incorporated a control group in our sample, i.e. women who have never had an induced abortion (but might have experienced spontaneous abortions/miscarriages). In each cluster we interviewed eight such women; just over one woman without an induced abortion history for every two women who had induced abortion histories. Therefore in our sample there are 222 respondents from the control group. To ensure that the two groups were comparable we selected those respondents for our control group who had at least three living children. We used this parity since medical studies show that married women who get induced abortions, generally have at least three living children. Unmarried women were excluded from our sample because sex outside of marriage is against the law in Pakistan, punishable by death, and we did not believe we would be able to find enough women in this group to interview. However, our literature review did show that a small proportion of women seeking medical care for post-abortion complications were unmarried, averaging around five to ten percent of caseload (Khan A. 2009).

Given that we have interviewed purposively selected individuals with induced abortions as well as a comparison group (i.e. women who have never had induced abortions) and that this is a retrospective analysis, our study design most closely resembles the case-control methodology of observational research. To this extent, using the convention of the case-control method, we have followed the guiding ratio of control to case sample size of 1:3. Akin to case-control studies, the purpose of this research is not to establish incidence of abortions or associated complications. However case-control studies are generally used in epidemiological research whereas this study presents an economic analysis. Moreover, our analysis is not just limited to exploring causes of unsafe abortions; we also study what happens post-abortion, i.e. post abortion complications and the cost burden of treatment.

For the early stages of the event cycle (whether or not a pregnancy is wanted, and whether or not it is aborted) we needed a sample of pregnancies in order to establish the main correlates of unwanted pregnancies and induced abortions. While a number of possible correlates of induced abortion such as parity and age at pregnancy are pregnancy-specific, others are specific to women (agency, education) and their household characteristics (wealth, remoteness). In order to introduce greater variation in the sample with respect to women and households, it was decided to sample a control group of women with comparable observable socio-economic and life-cycle characteristics to the induced abortion sample. Since aborted pregnancies are

[5] In mid-2007, the population of Pakistan was estimated to be around 160 million and the population growth rate was 1.9% per annum according to the PDHS 2006-07 (NIPS and Macro International 2008: 2). At this rate the population of the country in 2009 can be estimated to be 166.14 million.

conventionally regarded as being 'hidden', we also wanted to compare the induced abortion group (which would yield a sample of pregnancies that were taken to term, those that aborted spontaneously and those that were intentionally aborted) with the control group (where we would only find pregnancies taken to term or those that were spontaneously miscarried) to estimate the extent of underreporting of induced abortions.

For the analysis of later stages of the event cycle, we required a sample of women who reported having had an induced abortion in the reference period. For this analysis there is no control group, and the analysis depends on intra-sample variation within the induced abortion sample.

In addition to these 699 interviews, we also interviewed families of women who had died as a result of post-abortion complications. We did not set a target for these interviews since we were unsure of how many such cases we would actually discover and whether or not relatives of the deceased would be willing to share information given that the subject is rather controversial and concerns the loss of a near one. Nonetheless our field teams inquired in every cluster and we were able to conduct six such interviews. While some of these cases were identified by CBRs, others were identified with the help of our female respondents who were asked to refer our enumerators to such households.

ii. Limitations and Biases

As with all non-probability samples, the inherent variation in our sample could not be estimated. Therefore we cannot claim our sample is representative of the population of all women who have induced abortion histories. [For reasons already discussed it was not feasible for us to select our sample randomly]. In order to try and overcome this limitation we decided to spread our sample geographically rather than select all our respondents from one part of the country.

Since we primarily relied on community-based 'experts' to gather our sample, the sample is likely to be biased by self-selection, i.e. majority of the women in our sample would be acquaintances of the CBR; women the CBR did not know would most likely have not made it to our sample. However our primary concern was not to make our sample cross-sectional and representative, rather we had first to determine whether or not it was possible, in our social context, to gather a large nation-wide sample of women with induced abortion histories who were willing to participate in our survey.

In addition to expert sampling we also relied on snowball sampling therefore there are likely to be correlations in our study which might not apply to the general population. Generally a large sample size can overcome this bias. From the discussion on sample size in the preceding section it is evident that our sample is greater than what would be required even if it were possible to select the sample randomly.

Our sample is inherently skewed towards the middle/lower middle socio-economic strata. This is because of two reasons: (i) we identified communities/clusters for our work with organizations and people involved in improving health conditions in underserved communities; and (ii) our point of entry into the clusters, i.e. community health workers, midwives, social mobilizers etc., are providers who serve women who cannot access costly medical services. This, however, is not necessarily a limitation; rather this enabled us to gather our sample from that section of population where the incidence of PACs is likely to be higher simply because women in this section are more likely (as opposed to women belonging to the upper-middle/upper classes) to use services of unsafe providers.

The IAS belongs to class of surveys that depend on self-reported information about reproductive health issues and morbidity. These surveys suffer from a number of biases that need to be stated upfront. Our sample of pregnancies relied on recalling the entire pregnancy history of the respondent woman. Given the uneven time span covering each women's first and last pregnancy there was bound to be a great deal of variation in the reference time period of sample pregnancies. There were several ways in which the effects of differential recall biases were mitigated. The abortion sample only included women who reported having had an induced abortion in five years preceding the survey. More than 85% of the abortion sample in fact had the reference abortion (induced and spontaneous) during the preceding 36 months (3 years). Most of the questions in our survey relate to the latest abortion, while others are anchored in other important life events (such as marriage and illness) which, prior research shows, are generally easier to remember.

Women are the most comprehensive, and usually the only, source of information regarding their own pregnancies; i.e. their attitudes towards pregnancies as well as health seeking behaviour and complications related to pregnancies. Recall has been the method of choice for recording birth histories, for example, in the PDHS (2006-07), information on the latest birth was recorded first followed by preceding births where it is assumed that more recent events are recalled more accurately. However, unlike the PDHS birth history record the purpose of the IAS pregnancy history record was not to establish the accurate number of live births and deaths in the household, rather it was an exercise to study a woman's pregnancy-related health-seeking behaviour and to determine variations between different groups of women. Therefore in our survey pregnancy data was recorded starting from the first pregnancy. Since significant events are recalled easily, information on abortions, complications, provider of termination and sex of the child is likely to be accurate. Age at the time of pregnancy was anchored in marriage. Data that is likely to be affected by recall problems could relate to antenatal care, expenditure on delivery or abortion, whether or not the pregnancy was wanted after it had been established and gestation of terminated pregnancy. However we triangulated data on the latest terminated pregnancy through detailed probing in a separate section on the latest abortion. Moreover, for the most part, we limit our analysis on pregnancy histories to the preceding 5 years.

It is important to note however, that such an attempt, i.e. a multi-community sample of women for their health seeking behaviour over their entire reproductive lives, has not been made in Pakistan before. Hence, with use and over time some of the underlying assumptions will be revised to further reduce the impact of poor recall.

Finally, there are likely to be unquantifiable biases in the self-reporting of morbidity, service providers, and medical interventions. The IAS was women-centric, in the sense that it was based exclusively upon the perceptions and reports of respondent women about complex health issues. If the women were poorly informed about the precise nature of the morbidity they faced or the exact identity and type of service provider or medical intervention, this incompleteness is carried over into our results. Having noted this bias, however, we are confident that the benefits outweigh the costs. Since our study is quite largely about the behaviour of women and their families, the information and perceptions biases upon which that behaviour is premised is an important aspect of our investigations. The medical costing analysis of this research project relies on information supplied by medical professionals dealing with the PAC caseload, investigations, and medicines, and it complements the women-centric respondent survey.

iii. Fieldwork Strategy and Data Management

To conduct the survey we trained five separate teams of enumerators, one for each geographical zone. Depending on the geographical spread of the zones and scope of work (i.e. number of clusters to be covered) the teams comprised a minimum of four and a maximum of eight female enumerators and two field supervisors (at least one of whom was from the Collective). Appendix 3 gives details of our field staff.

Before commencing work in each zone we held training workshops for enumerators. Five such trainings were organized over the course of data collection, in Karachi, Hyderabad, Sukkur, Multan and Lahore. The purpose of training was to familiarize the team with the questionnaire and its objectives and also to give the enumerators the opportunity to test the questionnaire before going into the field.

Starting with Karachi (South Sindh) in February, we worked our way north and ended data collection in Gujranwala (North Punjab) in April 2010.

The supervisors coordinated with the CBR to ensure only relevant respondents were interviewed and also gathered information regarding the cluster. Field supervisors checked the questionnaires at the end of each day. Any mistakes/inconsistencies were rectified by enumerators the next day, where required, through revisits.

Generally fieldwork proceeded smoothly. In some clusters we faced the issue of enumerator dropout however this did not prove to be detrimental to the progress of fieldwork since we had budgeted for extra time in our fieldwork schedule. In some clusters we could not complete our work but having back-up CBRs mitigated the impact of any setbacks. On some occasions our female field-supervisor, with the assistance of the CBR, identified the required respondents using the snowball technique.

Prior to the commencement of fieldwork in any cluster, the CBRs obtained verbal consent of the women to be interviewed and only then were the respondents approached by the enumerator teams who then obtained written consent before proceeding further. We found that generally our respondents were comfortable talking about their induced abortion experiences. However, in rural Hyderabad women were somewhat reluctant to converse on the issue. At times respondents, after having told the CBR of their induced termination, denied having ever had an induced abortion while being interviewed by enumerators.

iv. Data Entry and Processing

The data entry process commenced while fieldwork was on-going. This not only saved us time but also allowed detection of data recording problems in time for the field teams to be informed. Completed questionnaires were returned to the Collective where they were entered by a team of two dedicated data entry personnel. After data from all clusters was entered, data cleaning and processing began. This process took almost a month and finished in May/June, 2010.

B. Research Tools

i. Cluster Checklist

This checklist was developed to gather information about the clusters where we conducted our study. The format of this checklist is presented in Appendix 4. One purpose of this checklist was to consolidate information regarding our potential respondents in the cluster, which facilitated identification of the right respondents (Table 1 in the checklist).

Tables 3 and 4 gathered information on the primary and secondary occupations of the male and female inhabitants of the cluster as well as the prevalent wage rates. Tables 5 to 8 collected information on the infrastructure and availability (or not) of basic facilities for health, maternal health (including abortion services), education, potable water and sanitation.

This information was essential since infrastructural impediments play an important role in shaping people's health seeking behaviour. For instance if a maternity home or a doctor's clinic does not exist within the vicinity, then women might not have any option but to rely on the services of traditional birth attendants or community midwives for delivery or pregnancy-related complications.

ii. Women's In-depth Questionnaire (WIQ)

During the year preceding the survey (2009/2010) extensive consultations and interviews were conducted with medical professionals, health providers in communities, women with induced abortion histories as well as representatives of local/national non-government organizations working towards improvement of maternal health services (Appendix 5). These meetings were instrumental in developing the questionnaire.

In addition, review and analysis of existing surveys on related subjects greatly aided the development of this survey. These include the *PDHS 2006-07* (National Institute of Population Studies and Macro International Inc: 2008), *Time Use Survey 2007*(Government of Pakistan, Federal Bureau of Statistics: 2009), *WHO Multi-Country Study on Women's Health and Domestic Violence against Women 2005* (WHO: 2005), *Women's Work and Empowerment Questionnaire* (Work Theme Group 2008) and *Drivers of Poverty Reduction 2005* (Gazdar 2005).

This WIQ comprises of several sections developed to gather information on various aspects of women's lives such as their marriage, family, education, employment, socio-economic status, general and pregnancy related health seeking behaviour, use of contraception, circumstances surrounding the pregnancy termination and follow-up treatment for complications if it was required.

This questionnaire is presented in Appendix 6. Following is a brief description of each section.

a) Household Module
This section collected information regarding housing conditions; access to health and other public utilities/services; wealth (including assets, land and livestock ownership) of the household; food security status; household size and composition; and burden of household responsibilities. These household characteristics provided the necessary backdrop against which information on respondents' choices/decisions and behaviour was to be analysed. For instance, to analyse why a respondent chose to go to an untrained birth attendant rather than a doctor we needed to know whether it was because there was no doctor in the vicinity or whether her socio-economic status prevented her from doing so, or whether it was neither one of these factors.

b) Woman's Profile
This brief section gathered information on the age, marital status and parity of the respondent, all of which play an important role in the decisions women make regarding their reproductive health.

c) Employment and Access to Resources
The purpose of this section was to gather information on women's access to financial resources that could be in the form of income/salary from paid work, financial support from natal family or savings. We also wanted to understand how women's financial resources are expended. In particular, we wanted to see whether or not women have access to financial resources and whether they have any control over the flow and use of those resources, since these factors have important implications for women's agency in making decisions regarding their own wellbeing.

d) Husband's Background and Marriage Type

Here we wanted information on the types of marital arrangements among couples (such as a match arranged with woman's consent, arranged without woman's consent, *watta satta*[6], *wani/swara*[7], consanguinity, dowry and bride price. These factors influence the status a woman is given in her family/household and consequently the decisions that are made or that she herself makes regarding her wellbeing.

e) Mobility and Communication

In this section we wanted to know whether or not there are any restrictions on women's mobility. Moreover we wanted to know the frequency of contact/communication between women and their natal families.

f) General Health Seeking Behaviour

Questions in this section were about any chronic or long-term illnesses that the women might have experienced and their related course of action; i.e. whether or not they sought treatment for the illness, if they did then who was the treatment provider, why did they chose to go those providers and whether or not permission for seeking treatment was required. Information on general health-seeking behaviour provides important insights into how women regard their own health. It also allows us to compare and draw parallels between this general behaviour and more specific behaviour related to pregnancy and pregnancy termination.

g) Contraception

This section covered contraception/family planning related to: respondents' knowledge of contraceptives (modern and traditional), ever and current use of contraception, reasons for using/not using and future intent to use. Use/non-use of effective contraception is central to the whole discussion on unwanted pregnancies, hence induced abortions and, therefore, is a very important component of the study.

h) Pregnancy History and Maternal Complications

In this section we collected information regarding all the pregnancies a woman has had in her lifetime. This information included the woman's age at the time of each pregnancy, use of ante-natal care, pregnancy outcome (terminated, still birth, live birth etc.), gestation age when/if pregnancy was terminated, whether or not the pregnancy was wanted or wanted at that time, sex of the child, type of assistance at the time of delivery/pregnancy termination, place of delivery/place of pregnancy termination, and related expenses. We also collected information on any maternal complications that women faced at the time of delivery or pregnancy termination and whether or not they sought treatment for those complications.

This information allowed us to study women's pregnancy-related behaviour and how that differs among women with varying background characteristics. We also wanted to see whether or not women's pregnancy-related health-seeking behaviour differs from induced abortion-related behaviour.

i) Latest Pregnancy Loss

This section investigates the circumstances surrounding pregnancy termination. The questions were administered to respondents who had had induced abortions as well as those who had experienced spontaneous abortions from the control group. They explore whether the respondents got an ultrasound before the abortion, what were the reasons for terminating the pregnancy, who was the provider of the abortion services and what, if any, were the complications that they faced after the abortion. Women were also asked to

[6] Customary practice of exchanging brides between families for marriage. The term is in Punjabi.

[7] *Swara*and *wani* both meanthe practice of giving a girl in marriage to a hostile family to compensate for a relative's crime or to solve a dispute between two parties.

tell us whose advice they sought, if at all, at the time of abortion and what were their reasons for choosing a particular provider.

j) , k), and l) Treatment of PACs

If women experienced PACs, they were asked whether or not they sought treatment for their problems. If they did then they were asked questions regarding the provider and the treatment. In our preliminary fieldwork we discovered that women went through several treatment cycles, not just one. Often these women went back to the same unsafe providers. To track women's health seeking behaviour in such situations we incorporated three treatment cycles in our questionnaire, each one probing the choice of provider, treatment procedure, treatment expenses as well as the burden of treatment expenditure. To predict future health-seeking behaviour, women were also asked if they would return to those providers if they experienced pregnancy-related complications in the future.

m) Impact of PACs on Work

Women who experienced PACs were asked to report the impact these complications (and their treatment) had on their household work as well as any paid work, if applicable. Impact was measured in terms of inability to do work for a certain period of time, burden of additional work on other household members and loss of income.

n) Family Planning Counselling

Effective family planning counselling can be an important supply-side intervention to mitigate unwanted pregnancies. Through this component of the questionnaire we wanted to determine if the respondents had ever received such counselling at any stage during the termination and PAC treatment process and who gave them the advice.

o) Fertility Preference/Desire for More Children

This section explored whether or not women wanted more children in the future, and if they were pregnant at the time of the interview what were their feelings towards their pregnancy. Reasons for wanting or not wanting more children were explored along with reasons for not using contraception among women who desired to limit family size or space their next birth.

p) Domestic Violence

Domestic violence has been shown to impact not only women's physical health but also their psychological wellbeing. Results of a recent multi-country study by WHO show that women who had ever experienced abuse at the hands of their partner were 'significantly more likely to report poor or very poor health' compared to women who had never experienced such violence (WHO: 2005). Motivated by these findings we wanted to explore the link, if any, between domestic violence and women's reproductive health seeking tendencies in the context of Pakistan. Women were asked to report if they had faced physical or verbal abuse after, and even before, marriage as well as the level of severity of violence. The issue of pregnancy-related violence was also explored.

q) Maternal Deaths

This section was incorporated for two reasons; (i) we wanted to determine whether women considered maternal complications to be a threat to their lives at all; and (ii) we wanted to identify cases of women who had died due to abortion-related complications.

r) Decisions Regarding Children's Wellbeing

The purpose of this section was to determine how significant women were in the decisions related to their children's education, health and nutrition. This information would give us important insights into a woman's general decision-making ability.

s) Exposure to Media and Social Networking

In this final section we tried to gather information on women's exposure to media by asking them to report how often they saw television, read newspapers or listened to the radio. Moreover they were asked to report if they were members of any social, professional or political groups or associations. The intuition, informed by prior research, was that exposure to media and social networks are likely to enhance women's general knowledge/awareness and hence facilitate their access to resources.

iii. Deceased Women's Questionnaire

The Deceased Women's Questionnaire is a modified version of verbal autopsy instruments which are commonly used to determine the cause of death. Our questionnaire was designed to be administered to the female household members of women who have died because of post-abortion complications. In almost all cases the respondent was a relative of the deceased and was present at the time of death.

In all we found six cases of women who had died due to PACs. Some of the respondents for this questionnaire were identified by the CBRs while others were identified by women who were interviewed for the WIQ.

The questionnaire followed the format of the WIQ, with more pre-coded and very few open-ended questions, but was very brief. Basic household information was collected the same way as it was for WIQ. The respondents were asked to report what they knew about the induced abortion; i.e. the reasons her relative decided to get an induced abortion, the provider, the procedure and the associated cost. Further probing was conducted regarding the complications after the abortion and whether or not treatment was sought and from whom. Finally the respondents were also asked to report the time gap between induced abortion and death.

CHAPTER 2: SAMPLE CHARACTERISTICS

The sampling method described in Chapter 1 focused on ever-married women who either had a history of induced abortions, or those in the control group who never had an abortion. A CBR was responsible for identifying 17 women for the abortion sample and another eight women for the control group from her cluster. In the end this yielded a sample of 699 women who were fielded a detailed women's questionnaire, including a household module, a full pregnancy history table, and a number sections soliciting information about the woman, her individual situation and agency, and details of her induced abortion.

The abortion sample consisted of 477 women with the control group accounting for 222 women (Table 2.1). In all, these 699 women had a total of 4,120 pregnancies, or on average just less than 6 pregnancies per woman. Women in the control group had a lower number of pregnancies on average than the abortion sample. In the abortion sample there was a total of 2,918 pregnancies of which 611 had ended in an induced abortion. On average each woman in the abortion sample had 1.3 induced abortions. The analysis of fertility preferences, induced abortions, complications, health-seeking behaviour and household costs of induced abortion uses data from pregnancy histories as well as modules on women's individual characteristics. The unit of observation is the individual woman for some questions, eg where the focus is on her individual agency, her last induced abortion, and details of abortion-related complications. On other issues, such as the correlates of a terminated pregnancy, the relevant point of analysis is the pregnancy. The sample, therefore, consists of 699 women or 4,120 pregnancies depending on the context.

Table 2.1: Induced Abortion Survey: women and pregnancies

	Women	Pregnancies	Induced abortions	Pregnancy per woman	Induced abortion per woman
Abortion sample	477	2,918	611	6.1	1.3
Control group	222	1,202		5.4	
Total	699	4,120	611	5.9	

The region and urban-rural distribution of the sample is described in Table 2.2. The total number of respondent women or households varies between regions and urban-rural segments in line with the number of clusters. The target of 25 respondent women per cluster was met in nearly all cases. As explained in Chapter 1 above, the sampling method was not designed to obtain national statistical representation. There was a bias in favour of those regions and segments where effective CBRs were available.

Table 2.2: Distribution of sample by region and urban-rural

	Urban	Rural	Total
South Punjab	50	100	150
North Punjab	101	100	201
South Sindh	125	75	200
North Sindh	25	73	98
Balochsitan	0	50	50
Total	301	398	699

A comparison between household conditions, socio-economic characteristics of women and fertility behaviour of the Induced Abortion Survey (IAS) sample and the nationally representative PDHS 2006-2007 serves to highlight some of the limitations of the former in terms of national representation. Housing conditions (Table 2.3) were generally better in the IAS than the PDHS. More households in the IAS sample had flush latrines, electricity and gas connections compared to the PDHS. Even the rural segment of the IAS sample had a relatively high coverage of gas connections, suggesting that in reality many of the areas classified as rural were, in effect, peri-urban.

Table 2.3: Comparison between Induced Abortion Survey and PDHS samples: housing conditions

	Induced Abortion Survey			PDHS 2006-7		
	Urban	Rural	All	Urban	Rural	All
Water supply or boring	95.3	79.1	86.1	87.7	84.1	85.4
Flush latrine	90.0	70.1	78.7	78.7	36.6	51.0
Electricity	100.0	97.7	98.7	98.3	84.4	89.2
Durable material roof	80.1	62.8	70.2	80.6	54.0	63.1
Natural gas for cooking fuel	95.0	47.5	68.0	70.0	3.9	26.5

The age distribution of women in the IAS sample was more skewed in favour of the 30 to 39 age group compared to the PDHS. This was an outcome of the different sampling methods. The IAS sample was constructed around ever-married women who had an induced abortion within the five years preceding the survey, whereas the PDHS sampled households and then identified women within these households as respondents. Within the IAS sample there were significantly more women age 25-29 years in the control group compared with the abortion sample.

There was broad similarity between the two samples in terms of marital status (Table 2.4). The control group was almost identical to the PDHS sample. The IAS sample women were better educated than the PDHS sample, and the abortion and control groups were broadly similar in this respect. This strengthens the finding above with respect to housing conditions that the IAS sample is somewhat better off than the population as a whole.

Table 2.4: Comparison between Induced Abortion Survey and PDHS samples: distribution of ever married women aged 15-49 by selected characteristics

	Induced Abortion Survey			PDHS
	Abortion sample	Control group	All	
Age group (years)				
15-19	4.0	0.7	2.9	5.7
20-24	13.5	13.3	13.4	15.0
25-29	19.9	27.3	22.3	20.0
30-34	29.6	24.4	27.9	17.8
35-39	24.9	24.4	24.7	16.5
40-44	3.1	2.6	2.9	13.0
45-49	5.0	7.4	5.8	12.1
Marital status				
Married	97.9	95.6	97.2	95.3
Divorced	0.3		0.2	0.5
Separated	0.9	1.1	0.9	1.0
Widowed	0.9	3.3	1.6	3.2
Education				
No education	48.8	48.3	48.6	65.0
Primary	20.4	23.4	21.4	14.2
Middle	11.0	10.0	10.7	6.3
Secondary	12.2	8.2	10.9	8.1
Higher	7.7	10.0	8.4	6.4

Differences in sampling methodology – i.e. the selection of ever-married women in the IAS compared with households in the PDHS – accounts for the distinct fertility profiles of the two samples (Table 2.5). The abortion sample, in particular, was biased in favour of women with higher numbers of children ever born. By contrast, over 12 per cent of the women in the PDHS sample did not have any children. The average number of children per woman varied accordingly between the IAS and the PDHS sample.

Table 2.5: Comparison between Induced Abortion Survey and PDHS samples: distribution of women by number of children ever born

	Induced Abortion Survey			PDHS
	Abortion sample	Control group	All	
0	0.0	2.5	1.7	12.1
1	0.5	5.2	3.7	11.5
2	1.8	12.2	8.9	13.2
3	29.7	16.4	20.6	12.6
4	24.3	16.8	19.2	12.5
5	14.0	18.0	16.7	10.5
6	12.2	11.5	11.7	8.4
7	8.1	7.8	7.9	7.4
8	6.8	3.1	4.3	4.9
9	1.8	2.1	2.0	3.0
10+	0.5	2.7	2.0	3.8
Mean number of children ever born	4.53	4.70	4.58	3.88

The remainder of this chapter compares the characteristics of women and their households between the abortion sample and the control group within the IAS.

While knowledge of contraceptive methods was found to be almost universal in both samples (Table 2.6), there was a stark difference in the current use of contraceptives by currently married women; 62% in the IAS sample compared to 30% in the PDHS sample (Table 2.7). Current use of contraception was found to be lower in the control group (51%) than in the abortion sample (64%). Higher use of contraception in the abortion sample is indicative of the desire to limit/space childbirth.

Table 2.6: Knowledge of contraceptive methods among ever-married women age 15-49

	Induced Abortion Sample Survey			PDHS
Knowledge of methods	Abortion Sample	Control Group	All	
No knowledge of any method	1.7	4.8	2.7	4.3
Knowledge of at least one method	98.3	95.2	97.3	95.7
Total percent	100.0	100.0	100.0	100.0

Table 2.7: Current use of contraception by currently married women age 15-49

	Induced Abortion Sample Survey			PDHS
	Abortion Sample	Control Group	All	
Users	63.8	51.3	62.0	29.6
Non-users	36.2	48.7	38.0	70.4

Table 2.8: Reasons for non-use of contraception

	Induced Abortion Sample Survey			
Reasons for not using contraception	Abortion Sample	Control Group	All	PDHS
Fertility related	50.4	39.8	47.0	30.0
Method-related	6.3	6.4	6.3	12.1
Opposition to use	34.4	42.1	36.9	23.0
Knowledge-related	1.2	1.5	1.3	3.0
Up to God				30.6
Never thought about it	7.0	6.0	6.7	
Others	0.7	4.2	1.8	0.9
Missing				0.4
	100.0	100.0	100.0	100.0

While the most significant reasons for non-use (Table 2.8) in the IAS sample were fertility related (47%), women in the PDHS sample reported that getting pregnant was 'up to God' as the primary reason for not using any method (31%). Opposition to use (by husband, others) is seen to be an important concern in both samples and within the IAS sample women in the control group seem to face greater opposition to use, which indicates lower agency in decision-making regarding contraception use.

A high proportion of the women in IAS – in both the abortion sample and the control group – had early marriages. Over a quarter were married at the age of fifteen or younger (Table 2.9). Nine-tenths of the sample, and of each sub-sample, had been married by the age of 22 years. In the age groups in between, more of the abortion sample women had married somewhat younger than their control group counterparts.

Table 2.9: Distribution of women by age at marriage

Age Groups	Abortion sample	Control group	All
15 or below	27.3	28.2	27.6
16 to 18	37.2	31.8	35.5
18 to 22	25.8	30.0	27.2
23 or above	9.7	10.0	9.8
Total	100.0	100.0	100.0

The IAS asked a range of questions relating to the individual agency of the respondent women. These included questions about their participation in decision-making with respect to marriage, paid work, mobility out of the home, decision-making with regard to children's welfare, and vulnerability to domestic verbal and physical abuse.

Table 2.10: Distribution of women by agency in marriage decision

	Abortion sample	Control group	All
Forced	2.3	0.9	1.9
Watta Satta	13.6	12.2	13.2
Males decided	39.0	40.1	39.3
Mother included in decision	8.8	14.9	10.7
Consulted	26.2	23.0	25.2
Decided herself	10.1	9.0	9.7
Total	100.0	100.0	100.0

Only two per cent of the women in the IAS sample reported that they were in forced marriages, and only ten per cent said that they made their own decision on the choice of marriage partner (Table 2.7). Most women were in intermediate categories such as *watta satta*, marriages where only men in their families decided, or where their mothers were consulted, or where others decided but they themselves were consulted. There were no major differences between the abortion sample and the control group in this regard. Just over a third of the sample women reported ever having done paid work (Table 2.8) and there was no difference between the abortion sample and the control group in this regard. Less than half of the women respondents had been out grocery shopping in the six months preceding the survey, and visiting the homes of friends and relatives was the most common form of outing, more common than visiting neighbours. Around a tenth of the women had not even made such a social visit in six months. There were no clear differences between the abortion sample and the control group in terms of mobility, except that more women from among the former reported going out for functional reasons such as health and grocery shopping.

Table 2.11: Work and mobility - distribution of women by activity done

	Abortion sample	Control group	All
Ever done paid work	36.9	36.0	36.6
Visited the following in the last six months:			
Health facility	69.0	61.3	66.5
Market for grocery shopping	50.5	42.8	48.1
Shopping for person effects	69.2	68.9	69.1
Friends and relatives	90.8	91.4	91.0
Neighbours	80.3	82.4	81.0
Park/picnic	17.4	17.6	17.5

More than 50% of the women in the IAS sample had had their first pregnancy by the age of 18 (Table 2.12); the proportion being higher in the abortion group (almost 56%) compared to the control group. The proportion of women who had their first pregnancy between the ages of 19 and 24 was seen to be higher among women in the control group (44%) than among those in the abortion group (39%).

Table 2.12: Age at first pregnancy

Age Groups	Abortion Group	Control Group	Total
15 years and younger	19.3	17.6	18.7
16 to 18 years	36.5	31.5	34.9
19 to 21 years	27.7	29.3	28.2
22 to 24 years	10.9	14.4	12.0
25 years and older	5.7	7.2	6.2
Total Number	477	222	699

Nearly 80% of the all pregnancies (n=4,120) occurring to our sample population were wanted and the proportion of wanted pregnancies was greater in the control than in the abortion group (89% versus 75%); even the proportion of mistimed pregnancies was higher in abortion group (Table 2.13).

Table 2.13: Wanted/Unwanted Pregnancies

	All Pregnancies %			Pregnancies (%) in the last 5 years		
	Abortion group	Control group	Total	Abortion Group	Control Group	Total
Wanted a child at that time	75.3	89.4	79.4	54.1	83.3	62.0
Wanted a child but later	14.4	8.3	12.6	23.5	11.1	20.2
Did not want another child	10.3	2.3	8.0	22.4	5.6	17.8
Total Number	2918	1202	4120	1049	395	1444

The average space between two pregnancies was around 2.2 years (standard deviation 1.65) with a minimum interval of 0 and a maximum of 15 years. The most commonly reported interval between any two pregnancies was 1 to 2 years (Table 2.14) and did not seem to change much for later pregnancies.

Overall, 47% of the women in the IAS sample reported making at least 3 antenatal care (ANC) visits for all of their pregnancies (Table 2.15) and the average number of ANC visits is 3.7 (standard deviation 6.35). The percentage of women making at least 3 ANC visits is slightly higher for the latest pregnancy.

Table 2.14 Intervals between pregnancies

	Consecutive Pregnancies						
Interval between two consecutive pregnancies in years	1st and 2nd pregnancy	2nd and 3rd pregnancy	3rd and 4th pregnancy	4th and 5th pregnancy	5th and 6th pregnancy	6th and 7th	7th and 8th or beyond
0	3.0	2.1	4.3	2.6	3.2	4.4	4.7
1	33.1	30.1	30.2	34.3	33.6	26.9	31.9
2	41.3	38.7	39.8	33.0	33.3	42.7	36.4
3	13.0	15.4	14.5	15.1	9.6	13.7	12.9
4	6.2	6.8	5.5	4.5	7.8	4.0	5.8
5	1.7	3.6	2.4	4.5	3.5	3.1	2.8
6	0.9	1.6	1.2	2.1	2.0	3.1	2.6
7	0.0	0.9	0.7	1.3	2.9		0.3
8	0.1	0.4	0.3	0.6	1.7	0.4	1.1
9	0.3	0.3	0.3	0.4	0.3	0.4	0.3
10 +	0.3	0.0	0.9	1.5	2.0	1.3	1.2
Number of pregnancies	692	674	586	469	345	227	653

Table 2.15: Antenatal care visits

Number of ANC visits	All Pregnancies	First Pregnancy	Last Pregnancy
0	23.4	21.1	17.7
1	15.4	10.3	32.5
2	14.3	15.3	16.5
3	10.9	11.6	9.6
4	7.3	8.8	4.1
5	6.4	6.6	4.9
6	3.4	4.0	1.6
7	3.0	3.8	1.3
8	2.9	2.2	1.9
9	9.4	10.9	7.1
10	1.5	1.6	1.0
>10	1.8	1.8	22
Don't remember	0.3	0.3	3
Women who made at least 3 ANC visits	46.6	51.3	53.5

For pregnancies taken to term in the 5 years preceding the survey (i.e. excluding induced and spontaneous abortions), more women in the control group made at least 3 ANC visits (Table 2.16). The inclination towards 'safe' health service providers shows higher concern for pregnancy related-health among the control group (Table 2.17). This is also reflected in the choice of provider for delivery (Table 2.18),as a greater proportion of women in the control group chose 'safe' providers.

Table 2.16: Number of ANC visits for pregnancies taken to term in the last 5 years

ANC Visits	Abortion Group	Control Group	Total
0	19.2	14.4	17.4
1	10.1	8.4	9.5
2	13.7	13.5	13.6
3	11.6	16.2	13.3
4	8.2	8.7	8.4
5	8.2	7.2	7.8
6	3.0	4.2	3.5
7	5.0	3.0	4.2
8	4.1	3.3	3.8
9	12.6	16.5	14.1
10	1.4	2.1	1.7
10+	2.5	2.4	2.5
>=3	56.6	63.5	59.2
Number of Pregnancies	562	334	896

In terms of where women went for ANC, 57% of the whole sample relied on private hospitals and clinics (Table 2.17). A greater proportion of women in the control group used services of government hospitals (32% in the control group versus 25% in the abortion group). More women in the abortion group relied on traditional birth attendants (*dais*) for ANC (9.1%) compared to the control group (5.3%).

Table 2.17: Place of ANC for pregnancies taken to term in the last 5 years

Place of ANC	Abortion Group	Control Group	Total
Government Hospital	25.1	31.9	27.7
BHU/Maternal Child Health Centre	7.5	7.4	7.5
Private Hospital/Clinic	58.1	55.4	57.1
Other	0.2		0.1
Dai's home	9.1	5.3	7.6

For pregnancies taken to term in the five years preceding the survey, nearly 42% of the sample said they relied on doctors whereas 44% relied on*dais* (Table 2.18). A slightly greater proportion of women in the abortion group relied on *dais* (46%) compared to the control group (41%). Similarly among women in the control group, as compared to the abortion group, doctors, nurses, LHVs and trained birth attendants assisted more births.

Table 2.18: Assistance at the time of delivery for pregnancies taken to term in the last 5 years

Assistance at the time of delivery	Abortion Group %	Control Group %	Total %
Doctor	39.9	44.5	41.6
Nurse/TBA/LHV	12.0	14.2	12.8
Dai	45.8	41.0	44.0
LHW	1.3		0.8
No one	1.0	0.3	0.7
Number of Pregnancies (N)	601	344	945

While recording their pregnancy histories, women in the IAS sample were also asked to recall any complications they had experienced during or right after delivery or abortion. Table 2.19 presents the findings for complications related to live births, and spontaneous and induced abortions in the five years preceding the survey. Pregnancies taken to term (including live and still births) were associated with the lowest proportion of maternal complications (20%) and spontaneous abortions with the highest (43%). The reported instances of induced abortion complications (33%) were lower than spontaneous abortions. This could be due to the fact that a miscarriage itself was seen to be a complication or the result of a complication by the respondents.

Table 2.19: Incidence of pregnancy complications in the 5 years preceding the survey

	Pregnancies taken to term		Spontaneous terminations		Induced abortions	
Complications after delivery/ termination	Number	%	Number	%	Number	%
Yes	171	20.0	46	43.4	156	32.7
No	686	80.0	60	56.6	323	67.3
Total	857	100.0	106	100.0	480	100.0

Irrespective of the pregnancy outcome, at least 80% of the women who reported having experienced complications said they sought treatment for the complication (Table 2.20).

Table 2.20: Treatment sought for complications

	Pregnancies taken to term		Spontaneous terminations		Induced abortions	
Treatment sought	Number	%	Number	%	Number	%
Yes	137	80.6	40	85.1	131	84.0
No	33	19.4	6	14.9	25	16.0
Total	170	100.0	46	100.0	156	100.0

Information on household characteristics, conditions and consumption patterns was collected to rank households by some proxy of income, wealth or material wellbeing. Dedicated household surveys field detailed consumption and asset modules in order to construct money values for income, consumption or wealth. These modules are typically lengthy and complex to administer and would have diverted the resources of the present survey from its core area of interest. It was possible, however, to gather information on key household

characteristics and to use this indirectly. There was little difference between the abortion sample and the control group in terms of housing conditions (Table 2.21).

Table 2.21: Housing conditions: induced abortion case and control group

	Abortion sample	Control group	All
Water supply or boring	86.2	84.7	85.8
Flush latrine	79.6	80.0	79.7
Electricity	98.8	98.8	98.8
Durable material roof	70.4	71.2	70.6
Natural gas for cooking fuel	67.7	71.2	68.6

Diversity and variety in diet was used as a proxy for income or consumption. Respondents were asked if the household diet had included particular food items such as flour, rice, lentils, cooking fat, vegetables, milk, and meat in the period preceding the survey. Based on the distribution of food items consumed it was possible to classify households according to their diversity and variety in diet over the reference period. Nearly all households commonly consumed flour, cooking oil, milk, sugar, onions and tomatoes, which were then treated as staple items. The abortion sample appeared to be a little better off than the control group in terms of meat and other non-staple consumption (Table 2.22).

Table 2.22: Food consumption - distribution of households by food items consumed during last 7 days

	Abortion sample	Control group	All
Non-staple eaten at least 4 days	87.0	82.4	85.8
Non-staple eaten every day	59.3	56.5	58.5
Meat eaten at least once	65.0	61.5	64.1

The IAS sample was broadly comparable to nationally representative data in terms of women's marital status. The IAS respondent women were relatively more urbanised – and those classified as rural were also in areas with greater access to public infrastructure – than the national population as a whole. They were also slightly more educated than their counterparts in the PDHS. This difference between the IAS sample and the PDHS was likely due to the different sampling methodologies. The reliance on CBRs in the IAS meant that the survey was limited to those areas where reliable and high quality CBRs could be found. This meant that even in districts selected, *a priori*, on the basis that they were in relatively under-developed regions, the IAS sample represented somewhat better off segments.

The sampling methodology for the IAS was purposive in identifying a large number of induced abortion cases, in which it has proven to be successful. Since the present study did not intend, from the very outset, to produce statistical data on the incidence of induced abortion the lack of correspondence with national data is not necessarily a serious handicap. However, it needs to be noted as a qualification.

The fact that there appears to be a great deal of variation within the sample in a number of individual and household characteristics means that the IAS can be useful in advancing the understanding of induced abortion in Pakistan. The correspondence between the abortion sample and the control group in terms of socio-economic characteristics is also reassuring. It implies that the strategy of using the CBRs to identify control group cases also from within their clusters yielded broadly comparable sub-samples. The remaining chapters of

this report will use respondent women from the IAS as well as their pregnancies as points of observation, depending on the specific question and its context.

CHAPTER 3: FERTILITY PREFERENCES

This chapter presents the survey data relating to contraceptive use and wanted/unwanted pregnancies. Women respondents were asked about their history of contraceptive use, and reasons for intending to use (or not) use them in the future. Pregnancy histories explored whether or not each pregnancy was wanted at the time when it occurred. The prevention of unwanted pregnancies is one of the main policy objectives of family planning and reproductive health. Unwanted pregnancies, and the related concept of unmet need for family planning, must be measured through women's stated preferences. The present study follows in line with other empirical studies in giving primacy to the expressed opinions of women respondents in this regard.

Nearly a third of all respondents stated that they did not intend to use contraceptives in the future (Table 3.1). The proportion did not vary much between those with a history of induced abortion and the control group. The leading reasons for both groups of women were opposition from husband, desire for more children, and fear of side effects. A somewhat higher proportion of women in the control group responded that opposition from husband (30.4%) and a desire for more children (31.4%) were among the reasons; whereas only 25.5% and 24.2% of women with induced abortion history respectively expressed the same reasons. More women with induced abortion history expressed infecundity (7.2%) and infrequency of sex (6.5%) as reasons for future non-use, as compared to only 3% and 2% of the control group respectively. Other reasons for not planning to use contraceptives were expressed in similar proportions between the two groups of women.

Table 3.1: Contraceptive use, intentions and reasons - distribution of women (percentage)

	Abortion sample	Control group	All
Not intending to use in future	32.1	31.5	31.9
Reason given for not intending to use:			
Opposition from husband	25.5	30.0	26.9
Want more children	24.2	31.4	26.5
Fear of side effects	15.7	15.7	15.7
Never thought about it	6.5	5.7	6.3
Infecund/menopausal	7.2	2.9	5.8
Infrequent/no sex	6.5	1.4	4.9
Own opposition	3.9	1.4	3.1
No menstruation after birth	3.3	1.4	2.7
Religion forbids	1.3	4.3	2.2
Other reasons	5.9	5.7	5.8
	100.0	100.0	100.0
Number of women	477	222	699

Respondent women were asked to provide their complete pregnancy histories, and also to indicate if a pregnancy had been wanted at the time when it was established. Over one-fifth of all pregnancies were reported to have been unwanted at the time they occurred (Table 3.2). Two-fifths of the unwanted pregnancies were not wanted at all, while the rest were reported as being mistimed. It is likely that retrospective opinion about pregnancies that actually did get established gives a biased estimate of the scale of unwanted pregnancy. Once a pregnancy is established a woman might accept it as fait accompli and report that it had been wanted after all. The fact that a fifth of all pregnancies were reported as having been unwanted represents useful

variation in the sample which could be a source of insight into factors which may contribute to a pregnancy being declared as being unwanted.

Table 3.2: Distribution of all pregnancies by whether they were wanted before they were established (percentage)

	N	%
Wanted child then	3,271	79.4
Wanted child later	521	12.6
Did not want child	328	8.0
Number of pregnancies	4,120	100

Table 3.3: Contraception before pregnancy (percent of women reporting use of contraceptive by whether pregnancy was wanted)

	Abortion sample	Control group	All
Wanted child then	15.2	13.0	14.5
Wanted child later	43.5	37.0	42.2
Did not want child	41.0	35.7	40.5
All pregnancies	21.9	15.6	20.0
Total number of pregnancies	2,918	1,202	4,120

Women were asked if they practiced contraception before a pregnancy. A fifth of the pregnancies were preceded by the use of contraceptives (Table 3.3). If this figure is taken at face value, it would represent a high rate of contraceptive failure. Pregnancies in the abortion sample had a higher rate of contraceptive use and failure, with nearly 22 per cent compared with 15.6 per cent of the pregnancies in the control group. Although the overall rate of contraceptive use was similar to the ratio of unwanted pregnancies, there was no exact overlap between the two categories: not all pregnancies that were declared as having been unwanted were actually preceded by the use of contraceptives. This is understandable, given the factors identified in Table 3.1 relating to contraception. What is surprising is that a number of pregnancies reported as having been wanted had also been preceded by the use of contraceptives. It is possible, of course, that an unwanted pregnancy (preceded by contraceptive use) was reported *post hoc* as having been wanted.

While the overlap between unwanted pregnancies and contraceptive use was not exact, contraceptive use (and failure) was higher among pregnancies that were reported as having been unwanted. Over two-fifths of such pregnancies were preceded by attempts at contraception, compared to 14.5 per cent of the pregnancies that were reported as having been wanted. These figures suggest that there is a relationship between expressed fertility preferences, reported actions, and actual outcomes, even if it is not linear or straightforward. A woman's ability to hold and articulate a clear position about whether or not a pregnancy was/is wanted represents one level of agency. Her control over the use of contraceptives is another level. The ability of a woman or a couple to then successfully prevent an unwanted pregnancy may represent yet another level of agency and empowerment.

The pregnancy history data allow analysis of factors associated with expressed fertility preferences and associated behaviour. Agency factors, such as those discussed above, as well as relatively straightforward demographic factors were expected to be influential. The number of live births before a pregnancy was interpreted as a proxy for family size and composition preferences. The rate of unwanted pregnancies did increase with the number of previous live births (Table 3.4). While on average 20.6 per cent of pregnancies were declared to have been unwanted, the ratio was around or above two-fifths for pregnancies established

after five or more previous live births. The association between male live births and unwanted pregnancies appeared steeper – that is, more pregnancies were declared unwanted if a woman had many previous male live births.

Table 3.4: Unwanted pregnancy by number of previous live births (percent)

	Boys	Girls	All children
0	5.7	8.8	6.4
1	17.0	18.5	11.3
2	32.2	28.3	16.3
3	40.5	34.1	22.7
4	47.8	49.2	33.3
5	51.9	45.7	41.3
6	54.1	46.2	38.2
6+	68.0	71.0	46.1
All	20.6	20.6	20.6

Contraception use increased with the number of previous live births for up to four births. Beyond that number the rate of use of contraception remained steady at around three-tenths (Table 3.5). It is worth recalling that contraceptive use actually indicates contraceptive failure or misuse, since a pregnancy did occur despite the reported use of contraception preceding it. At the same time, however, the use of contraception suggests that a pregnancy was not wanted at the time. Male live births preceding a pregnancy were generally associated with a higher rate of contraceptive use.

Table 3.5: Reported use of contraception before pregnancy,by number of previous live births (percent)

	Boys	Girls	All children
0	9.1	11.8	4.0
1	21.6	22.6	15.4
2	27.8	26.8	23.4
3	32.3	28.8	26.4
4	34.0	23.6	29.9
5	25.3	31.4	29.7
6	32.4	20.5	30.0
6+	28.0	25.8	28.4
All	20.0	20.0	20.0

Fertility preferences are thought to be associated with a range of individual and household level characteristics. The more educated a woman, the more control she is expected to have over her fertility. Similarly, women from wealthier households and those who exercised greater agency in their marriage decision might be expected to be able to articulate and act upon her own preferences with regard to pregnancy and childbirth. There seemed to be some association between a woman's schooling, her probability of having an unwanted pregnancy and her use of contraception, with the effect being more marked in latter case (Table 3.6). Increasing levels of schooling up to the secondary level were associated with more unwanted pregnancies and more contraceptive use (and failure). At the highest levels of schooling both unwanted pregnancies and contraceptive use (and failure) declined.

Table 3.6: Unwanted pregnancies and use of contraception by woman's years of schooling

	Unwanted pregnancy	Use of contraception
0	18.6	14.6
1-5	23.5	24.6
6-10	22.8	29.4
10+	20.7	22.8
All	20.6	20.0

A similar pattern was found with regard to household wealth (Table 3.7). Women in the poorest households had relatively fewer unwanted pregnancies and lower rates of contraceptive use (and failure). Increasing household wealth was associated with higher rates of unwanted pregnancy and contraceptive use. The highest wealth quintile, however, was associated with lower rates of unwanted pregnancy and contraceptive use (and failure). The broad similarity with the results in Table 3.5 might be due to correlation between schooling and household wealth – women in wealthier households tend to be more educated and vice versa.

There was no obvious pattern between a woman's agency in marriage decision and the incidence of unwanted pregnancy or contraceptive use (Table 3.8). Women who enjoyed greater agency in their marriage decision seemed to have a somewhat higher rate of unwanted pregnancies than average. For contraception use (and failure) agency in marriage did not have a linear association. The two polar extremes – that is those who had forced marriages as well as those who decided on their own marriage partners – had lower rates of contraceptive use and failure than the overall average.

Table 3.7: Unwanted pregnancies and use of contraception by household wealth quintile, lowest to highest

	Unwanted pregnancy	Use of contraception
1	19.4	10.0
2	22.7	22.2
3	20.4	25.1
4	22.0	27.9
5	18.7	16.1
	20.6	20.0

Table 3.8: Unwanted pregnancies and use of contraception by woman's agency in marriage decision

	Unwanted pregnancy	Use of contraception
Forced	19.5	15.6
Watta Satta	20.8	12.2
Males decided	17.7	23.0
Mother included in decision	22.5	17.4
Consulted	24.2	21.8
Decided	22.5	18.6
All	20.6	20.0

The analyses above have shown that the probability that a pregnancy was declared as having been unwanted was associated with a range of demographic, social and economic factors. These factors all have their own effects, and it is possible to estimate the specific impact of each of them on the overall probability of a pregnancy being declared as unwanted. A multivariate regression with an unwanted pregnancy as a dependent variable was estimated using the pregnancy history data from the IAS (Table 3.9). The results show that a pregnancy was more likely to be declared unwanted the older the woman at the time of the pregnancy, and the more children she had prior to the pregnancy. The number of boys born to the woman prior to a pregnancy had a greater effect on the pregnancy being declared unwanted, compared to the number of girls born. This clearly suggests that women's family size and composition preferences have implicit or explicit bias towards male children.

A woman's years of schooling, her agency in terms of marriage decision and physical mobility were all positively correlated with higher probabilities of having an unwanted pregnancy. The husband's years of schooling were also positively correlated with the probability of having an unwanted pregnancy, though the effect was smaller than that of the woman's own years of schooling. Household wealth was negatively correlated with unwanted pregnancy – the better off the household, the less likely was a pregnancy to be declared as being unwanted, other things remaining the same. A woman's agency with respect to her marriage decision was positively correlated with her declaring a pregnancy as unwanted, while her freedom from verbal and physical violence was negatively correlated. Other areas of agency were not significant factors.

Table 3.9: Dependent variable: Unwanted pregnancy

	Estimated coefficient	Significance
Age at pregnancy	0.0558	0.0000
Boys born before pregnancy	0.5024	0.0000
Girls born before pregnancy	0.3182	0.0000
Years of schooling	0.0514	0.0000
Husband's years of schooling	0.0374	0.0005
Household wealth score	-0.0897	0.1004
Remoteness score	0.0937	0.0526
Agency - marriage	0.1174	0.0025
Agency - mobility	0.0099	0.5292
Agency - freedom from abuse	-0.1607	0.0066
Agency - children welfare	-0.0058	0.5293
South Punjab	0.3673	0.0049
North Sindh	0.0771	0.6161
South Sindh	0.6642	0.0000
Balochistan	-0.5667	0.0060
Constant	-4.9654	0.0000
Number of observations	4,120	
Cox & Snell R Square	0.1869	

Summary

The analysis of unwanted pregnancy and contraception use from the pregnancy history data in the IAS has confirmed a number of existing hypotheses about factors that influence fertility preferences. A woman's age, the number of children she has already had, and the sex of previous children, affect whether or not the next pregnancy is wanted. This is intuitive. An educated woman, and one with greater agency in other areas of her life, is more likely to declare a pregnancy to be unwanted, other things being equal.

Unwanted pregnancy plays a crucial role in defining unmet need for family planning, which in turn is a pivotal concept in the policy framework in reproductive health. To the extent that the termination of an unwanted pregnancy is a motivating factor for an induced abortion, it is important to gain a better understanding of it. Our analysis has suggested that the concept of an unwanted pregnancy is complex because it is, by its very nature, dependent on assumptions about a woman's agency regarding defined preferences with respect to a pregnancy, her willingness to express those preferences, and her ability to act upon them. Under conditions of generally constrained agency, the articulation of a preference may, in itself, constitute an improvement over the absence of such articulation. In other words, while it is still correct to focus on the reduction of unwanted pregnancy as a policy goal, the existence of unwanted pregnancies might represent greater rather than lesser agency on the part of a woman.

CHAPTER 4: INDUCED ABORTION

The IAS sample consisted of 699 women, of whom 477 reported having had an induced abortion within the five years preceding the survey. There were 4,120 pregnancies for all women – 2,918 in the abortion sample and 1,202 in the control group. Pregnancy history data included information on a range of issues relating to each pregnancy, including its outcome. For all women in the sample the latest terminated pregnancy was the focus of more detailed probing. The women in the abortion sample were asked about their most recent induced abortion, while the control group was probed on the most recent case of spontaneous abortion. This chapter of the report summarises key findings relating to induced abortion -- including reasons given for the abortion, as well as the place, provider and method of induced abortion. The 477 cases of induced abortion and the pregnancy history data encompassing over four thousand pregnancies represent a unique opportunity for understanding the dynamics of induced abortion in present-day Pakistan.

Out of the 4,120 pregnancies for which data were collected, nearly four-fifths were taken to term, 14.8 percent were aborted and 5.8 percent were reported as having ended in miscarriages or spontaneous abortions (Table 4.1). The rate of induced abortion was, obviously, higher in the abortion sample that was purposively selected to represent induced abortion cases. In the abortion sample over a fifth of all pregnancies were terminated through an induced abortion, and another 3.4 per cent were lost due to miscarriage. The reported rate of miscarriage or spontaneous abortion in the control group was much higher at 11.4 per cent. If the induced abortions are subtracted from the abortion sample the rate of miscarriage in that sub-sample was only 4.3 per cent (final column, Table 4.1).

Table 4.1: Induced and spontaneous abortions (percent)

	Abortion sample	Control group	All	Abortion sample - minus induced abortions pregnancies
Induced abortion	20.9		14.8	
Spontaneous abortion	3.4	11.4	5.8	4.3
Pregnancy to term	75.6	88.6	79.4	95.7
Total	100.0	100.0	100.0	100.0
Number of pregnancies	2,918	1,202	4,120	2,306

It is widely argued that in countries where induced abortions are not fully accepted in law and social mores, women tend to conceal induced abortion cases by reporting them as miscarriages. Since the IAS sample was successful in identifying at least 477 women across Pakistan willing to disclose an induced abortion, it represented an opportunity for arriving at an estimate of a rate of concealment. The control group was drawn from the same communities as the abortion sample, and as we have shown in Chapter 2 above, in terms of socio-economic characteristics the women and households between the two sub-samples were broadly comparable. Since women who were willing to speak about their induced abortions were clearly not concealing induced abortions as miscarriages, it might be argued that the 'natural' rate of miscarriage in the reference population should be around 4.3 percent. The rate reported by the control group (11.4 percent), therefore, might include induced as well as spontaneous abortions. This suggests that over three-fifths of reported spontaneous abortions might, in fact, have been induced abortions.

Reasons reported for inducing abortion could be clustered into two groups (Table 4.2). The first comprised of women who did not wish to become pregnant *ex ante* (before the fact)but nonetheless conceived. This group may include women who were practicing contraception but the method failed, and women who were using the abortion as a means of contraception. These were 88 per cent of induced abortion cases. Women were also asked whether they decided against keeping a pregnancy after the fact, *ex post*, due to any changes in their circumstances, and 12 per cent reported that this was the case. This confirms that most abortions are induced due to the non-use or failure of contraception. Even so, a substantial proportion of abortions may be expected to occur even if the effective use of contraceptives was to rise.

Table 4.2: Reason for induced abortion - ex ante and ex post

	N	%
Ex ante (use of abortion in place of contraception or due to contraceptive failure)	420	88.1
Ex post (abortion due to change in circumstances after conception)	57	11.9
Total	477	100.0

Respondents were asked to provide specific reasons, if possible, for having aborted the pregnancy. While some simply gave spacing and limiting as reasons, others identified other factors that contributed to the decision to abort (Table 4.3). Out of those who used induced abortion as an alternative to contraception, or responded to contraceptive failure, 48.6 per cent said they wanted to space childbirth, and 18.8 per cent used abortion because they did not want any more children. The woman's illhealth (16.4 per cent) and poverty (11.7 per cent) were other common ex-ante reasons for induced abortion. Most women (90%) who reported *expost* changed circumstances as reasons for induced abortion cited medical reasons, either their own or a foetal abnormality (Table 4.4).

Table 4.3: Ex-ante reasons for induced abortion

	N	%
Woman's ill health	69	16.4
Husband's ill health	2	0.5
Ill health of existing children	3	0.7
Poverty	49	11.7
Have grown up children	7	1.7
Other children are very young	7	1.7
Spacing (no other reason given)	204	48.6
Limiting (no other reason given)	79	18.8
Total	400	100.0

Table 4.4: Ex post reasons for induced abortion

	N	%
Husband's request/demand	3	5.3
Wanted son	2	3.5
Changed mind regarding pregnancy	1	1.8
Medical reasons-threat to woman's life	14	24.6
Medical reason-foetal abnormality	37	64.9
Total	57	100.0

The total sample of over four thousand pregnancies included both the abortion sample and the control group. In order to gain a better understanding of the factors contributing to an induced abortion, it was useful to treat the pregnancy rather than the woman respondent as a unit of analysis. Pooling the two sub-samples, 14.8 per cent of all pregnancies were terminated using an induced abortion. This figure is, obviously, not representative of the population, since the sampling method was not designed to obtain statistical representation of the population as a whole. Variation within the sample, however, remains a source of insight. Pooling the two sub-samples implies treating non-aborted pregnancies in the abortion sample in the same way as pregnancies of the control group. Since a number of variables of interest such as age at pregnancy and number of previous births are pregnancy-specific, the pooling of the two sub-samples provided greater variation.

As in the analysis of fertility preference in Chapter 3, it was possible to analyse the probability of induced abortion through a number of pregnancy-specific, woman-specific, and household-specific factors. Age at pregnancy and the number of children prior to the reference pregnancy were obvious candidates as correlates of induced abortion. Pregnancies at later ages were far more likely to be aborted than those established at earlier ages (Table 4.5). The association with previous live births was also positive, but less dramatic (Table 4.6). Previous birth of boys appeared to have a stronger association with the probability that a reference pregnancy would be aborted than did the previous birth of girls. It needs to be reiterated that the figures in Tables 4.5 and 4.6 are not suggestive of population statistics, but simply explain variations within the sample of pregnancies. It is not being suggested, for example, that three-quarters of the pregnancies among women aged 45 or above are aborted, but that a disproportionate number of induced abortions occur for pregnancies among older women.

Table 4.5: Induced abortion cases by age at pregnancy

Age at pregnancy	Percent of pregnancies terminated by induced abortion	Total number of pregnancies in sample
Up to 19	5.7	959
20 to 24	7.5	1,381
25 to 29	17.8	1,042
30 to 34	29.9	468
35 to 39	39.1	179
40 to 44	60.9	69
45 plus	76.2	21
All	14.8	4,119

Table 4.6: Induced abortions by number of previous live births - per cent of sample pregnancies aborted

Number of previous live births	All	Male	Female
0	10.5	6.3	7.7
1	9.6	11.3	13.7
2	11.4	24.1	18.9
3	15.7	26.7	25.1
4	20.6	30.2	32.7
5	27.5	30.4	25.7
6	22.5	33.9	31.4
All	14.8	14.8	14.8
Total number of pregnancies in sample	4,120	4,120	4,120

Women with higher levels of education were more likely to undergo induced abortions than less educated women (Table 4.7). Pregnancies of women with higher than primary, but up to secondary level schooling, were the most likely to be aborted. For women with higher than secondary schooling the probability of having an induced abortion was lower than those with up to secondary schooling, but was still higher than the sample average. The fact that the control group women had similar or higher levels of schooling than the abortion sample (see Chapter 2, Table 2.4) implied that there were more induced abortions per pregnancy for educated women compared with their less educated counterparts. The positive association between women's schooling and induced abortion corresponded with the finding in Chapter 3 that there were more unwanted pregnancies among educated women. Household wealth did not appear to have an influence on the probability of a woman to have an induced abortion except for the bottom two quintiles (Table 4.8).

Table 4.7: Induced abortions by woman's education level

Educational level	Per cent of pregnancies aborted	Total number of pregnancies in sample
No schooling	13.3	2,174
Up to primary	14.7	928
Up to secondary	19.0	732
Above secondary	16.1	285
All	14.8	4,119

Table 4.8: Induced abortions by household wealth quintile, lowest to highest - per cent of sample pregnancies aborted

Household wealth quintile	Per cent of pregnancies aborted	Total number of pregnancies in sample
1	13.5	914
2	17.7	798
3	14.8	796
4	14.0	836
5	14.5	775
All	14.8	4,119

Multivariate regression analysis was carried out on the probability of an induced abortion using pregnancy-specific, woman-specific and household-specific explanatory variables using a simple probability model (Table 4.9). The age and pregnancy and previous births of boys were strong predictors of the probability of an induced abortion. Previous births of girls did not come out as a significant correlate. This result suggests a strong sex bias in family composition. Pregnancies preceded by a high number of male live births are far more likely to be aborted than those preceded by a high number of female live births. A woman's level of schooling was also positively correlated with the probability of her pregnancy being aborted. Her husband's years of schooling were not significant in this regard. A woman's agency in other areas of life did not appear to be important, except that women who were mobile were less likely to terminate pregnancies through induced abortion.

Table 4.9: Correlates of induced abortions – multivariate regression

Dependent variable: Pregnancy terminated through induced abortion		
Explanatory variable	Coefficient estimate	Significance
Age at pregnancy	0.125	0.0000
Previous live births - boys	0.180	0.0000
Previous live births - girls	0.048	0.1664
Own years of schooling	0.055	0.0000
Husband's years of schooling	0.017	0.1397
Household wealth score	-0.180	0.0028
Remoteness score	0.002	0.9727
Agency - marriage	0.034	0.4226
Agency - mobility	-0.053	0.0019
Agency - person	-0.042	0.5188
Agency - children	-0.009	0.3783
South Punjab	0.035	0.8039
North Sindh	-0.024	0.8801
South Sindh	0.280	0.0381
Balochistan	-0.526	0.0148
Constant	-5.309	0.0000
Number of observations	4,119	
Cox and Snell R Sq.	0.112	

Household wealth was negatively correlated with the probability of a pregnancy being aborted. Other things being equal, a woman in a poor household was more likely to abort a pregnancy than one in a richer household. There were regional effects for two regions. Pregnancies of women in southern Sindh (for which the sample is dominated by urban areas such as Karachi and Hyderabad) were more likely to be terminated, and those in Balochistan were less likely to be terminated. Since the sampling method ensured proportionate numbers of abortion and control cases in each region, this finding implied a higher rate of abortion per pregnancy in southern Sindh and lower rate in Balochistan compared to other regions (north Sindh, and Punjab).

The correlates of induced abortion correspond somewhat with those of unwanted pregnancy discussed in Chapter 3. The preference in family composition with respect to some implied target number of boys is stronger here than with stated fertility preferences. The picture with respect to women's agency is even more nuanced: a woman's education is positively correlated with induced abortion, her husband's is irrelevant, and her mobility has a negative correlation. As in the case of unwanted pregnancy, household wealth is inversely correlated with induced abortion, other things being equal. The data on induced abortion might be considered more compelling than that on unwanted pregnancy, since the former deals with a specific action while the latter relates to the

retrospective recollection of the desirability of a pregnancy. The correspondence between the two sets of results strengthens the case for treating unwanted pregnancy and induced abortion as complex concepts, particularly with regard to women's agency.

The remainder of this chapter provides a summary of the data collected on the most recent induced abortion reported by the 477 women respondents of the abortion sample. All of these cases of induced abortion occurred within five years before the survey – this was one of the conditions for sampling. A small proportion of induced abortions took place four months or longer into the pregnancy (Table 4.10). The rest were almost evenly split into gestation periods of up to two months, and two to four months.

Table 4.10: Gestation period before induced abortion

	N	%
Upto 2 months	226	47.4
2-4 months	210	44.0
4-6 months	31	6.5
Above 6 months	4	0.8
Don't know	6	1.3
Total	477	100

The place where the abortion was carried out is thought to be critically important from the point of view of safety, as well as an indicator of the ease or difficulty women face in accessing abortion facilities. Over half of all induced abortions were carried out in a private hospital (Table 4.11). A relatively small number were reported to have been carried out in NGO facilities. Government hospitals, LHV clinics and abortions carried out at home accounted for roughly equal proportions. The woman-centric approach of the IAS implies that women's own knowledge of where the induced abortion took place is accorded primacy here. When women reported that they had been to a private hospital the survey recorded as such. In many cases women were not sure if the hospital in question was properly equipped or not. When women reported having gone to an LHV clinic this invariably meant that they used a private facility run by someone they recognised as a trained LHV.

Table 4.11: Place where abortion carried out

	N	%
Private hospital	271	56.8
Government hospital	60	12.6
NGO	6	1.3
Community health centre/maternity child health centre	10	2.1
LHV clinic	47	9.9
Dai's clinic	33	6.9
Home	50	10.5
Total	477	100.0

A relatively small proportion of induced abortions were carried out at the premises of a traditional birth attendant (6.9 per cent) or at home (10.5 per cent). These figures suggest that private sector provision of abortion services was not only widespread, but easily accessible. Most of the women had abortions at places where they had reason to believe that they would receive professional medical treatment and care. This is an important finding for Pakistan, as it suggests that legal and social constraints on induced abortion do not necessarily lead to a high incidence of what might be regarded as 'back street' abortions. The main issue is likely

to be the actual quality of service provided and cost. For most women having an induced abortion the place of abortion appears to have been a matter of choice – this issue is taken up further in the analysis of health-seeking behaviour in Chapter 6.

There was some difference in choice of place where the abortion was carried out by the length of the gestation period (Table 4.12). More of the late abortions were carried out in government and private hospitals, and relatively fewer in LHV and traditional birth attendant clinics. There was no difference in the proportion of early and late abortions carried out at home.

Table 4.12: Place where abortion carried out by gestation period (percent)

	Up to 2 months	More than two months	All
Private hospital	55.3	59.2	57.3
Government hospital	6.6	17.1	12.1
NGO	1.8	0.8	1.3
Community health centre/maternity child health centre	4.0	0.4	2.1
LHV clinic	12.8	6.5	9.6
Dai's clinic	8.8	5.3	7.0
Home	10.6	10.6	10.6
Total	100.0	100.0	100.0

Table 4.13: Place where abortion carried out by woman's education (percent)

	No schooling	Up to primary	Up to secondary	Above secondary	All
Private hospital	52.4	57.6	60.7	69.2	56.8
Government hospital	15.0	12.1	8.9	10.3	12.6
NGO	0.4	1.0	2.7	2.6	1.3
Community health centre/maternity child health centre	2.2	4.0	0.9		2.1
LHV clinic	9.3	7.1	13.4	10.3	9.9
Dai's clinic	7.5	9.1	3.6	7.7	6.9
Home	13.2	9.1	9.8		10.5
Total	100	100	100	100	100

Table 4.14: Place where abortion carried out by household wealth quintile (percent)

	Wealth quintile from lowest to highest					All
	1	2	3	4	5	
Private hospital	48.5	50.0	61.1	62.2	63.7	56.8
Government hospital	22.8	16.0	10.5	6.7	5.5	12.6
NGO	1.0		1.1	4.4		1.3
Community health centre/maternity child health centre		2.0	3.2	2.2	3.3	2.1
LHV clinic	6.9	10.0	7.4	11.1	14.3	9.9
Dai's clinic	6.9	12.0	5.3	5.6	4.4	6.9
Home	13.9	10.0	11.6	7.8	8.8	10.5
Total	100	100	100	100	100	100

The place of abortion was associated with the socio-economic characteristics of the woman and her household. There appeared to be a positive association between abortions at private hospitals and education and household wealth (Tables 4.13 and 4.14). Similarly, less educated women and those from poorer households were more likely to have had their abortions at home. Government hospitals were also more likely to have been chosen by less educated women and those from poorer households.

There were regional patterns too in the choice of place of abortion (Table 4.15). Although private hospitals accounted for the largest number of induced abortions in all regions, there was relatively high reliance on government hospitals in the two Sindh regions compared to other parts of the country, and on LHV clinics in southern Punjab. Northern Punjab had the highest incidence of abortions at home. These regional contrasts may signify differences in the availability of services, in the attitudes of service providers particularly in the case of government hospitals, and in the attitudes and perceptions of women and their peers.

Table 4.15: Place where abortion carried out by region – percent

	South Punjab	North Punjab	South Sindh	North Sindh	Balochsitan	All
Private hospital	54.4	64.0	53.7	48.5	64.7	56.8
Government hospital	5.8	6.6	20.6	22.1	5.9	12.6
NGO	1.9	0.7	0.7	2.9		1.3
Community health centre/maternity child health centre	3.9	2.9		2.9		2.1
LHV clinic	26.2	2.9	5.1	8.8	8.8	9.9
Dai's clinic	2.9	5.9	11.8	4.4	8.8	6.9
Home	4.9	16.9	8.1	10.3	11.8	10.5
Total	100	100	100	100	100	100

Women were asked to identify the person who carried out the induced abortion by his or her designation or qualification. While around 69 per cent of induced abortions were reported to have been carried out in hospital (private and government), women respondents thought that only 53 per cent were actually attended by a doctor (Table 4.16). In fact, it is possible the actual figure might have been smaller still, as many of the respondents had little way of distinguishing between qualified physicians and those pretending to be doctors. Over a fifth of the women thought that their abortions were attended by either LHVs or LHWs. The former are trained to carry out minor surgical procedures while the latter are not. There is anecdotal evidence suggesting

that both LHVs and LHWs provide paid services on the side, parallel to their official duties, and it is possible that LHVs as well as LHWs do carry out induced abortions on a private basis.

Table 4.16: Abortion service provider

	N	%
Doctor	252	52.8
Trained nurse/midwife	69	14.5
LHV/LHW	104	21.8
Untrained midwife	25	5.2
Self	27	5.7
Total	477	100.0

Nearly all abortions were induced using some modern method (Table 4.17). Only seven out of the 477 induced abortion cases involved a folk method. With respect to abortion method, as with regard to service provider, IAS relies on women's own understanding of the method used. It is possible that there was overlap in some of the categories reported below. The "vaginal pill" method most likely refers to prostaglandin or oxytocin suppositories that are available in the open market. The "oral pill" most likely refers to various combinations of mifepristone and misoprostol that are also available. Those who reported having been made unconscious (most likely through the use of sedation or general anaesthesia) may also have had a "machine used" (such as that used for dilation and evacuation). The use of modern methods does not necessarily imply that the induced abortion was carried out safely. To establish whether medical and safety standards were met the women respondents will have to have known more about appropriateness of the combination of procedures used. In any case, the high incidence of "made unconscious" and "machine used" suggests that in a vast majority of the cases abortion was approached as a medical-clinical procedure.

Table 4.17: Abortion method

	N	%
Vaginal pill	57	11.9
Oral pill	92	19.3
Made unconscious	101	21.2
Machine used	180	37.7
Other modern method	40	8.4
Folk method	7	1.5
Total	477	100.0

Cross-tabulation between service provider and abortion method shows folk methods may have been replaced by the oral pills. There is a wide range of pills available in the open market and used in clinics across Pakistan. These include emergency contraceptives and misoprostol.Under a fifth of the women reported the use of the oral pill as the primary or only method in the sample as a whole. Among those who induced their abortions themselves or went to untrained attendants the ratios were much higher.

Table 4.18: Abortion method by service provider - row percentage

	Vaginal pill	Oral pill	Made un-conscious	Machine used	Other modern method	Folk method	All	N
Doctor	10.7	13.9	25.4	42.9	7.1		100.0	252
Trained nurse/ Midwife	18.8	23.2	18.8	17.4	21.7		100.0	69
LHV/LHW	7.7	13.5	22.1	52.9	3.8		100.0	104
Untrained midwife	36.0	40.0	4.0	20.0			100.0	25
Self		63.0			11.1	25.9	100.0	27
All	11.9	19.3	21.2	37.7	8.4	1.5	100.0	477

Summary

This chapter has reported some key findings of the IAS with respect to induced abortions. The IAS is possibly the first study based on a large sample in which it is possible to compute the rate of spontaneous and induced abortions in a reference 'population' of pregnancies. The findings suggest that as many as three-fifths of pregnancies that are reported as ending in miscarriages might be attributable to induced abortions.
The probability that a pregnancy was aborted was positively correlated with some expected demographic variables. Pregnancies established at later ages were more likely to be aborted, as were those that were preceded by more previous births. Moreover, the age at pregnancy did not simply act as a proxy for parity, and had an effect on the probability of abortion even after taking parity into account. Although our survey did not find evidence of sex-selective abortion in Pakistan, it did reveal that abortion was used to influence the gender composition of the family. Pregnancies preceded by a high number of male births were more likely to be aborted than those preceded by female births.

The positive association between women's schooling and induced abortion corresponded with the finding in Chapter 3 that there were more unwanted pregnancies among educated women. A woman's level of schooling was also positively correlated with the probability of her pregnancy being aborted.A woman's agency in other areas of life did not appear to be important, except that women who were mobile were less likely to terminate pregnancies through induced abortion.

Nearly nine-tenths (88%) of pregnancies that were ended using an induced abortion were terminated due to unmet need for family planning or contraceptive failure. A majority of abortions were induced in hospitals, private as well as government, and folk methods accounted for a small fraction (1.5%) of all induced abortions. Very few women in the sample reported going to NGO facilities or community health centres. The prevalence of abortions at privately-run facilities – including hospitals as well as private clinics run by LHVs – was in line with the high degree of reliance on the private or semi-private sector for health needs in general. This finding also underscored the fact that the provision of abortion services in Pakistan is in the less-regulated private sector.

The key issues with respect to safety are quality of service and care, and women's own knowledge of what might be a safe provider or method. The oral pill appeared to have made modern methods widely available; its wide use by untrained providers and by women themselves implied that it might have taken the place of traditional unsafe methods.

CHAPTER 5: POST-ABORTION COMPLICATIONS

Nearly 70 per cent of women in the sample reported that they did not experience any complications as a result of their most recent induced abortion (Table 5.1). Since this is the first multi-community survey of its type, it is difficult to compare a 30.2 per cent rate of complication with other benchmarks. It does seem high considering the fact that induced abortion is not, in principle, a complex procedure. Out of those who reported having a complication, bleeding and abdominal pain were common symptoms. Over a quarter of those reporting a complication had suffered multiple symptoms – in most cases bleeding as well as abdominal pain. There were 46 cases, or 31.9 per cent of those with post abortion complications, and around a tenth of all induced abortion cases, where the reported symptoms were more severe. These included one extreme case of organ failure, but also other serious symptoms such as sepsis, retained products of conception and high fever. These are classified here together as 'more severe symptoms'. The classification used here proved useful for the purposes of representing self-reported morbidity from survey data, but may not correspond with the various gradation of mild, moderate and severe complications used in the clinical literature.

Table 5.1: Post-abortion complication, by reported symptom

	Number	%	% of all complication cases
No complication	333	69.8	
Bleeding	37	7.8	25.7
Abdominal pain	19	4.0	13.2
Other non-severe	5	1.0	3.5
Multiple non-severe	37	7.8	25.7
More severe symptoms including nausea, high fever, retained products, sepsis, organ failure	46	9.6	31.9
All complication cases	144	30.2	100.0
Total	477	100	

The factors leading to PAC are likely to be complex and idiosyncratic, depending among other things, on the gestation period before the abortion, the safety of the procedure used, conditions at the place where the abortion was carried out, as well as any number of factors such as the prior general health condition of the woman, or her vulnerability to infection, which are not possible to measure in a social survey. There did appear to be some association between the rate and severity of complication and the gestation period before the abortion (Table 5.2). While on average nearly 70 per cent of the abortions escaped complication, the few that were carried out at gestation periods of over four months had much higher rates of complication. These abortions were also disproportionately represented among those with the more severe symptoms.

Table 5.2: Complication and severity by gestation period in months

	No complication	Single less severe	Multiple less severe	More severe		N
Up to 2	72.1	12.4	6.6	8.8	100.0	226
2 to 4	69.5	12.9	7.6	10.0	100.0	210
4 to 6	54.8	12.9	19.4	12.9	100.0	31
Above 6	25.0	50.0		25.0	100.0	4
All	69.4	13.0	7.9	9.8	100.0	471

As argued in Chapter 4 above, from the point of view of a woman wanting an induced abortion, or that of her immediate family and peers, the choice of service provider and method was likely to be subsumed within the choice of the facility where the abortion was sought. Abortion carried out at home or at a traditional birth attendant's clinic had higher rates of complication than average, and also relatively more severe symptoms (Table 5.3). NGO facilities and community health centres, which handled relatively few of the sample cases, had the lowest rates of complication and no reports of more severe symptoms. Women who went to private or government hospitals faced rates of complication not much lower than the overall sample average – even if government hospitals appeared to be somewhat better than their private sector counterparts.

These differential rates of complication suggest that women probably had little basis for knowing if their choice of facility for getting an induced abortion was safe or not. As shown in Chapter 4, relatively more educated women and those from wealthier households chose private facilities over government ones. Few women chose NGO or community health facilities, and while the number of cases at these facilities were too small to make a strong inference, they did appear to provide a safer service.

Table 5.3: Complication and severity by place of abortion

	No complication	Single less severe	Multiple less severe	More severe		N
Private hospital	70.5	11.4	7.7	10.3	100.0	271
Government hospital	73.3	10.0	8.3	8.3	100.0	60
NGO	83.3	16.7			100.0	6
Community or maternal child health centre	100.0				100.0	10
LHV clinic	70.2	12.8	6.4	10.6	100.0	47
Dai's clinic	60.6	18.2	15.2	6.1	100.0	33
Home	60.0	22.0	6.0	12.0	100.0	50
All	69.8	12.8	7.8	9.6	100.0	477

Women respondents reported on the service provider who carried out the abortion. This, as discussed in Chapter 4, could vary between different types of facility. It was possible, for example, for a woman to have been treated by a doctor or a trained nurse or midwife at a private or government hospital. Abortions carried out by untrained midwives proved to be the least safe in terms of the rate of complication, which was even higher than those induced by a woman herself. Trained paramedics, including nurses, trained midwives, and LHVs fared somewhat better than average, and also better than doctors. Doctors, however, did better in terms of avoiding more severe complications (Table 5.4).

Table 5.4: Complication and severity by abortion service provider

	No complication	Single less severe	Multiple less severe	More severe		N
Doctor	70.2	12.7	8.3	8.7	100.0	252
Trained nurse/midwife	73.9	8.7	8.7	8.7	100.0	69
LHV/LHW	73.1	9.6	6.7	10.6	100.0	104
Untrained midwife	52.0	28.0	8.0	12.0	100.0	25
Self	59.3	22.2	3.7	14.8	100.0	27
All	69.8	12.8	7.8	9.6	100.0	477

While very few women reported having used a folk method for inducing an abortion, these methods were clearly associated with higher rates and severity of complications compared to other methods (Table 5.5). This finding is further borne out by the data on six mortality cases, discussed in Chapter 6. The next most common unsafe method was the oral pill, in terms of the rate of complication. This was 38 per cent compared with 30 per cent for the sample as a whole. No method, however, had a rate of complication of under a quarter. Folk methods, oral pills and vaginal pills were associated with disproportionate numbers of the more severe symptoms.

Table 5.5: Complication and severity by abortion method

	No complication	Single less severe	Multiple less severe	More severe		N
Vaginal pill	68.4	12.3	7.0	12.3	100.0	57
Oral pill	62.0	15.2	9.8	13.0	100.0	92
Made unconscious	75.2	9.9	5.0	9.9	100.0	101
Machine used	71.1	12.2	8.9	7.8	100.0	180
Other modern method	75.0	15.0	5.0	5.0	100.0	40
Folk method	42.9	28.6	14.3	14.3	100.0	7
	69.8	12.8	7.8	9.6	100.0	477

There is a wide range of factors that might be expected to contribute to the probability of complication due to an induced abortion. Some of these have been identified above and could be measured using IAS data. Multivariate regression analysis of the probability of having a PAC using the probit method was not very successful in explaining the variation in the sample. Factors not identified or measured in the IAS would have played a dominant part in explaining why an abortion led to a complication. Causes of morbidity are, in any case, likely to be highly idiosyncratic, depending on a woman's prior health status, her vulnerability to infection, and a range of conditions at the time and place of the induced abortion procedure.

Summary

The rate of post-abortion complications is high at over 30 per cent. Around a third of the PACs can be classified as showing more severe symptoms and very few among these are extreme cases such as organ failure or sepsis. It can be postulated on the basis of the IAS sample that around one in ten of the induced abortion cases in Pakistan will result in more severe symptoms.

While factors such as gestation period, the facility where the abortion was induced, the service provider and the method of abortion all appeared to influence the rate and severity of complication, the evidence was neither clear-cut nor decisive. Folk methods and traditional birth attendants were associated with higher rates of complications, and NGO and community health facilities appeared to relatively safe. Both these poles had relatively few cases. The bulk of the cases went to hospitals and other clinics where the overall rates of complication remained high with few discernible variations.

These findings should alert us to the possibility that categories such as 'safe' and 'unsafe' abortion are perhaps easier to define in policy manuals but harder to distinguish among the myriad combinations of facilities (mostly privately or semi-privately run), service providers and methods (nearly all modern) that are actually available on the ground. In this regard the situation with respect to induced abortion services might be reflective of health provision in general and maternal health provision in particular. Women opting for induced abortions are likely to face serious informational constraints when attempting to choose a safe provider.

CHAPTER 6: HEALTH-SEEKING BEHAVIOUR

This chapter summarises survey findings with respect to health-seeking behaviour, including the factors leading to the choice of the abortion provider as well as treatment for PACs. As shown in Chapter 4 above, there was much variation in the abortion sample in terms of the place, provider and method for induced abortions. Given the limitations of the sampling method, and the acknowledgement at the outset that the IAS sample is not statistically representative of the population, there is likely to be even greater variation in the country as a whole. It was possible to identify factors that influenced decision-making with respect to abortion and PAC treatment from the IAS, and a summary is provided in this chapter. An understanding of these factors is critical for a comprehensive picture of the event cycle of induced abortion in Pakistan.

A majority of the women who had induced abortions said that the choice of abortion provider was their own (Table 6.1). Among those who said that they themselves had decided about where to go for their induced abortion, they ranked safety and effectiveness lower than prior knowledge of the provider or affordability alone (Table 6.2). These self-reported factors suggest that the reputation of the provider played an important part in the choice of provider.

Table 6.1: Choice of abortion provider

	N	%
Someone else	203	42.6
Own decision	274	57.4
Total	477	100.0

Table 6.2: Reason for choosing provider (if own decision)

	N	%
Prior knowledge	88	32.1
Affordable	41	15.0
Safety	25	9.1
Prior treatment	21	7.7
Effective	18	6.6
Various other reasons	81	29.6
Total	274	100.0

In over two-fifths of the abortions the choice of provider was based on advice offered to the woman by someone else. The most frequent source of advice was a friend or neighbour, followed by the husband and then by close female relatives (Table 6.3). The reliance on other women, possibly in similar age groups, is a useful insight into the transmission of knowledge, and perhaps agency, in a key area of sexual and reproductive health. This insight may be particularly valuable if a community-based health or family planning worker might play the role of a friend or neighbour.

Out of the 144 women who suffered PACs, 28 did not seek any treatment for their complications (Table 6.4). Practical considerations were the leading reasons for women not seeking treatment for PACs. These were itemized as costs (43%), distance (11%), and lack of transport (7%). The second most important reason, however, was a woman's perception that the complication was not important enough a reason to seek health-

care (27%). Contrary to expectations, women's concern about confidentiality and concealing the abortion was cited by only seven percent as the reasons for not seeking treatment.

Table 6.3: If someone else's advice, relationship with that person

	N	%
Friend/neighbour	67	33.0
Husband	38	18.7
Mother-in-law	20	9.9
Mother	19	9.4
Sister-in-law	13	6.4
Sister	11	5.4
LHW	10	4.9
Other	25	12.3
Total	203	100.0

Table 6.4: Reasons for not seeking treatment for PAC

Reasons	Frequency	Percent
Costs too much	12	42.9
Not necessary or important	8	28.6
Too far	3	10.7
No transport	2	7.1
Did not want to leave my children alone	1	3.6
Afraid that other people might find out about the abortion	2	7.1
Total	28	100

Just over 80 per cent, or 116 out of the 144 cases of PACs, sought treatment (Table 6.5), and of these around half sought treatment within three days of the complication becoming known.

There was some association between the seriousness of the PAC symptom and the probability that treatment was sought. "Single less severe" refers to PACs about which women have mentioned only one symptom and that one falls in a mild category, e.g. mild bleeding or abdominal pain. "Multiple less severe" refers to PACs that women describe in terms of more than one symptom, but those too are not severe: eg mild to moderate bleeding and abdominal pain. "Multiple severe" refers to PACs with multiple symptoms that are severe and would necessitate urgent medical attention: e.g. heavy bleeding, abdominal pain, fever, foul-smelling discharge, internal rupture.

Table 6.5: Distribution of women who sought treatment for post-abortion complication, by severity of symptom

	%	Total number in category
Single less severe	67.2	61
Multiple less severe	94.6	37
More severe	87.0	46
Total	80.6	144

We tried to determine the general health-seeking behaviour of our sample through a series of questions on any chronic illnesses (unrelated to the induced abortion) the women might have had at the time of the interview or in the past (Table 6.6). Interestingly, nearly 30% of our whole sample (n=699) reported that their chronic illnesses had developed after childbirth. They were asked to report the type of illness, whether or not they sought medical assistance, the promptness with which they acted (i.e. time lapse between manifestation of symptoms and treatment) as well as the type of provider they approached for treatment. 35% of the women in the abortion sample acted in a way that demonstrates poor concern for own health, i.e. they either did not seek treatment, or sought treatment after six months of the appearance of symptoms, and that too from providers considered to be unsafe, such as *pir*(spiritual healer), compounder, or*dai*(Table 6.6). The proportion of women showing poor concern for their own health was seen to be higher in the control group, at 40%) (Table 6.7). Only 18% of the abortion group demonstrated high concern for their own health, i.e. they took prompt action and went to safe/qualified medical practitioners for treatment. Women who were classified as showing moderate concern for their health were the ones who delayed treatment by a month and sought help from somewhat trained providers, such as LHV/LHWs, nurses or hakims.

Table 6.6: Concern for own health (general health-seeking behaviour)

Levels of concern for own Health	Abortion Group
High concern for own health	18.0%
Moderate concern for own health	46.8%
Poor concern for own health	35.2%
Total	477

Table 6.7 Concern for own health and seeking treatment for PAC

	Group 1 Concern for own health %	Group 2 Moderate concern for own health%	Group 3 Poor concern for own health%	Total %
Sought treatment for PAC	85.7	81.1	74.3	80.6
Did not seek treatment for PAC	14.3	18.9	25.7	19.4
Total Number	35	74	35	114

Table 6.8 Concern for own health and selection of provider for PAC

Provider for PAC treatment	Group 1 Concern for own health	Group 2 Moderate concern for own health	Group 3 Poor concern for own health	Total
Private hospital/private clinic	70.0	63.3	50.0	62.1
Government hospital/BHU	13.3	15.0	23.1	16.4
NGO hospital/clinic	3.3	1.7	3.8	2.6
Government maternal child health centre	0.0	0.0	3.8	0.9
LHV clinic	3.3	10.0	7.7	7.8
Dai's clinic	6.7	6.7	7.7	6.9
Hakim/pir	0.0	1.7	0.0	0.9
Took medicine at home	3.3	1.7	3.8	2.6
Total	30	60	26	116

However, more than 70% of the women in these three sub-groups sought treatment for their post abortion complications (Table 6.7) and went to government or private hospitals for treatment (Table 6.8). Nonetheless the proportion of women who went to *dais* and who relied on self-medication was the highest in Group 3. Surprisingly women in Group 1 also reported going to *dais* for treatment, however this group also had the highest proportion of women who went to government/private hospitals for PAC treatment.

We can compare women's freedom in making general health decisions with their freedom in making decisions regarding treatment of PAC (Table 6.9). While 74% of the women in the abortion group had to seek permission to treat their general (chronic) illness, 68% had to do so with regard to PAC treatment.

Table 6.9: Freedom in making decisions regarding own health

Did you have to seek permission to get treatment?	General Treatment	PAC Treatment
Yes	74.4	68.1
No	25.6	31.0
Total	328	116
System	149	361
Total	477	477

Household wealth and the woman's agency in her marriage decision appeared to have a positive association with the probability that treatment was sought for her PAC (Tables 6.10 and 6.11).

Table 6.10: Distribution of women who sought treatment for complication, by household wealth quintile (lowest to highest)

	%	Total number in category
1	76.3	38
2	73.1	26
3	88.9	27
4	78.8	33
5	90.0	20
Total	80.6	144

Table 6.11: Distribution of women who sought treatment for complication, by agency in marriage decision

	%	Total number in category
Forced	75.0	4
Watta Satta	75.0	16
Males decided	64.7	51
Mother included in decision	100.0	16
Consulted	91.4	35
Decided	90.9	22
	80.6	144

Out of the women who sought treatment (80% of the 144 PAC cases), 57% went back to the abortion provider for treatment whereas 43% went to a different provider altogether (Table 6.9). The most common reason given by women respondents for going back to the same service provider, who had presumably contributed to the complication in the first place, was to 'get the problem fixed' (Table 6.16).

Analysis of the correlates of the probability that treatment was sought for a PAC highlights four factors as significant (Table 6.12). There was a higher probability of treatment being sought if the PAC was associated with more severe symptoms. This is intuitive, and under conditions of good health provision and access it would be the only factor that should matter. In fact, the woman's age at pregnancy, and her agency in terms of mobility turned out to be important correlates of the probability of treatment. Interestingly, the woman's schooling, the household's wealth or the distance from health facilities were not significant contributors to the probability of seeking treatment.

Table 6.12: Dependent variable: Sought treatment for complication

	Estimated coefficient	Significance
Age at pregnancy	-0.0718	0.0809
Gestation period	0.2025	0.6287
Severe complication	1.6184	0.0060
Years of schooling	0.0566	0.5025
Husband's years of schooling	0.0260	0.7071
Household wealth score	-0.0140	0.9667
Remoteness score	-0.2833	0.2301
Agency - mobility	0.1706	0.0891
Agency - marriage	0.3163	0.1890
Agency - freedom from abuse	0.1288	0.7259
Agency - children welfare	0.0861	0.1749
North Punjab	-0.7956	0.4029
South Punjab	-1.2054	0.2353
South Sindh	-0.2853	0.7812
Balochistan	-1.9612	0.0730
Constant	-0.1551	0.9342
Number of observations	144	
Cox & Snell R Square	0.2605	

Table 6.13: Reasons for not seeking treatment for PAC

Reasons	Number in Category	%
Costs too much	12	42.9
Not necessary or important	8	28.6
Too far	3	10.7
No transport	2	7.1
Did not want to leave my children alone	1	3.6
Afraid that other people might find out about the abortion	2	7.1
Total	28	100.0

19.4% of the women who experienced PACs (i.e. out of 144 women) did not seek treatment for their complications. Practical considerations were the leading reasons for women not seeking treatment for PACs. (Table 6.13) These were itemized as costs (43%), distance (11%), and lack of transport (7%). The second most important reason, however, was a woman's perception that the complication was not important enough a reason to seek health-care (27%). Contrary to expectations, women's concern about confidentiality and concealing the abortion was only seven percent of the reasons for not seeking treatment.

The promptness with which treatment is sought for maternal complications is widely regarded as an important determinant of young women's morbidity and mortality in Pakistan. There was some variation in the IAS sample in the time lag between the occurrence of the complication and treatment. The correlates of the probability of prompt treatment, or treatment within three days of the complication occurring, are reported in Table 6.14. The husband's schooling, but not the woman's own schooling, turns out to be a significant factor in prompt treatment. The greater agency a woman had in terms of physical mobility, the more likely she was to receive

prompt treatment. There was evidence of a regional effect – other things being equal, PACs in the northern Punjab sample were likely to receive delayed treatment.

Table 6.14: Dependent variable: Sought treatment within 3 days

	Estimated coefficient	Significance
Age at pregnancy	0.0013	0.9715
Gestation period	-0.1084	0.7260
Severe complication	0.1683	0.7193
Years of schooling	0.0636	0.2851
Husband's years of schooling	0.1052	0.0479
Household wealth score	0.1469	0.5600
Remoteness score	0.2405	0.3858
Agency - mobility	0.1439	0.0729
Agency - marriage	-0.0938	0.5896
Agency - freedom from abuse	-0.0516	0.8615
Agency - children welfare	-0.0452	0.3446
North Punjab	-1.3065	0.0685
South Punjab	-0.2138	0.7801
South Sindh	-0.3936	0.5445
Balochistan	-0.2065	0.8765
Constant	-0.2077	0.8918
Number of observations	116	
Cox & Snell R Square	0.1711	

Table 6.15: Place of treatment for PAC

Place of treatment	Number in category	% (all women who suffered from PAC)	% (only women who sought treatment)
Same place where induced abortion was performed	66	45.8	56.9
Some other place	50	34.7	43.1
Did not seek treatment	28	19.4	
Total	144	100	100
N	144	144	116

Table 6.16: Reason for return to same provider

	N	%
To get problem fixed	42	63.6
Already knew the provider	16	24.2
Other reason	8	12.1
	66	100.0

Table 6.17: Treatment providers for women who sought treatment for PAC

Treatment Providers	Number in Category	Percent
Private hospital/private clinic	72	62.1
Government hospital/BHU	19	16.4
NGO hospital/clinic	3	2.6
Government maternal child health centre	1	0.9
LHV clinic	9	7.8
Dai's clinic	8	6.9
Hakim/pir	1	0.9
Took medicine at home	3	2.6
Total	116	100

Among the 116 women who sought treatment for their PACs, more than half (62%) went to private hospitals or clinics (Table 6.17). Almost 17% percent went to any form of government facilities. The remaining women sought treatment at facilities that were likely to be unsafe, but may have been safe enough for the immediate problem at hand. These were NGO facilities, LHV clinics, *dai's* clinics, *hakim/pirs* or medicine taken at home.

A complete cycle of complications, treatment and morbidity emerging from the IAS is summarised in Table 6.18. It shows that most women whose PACs were not treated continued to suffer from symptoms for several months after the induced abortion. Seeking treatment for a PAC did not necessarily mean that a woman escaped the cycle of inadequate care. The rate of complication after the first treatment was only a little lower than that from the induced abortion – 29 out of the 116 cases for which treatment was sought had complications after the first treatment. Out of these, treatment was sought for 20 cases, and of the remainder eight women experienced symptoms for several months. Taking the cycle of complications and treatment as a whole, there were 33 cases of morbidity lasting several months out of a total 477 induced abortions – or a morbidity rate of around 7 per cent.

Table 6.18: Cycle of complication and treatment

Induced abortion	477							
Complication	144							
No treatment	28	First treatment	116					
		Complication	29					
		No treatment	9	Second treatment	20			
				Complication	6			
				No treatment	2	Third treatment	4	
						Complication	1	
Morbidity	23		8		1		1	33

These findings are complicated further, however, when we consider the cases of six women who died from their PACs.

Box 6.1 Unsafe abortion related mortality

Ruqqaya, age 35 and from Gujranwala district, was the mother of six children who had eight pregnancies. She married her cousin at age 20, according to her own wishes. She studied up to class seven, while her husband had done his metric. Their family income came from the saleof vegetables. She had four daughters and two sons and no chronic illnesses. Her first baby was a girl delivered by a dai at home, followed by no complications. The pattern was the same for all her deliveries. At the time of her eighth pregnancy her two youngest children were ages three years and six months. She decided at two months of gestation to terminate because she wanted to space between children. The abortion was done at a "private hospital" through herbal sticks and possibly tablets. We cannot be sure who was the service provider or what the cost was. After the abortion she had bleeding and according to her family she died the same day before she could seek further medical treatment.

There were three cases of mortality in which the abortion method had been the insertion of herbal sticks or laminaria tents, and due to the excessive bleeding that ensued the women died on the same day. The first case is described in Box 6.1, and the second was of a woman who died at age 25, with three children, who wanted to put a stop to her childbearing. The third case was of a woman age 35, with five living children, who ended her unwanted pregnancy by seeking the services of an untrained *dai*, who used the laminaria tent. The woman died within three days from heavy bleeding even though she went to a dispenser/compounder for a drip and medicines.

In the fourth case, a mother of seven children, age 30, lived in Karachi. The husband, a daily labourer, and wife were both uneducated. She had had all her deliveries with a *dai* at home and had not suffered any related complications. She went to a *dai* for her abortion, at four months of gestation, and paid Rs. 2,000 for the procedure. Her complications included bleeding, fever, and abdominal pain. Within a week she went to a hospital or clinic and paid Rs. 5,000 for the treatment, but died soon after.

Another mortality may have been related to a therapeutic induced abortion although the data is unclear. The women went to a government doctor for a dilation and curretage procedure (D&C), after which she suffered from abdominal pain, vomiting, and difficulty passing urine. She went back to the hospital for treatment, which included blood transfusions, and cost Rs. 30,000. Within six weeks, still under treatment, she died of hemorrhage, seizures and internal injury.

The final mortality was of a young woman age 23, who had one son but wanted to space her children and went to a private hospital/clinic for her abortion. Details of the procedure are not known, but within three days she developed complications and went for a D&C to a doctor. She died within a month, the causes included perforated intestine and a ruptured urethra.

The mortality data offers the following insights: first, that at least three deaths were directly linked to the most unsafe abortion method (insertion of herbal sticks/laminaria tents). Second, that a major complication and death is linked to an unsafe (albeit therapeutic) abortion in a government hospital, drawing further attention to the dangers and high complication rates noted in public health services. Third, that the expense of treating severe complications can be very high. Fourth, that all but one of the mortality cases involve women who had their deliveries with untrained *dais*, albeit without complications.

Summary

Most women in the IAS abortion sample decided themselves on where to go for their induced abortion. Prior knowledge of the service provider was the common reason for choosing a particular facility, and explicit concern for safety did not rank highly among reasons for the choice. Even when women relied on someone's advice for their choice of service provider, the most common source of such advice was a friend or neighbour. These findings suggest a relatively high degree of autonomy from the husband or his family members. This result, however, needs to be read alongside the findings reported in Chapters 3 and 4 which suggest that those women who expressed clear opinions about their fertility preferences or opted for induced abortions were already those who enjoyed greater agency in other areas of life.

Over four-fifths of the women who suffered a PAC were treated for the complaint, and there was a positive correlation between the severity of symptoms and the woman's agency in other areas of her life and the probability of treatment. These findings show that while women's concern for their general health has some bearing on their PAC-related health-seeking behaviour, they seem to be more cautious in the treatment of the latter. The women who did not receive treatment did not recover quickly. In fact, a majority suffered from their symptoms for several months. The promptness with which treatment was sought seemed to depend partly on the woman's agency, but also on the level of schooling of her husband.

Many of the women who sought treatment went back to the original service provider, who had most likely been responsible for the PAC in the first place. This finding adds to the mounting evidence from this survey that the unavailability of safe and effective service provision, and reliable information about such provision, might be a key constraint to preventing morbidity and mortality, even in cases where the woman does enjoy the agency to make decisions in her own interest. The details of the six mortality cases underscore the finding that the most serious complications are associated with the untrained abortion providers and herbal/instrumental methods.

CHAPTER 7: BURDEN OF INDUCED ABORTION COSTS

The original purpose of this study was to estimate the economics costs of unsafe abortion related morbidity and mortality in Pakistan. It was discovered early on in the review stage that the concepts and methods proposed by the work that had motivated interest in this area of research needed further refinement before they would come in line with standard approaches in economics. The cost of any disease or source of morbidity and mortality to the national economy is usually estimated using the demographic impact of that source, and then the statistical relationship between a demographic aggregate such as life expectancy and national income growth rates. The 'adding up' method proposed in the early motivational literature might be able to produce the accounting cost associated with morbidity and treatment, but this could not be considered the economic cost to the country.

At the review stage we argued that the appropriate use of the economic approach to unsafe abortion related morbidity and mortality was to set up the event cycle of unsafe abortion as a series of choices between alternatives. Additionally, it was found at the review stage that choice was likely to be constrained by agency – or that outcomes could not be attributed to choices between freely available alternatives. The design of the IAS and the ground covered thus far in this report has shown that the economic approach to the event cycle of unsafe abortion has been a useful source of empirical insight.

This chapter returns to the question of cost once again. While it is clear that the cost of unsafe abortion related morbidity and mortality cannot be 'added up' from specific accounting costs faced by individuals, households, health service providers or taxpayers, the comparison of the costs structure of various 'alternatives' faced by households can provide important insights into behaviour. Cost comparisons are all the more relevant, given the preponderance of private and semi-private sector providers of induced abortion services (Chapter 4). What households actually pay for services is a good index of how they value those services. Market-based providers, moreover, offer services at prices that allow them to operate profitably. While government subsidies in the form of public hospitals are not unimportant, accessing these services too requires households to incur out-of-pocket expenses. Public hospital accounts and costs are also discussed in more detail later in this chapter.

A. Costs to the Household

Pregnancy history data in the IAS asked women respondents to recall the out of pocket expenses incurred for every pregnancy – including costs of delivery for pregnancies taken to term, costs of miscarriages (spontaneous abortions) and induced abortions. For the most recent induced abortion further questions were asked to verify spending on specific items and services at the time of termination and for any subsequent treatments for complications. Women were also asked to recall the time lost in paid and domestic work due to the induced abortion, complications, treatment and morbidity.

Out-of-pocket expenditures on abortions and deliveries since 2005 were adjusted to 2010 prices using the consumer price index. Average spending per abortion was around 3,300 rupees, compared with over 5,200 rupees for the delivery of a pregnancy taken to term (Table 7.1). The higher costs of delivery are understandable, considering that some of the deliveries ended in surgical procedures. Out of pocket expenses varied, as expected, by service provider (Table 7.2). For all pregnancies the cost of going to a doctor was the

highest. For pregnancies taken to term the cost of delivery varied greatly between doctors, trained nurses, and untrained midwives. For abortions there was less variation between trained and untrained attendants.

Table 7.1: Cost of abortion/delivery for pregnancies since 2005, (2010 Pak Rupees)

	Mean	N	Std. Deviation
Induced abortion	3,378	472	3,892
Spontaneous abortion	3,339	62	3,262
Delivery of pregnancy taken to term	5,228	823	7,172
All pregnancies	4,498	1,357	6,143

Table 7.2: Cost of procedure by service provider for pregnancies since 2005 (in 2010 Pak Rupees)

	Pregnancy to term			Induced abortion			Spontaneous abortion		
	Mean	N	Std. Dev.	Mean	N	Std. Dev.	Mean	N	Std. Dev.
Doctor	8,443	353	9,514	4,470	236	4,739	4,595	24	3,918
Nurse/ TBA/LHV	4,299	116	3,212	2,498	148	2,668	3,594	9	2,367
Dai	2,372	342	2,686	2,277	48	1,807	2,766	17	2,685
LHV/LHW	1,351	6	1,167	2,208	19	1,225	3,362	3	2,802
All	5,228	823	7,172	3,378	471	3,896	3,339	62	3,262

The rate of complication varied between pregnancies taken to term, miscarriages and induced abortions (Table 7.3). It may be noted that the rate of complication in Table 8.3 differs from the one reported in Chapter 5. For Table 7.3 the sample include all induced abortions since 2005, while in Chapter 5 we focused on the latest induced abortion of all women in the abortion sample. Spontaneous abortions were over twice as likely to result in complications compared with pregnancies taken to term. The costs of treating complications were over 80 per cent higher for pregnancies than for induced abortions. This difference, once again, reflects the more complex nature of problems relating to delivery compared with induced abortion.

Table 7.3: Rate of complication and treatment costs for pregnancies since 2005 (2010 prices Pak Rupees)

	Rate of complication %	Total number of pregnancies	Cost of treatment, 2010 rupees	Number of pregnancies where treatment sought	Std. Dev.
Induced abortion	32.7	480	3,970	131	4,616
Spontaneous abortion	43.4	106	3,688	40	3,062
Delivery of pregnancy taken to term	20.0	857	7,301	137	9,480
All pregnancies	25.9	1,443	5,415	308	7,273

The expected out of pocket expenses of abortion can be compared with those of a pregnancy taken to term, by adding the cost of the initial procedure to the expected cost of treating a complication. The expected cost of treating a complication is the product of the average cost of treatment and the probability of complication. It was found using this method that the expected out of pocket cost of an induced abortion was over 4,600 rupees in 2010 prices (Table 7.4). By comparison, a spontaneous abortion was expected to cost less than 5,000 rupees, and a pregnancy taken to term was expected, on average, to lead to out of pocket expenses amounting to over 6,600 rupees. The expected economic burden of an induced abortion, therefore, was much lower than that of a pregnancy taken to term. If women and their families consider induced abortion as an alternative to an unwanted pregnancy, it is certainly a less expensive option.

Table 7.4: Expected cost of procedure by type (2010 prices Pak Rupees)

	Cost of Procedure	Probability of complication %	Cost of treatment	Total expected cost (procedure plus complication)
Induced abortion	3,378	32.7	3,970	4,676
Spontaneous abortion	3,339	43.4	3,688	4,939
Delivery of pregnancy taken to term	5,228	20.0	7,301	6,685
All pregnancies	4,498	25.9	5,415	5,902

The economic cost to the household of an abortion related complication includes, besides the out of pocket expenses of treatment itself, the economic value of the time during the period of incapacitation. For the most recent induced abortion in the abortion sample, the IAS probed the impact in terms of time away from domestic and paid work for the woman. It will be recalled from Chapter 5 that less than 31 per cent of the induced abortions resulted in a complication. This figure, as explained above, differs from the data reported in Table 8.4. Out of the 31 per cent who had a complication, over two-fifths did not stop housework at all (Table 7.5). Thus around 18 per cent of induced abortions resulted in a woman's time away from their usual domestic work. Of these, nearly all had returned to housework within 12 weeks of the complication. The economic burden in terms of time lost doing paid work was even smaller, since over 60 per cent of the women were not involved in paid work even prior to the complication (Table 7.6). Out of those who did work, virtually all had returned to work within 12 weeks.

Table 7.5: Distribution of women with complications by period of time for which housework stopped due to complication

	N	%	Cumulative %
Not stopped	59	41.0	41.0
Less than a week	16	11.1	52.1
1 to 2 weeks	19	13.2	65.3
2 to 3 weeks	19	13.2	78.5
3 to 4 weeks	10	6.9	85.4
Over 4 weeks	10	6.9	92.4
Over 12 weeks	9	6.3	98.6
To date	2	1.4	100.0
Total	144	100.0	

Table 7.6: Distribution of women with complications by period of time for which paid work stopped due to complication

	N	%	Cumulative %
Did not work prior to complication	87	60.4	60.4
Did not stop work	4	2.8	63.2
1 to 2 weeks	9	6.3	69.4
2 to 3 weeks	3	2.1	71.5
3 to 4 weeks	4	2.8	74.3
Over 4 weeks	31	21.5	95.8
Over 12 weeks	4	2.8	98.6
To date	2	1.4	100.0
	144	100.0	

Induced abortion, therefore, was not costly to the household in terms of out of pocket expenses, compared to a pregnancy taken to term. Its economic burden in terms of time lost for domestic or paid work was also not particularly high. Although comparable data were not collected for time lost due to pregnancy and related complications, it is quite likely that the latter imposed a higher indirect cost too. It is clear, then, that the overall economic cost of induced abortion related morbidity was likely to be small compared with the cost of taking an unwanted pregnancy to term.

This does not imply, obviously, that induced abortion, particularly if carried out in unsafe conditions was not costly for women and their households. It was less costly in economic terms than one of its alternatives, which is an unwanted pregnancy taken to term. Compared with the cost of using contraception, its cost to the household is likely to be unduly high, particularly if we consider that low-price and subsidised access to contraceptives is widely available.

But the main cost of induced abortion was to the health of the women involved. The rate of complication was considerably higher than that for pregnancies taken to term. In fact, the high rate of complications in pregnancies due to poor prevailing maternal health access and quality of service probably contributed to tipping the cost burden in favour of induced abortion. Despite the fact that induced abortion might have been offered and accessed under unsupportive legal and social conditions, the danger that induced abortion posed to women's health was comparable to other maternal conditions. This was not only because induced abortion services had become mainstreamed, but also because maternal health services in the mainstream were not particularly safe.

The prevalence of private and semi-private provision in maternal health facilities, coupled with the fact that there can be substantial out of pocket expenses even while accessing public services, implies that for women and households the amount of expense incurred for a procedure was determined not only by the seriousness of the condition but also the ability and willingness to pay for what were perceived to be safer and more effective services. It was possible to estimate the correlates of expenditure on delivery and induced abortion procedure using the pregnancy history data in the IAS.

The results of simple linear regressions (OLS) for expenditures on deliveries for pregnancies taken to term, and for induced abortions, are reported in Table 7.7. Although the estimated models did not explain much of the variation in expenditures in the sample, some correlates did emerge as important. A household's wealth score was a significant correlate for the amount of expenditure for both pregnancies and induced abortions, keeping other things equal. In addition, for induced abortions the gestation period before termination was significant. For deliveries, the woman's schooling and her agency in marriage were positive and significant correlates, even after taking household wealth into account. The number of male live births prior to the reference pregnancy had borderline statistical significance with a negative correlation. The expenditure on delivery declined with every previous male live birth, suggesting that women or households were willing to spend more if some implied target in terms of the number of sons had not been reached. For PACs the only other significant explanatory variable besides household wealth and gestation period was the regional effect of southern Sindh, where expenditure was considerably higher, even after accounting for other variables, than other regions.

Table 7.7: Correlates of expenditure on delivery and induced abortion procedure,linear regression

Dependent variable	Expenditure on delivery			Expenditure on induced abortion procedure		
N	822			471		
Adj R Square	0.09			0.10		
Std. Error of the Estimate	6,837.65			3,690.43		
Variable	Mean	Coeff.	Sign.	Mean	Coeff.	Sign.
Constant	1	2,984.30	0.08	1	1,834.96	0.12
Age of woman at the time of pregnancy (years)	26.026	7.61	0.90	29.633	-16.55	0.63
Woman years of schooling	4.163	285.41	0.00	3.822	-5.57	0.91
Husband's years of schooling	6.175	61.85	0.30	6.189	18.72	0.66
Live birth boys before this pregnancy	1.442	-355.01	0.11	2.083	-140.57	0.29
Live birth girls before this pregnancy	1.501	-37.18	0.85	2.013	-108.61	0.38
Household wealth score	-0.088	611.42	0.04	-0.038	441.68	0.03
Woman's agency in marriage decision	3.790	339.60	0.09	3.737	-28.53	0.84
Woman's mobility score	6.770	-37.77	0.66	6.968	58.84	0.33
South Punjab	0.191	24.78	0.97	0.216	-341.69	0.49
North Sindh	0.166	830.17	0.30	0.144	420.84	0.48
South Sindh	0.249	-357.39	0.60	0.267	1,814.89	0.00
Balochistan	0.103	118.06	0.90	0.081	622.42	0.40
Gestation at time of termination (months)				2.561	641.18	0.00

B. Costs at the Hospital

We conducted a review of health facilities that were accessible to low-income households and represented a large share of cases relevant to our research, e.g. government hospitals, private hospitals, charity/trust hospitals, NGO-run facilities and maternity homes. Data was collected according to type of facility, PAC management protocols, and resource allocation systems, based on key informant interviews with medical personnel. We visited a total of 14 health facilities in the formal sector (public and charity or private) in Karachi, Hyderabad, and Lahore and interviewed 37 (formal) health service providers.

Hospital key informants observed that the severity as well as number of PAC admissions was reducing over time. This decline is attributed in part to a larger proportion of spontaneous/induced abortion cases being treated in outpatient departments. These women would be provided with antibiotic cover, or given a medical abortion, or manual vacuum aspiration before leaving the hospital.

The following costing-related data is based on interviews and observations regarding the treatment of abortion-related cases at one major public hospital in Karachi. The medicines, supplies, investigations, and prescriptions noted were matched with their costs in the private sector and used to develop cost packages.

As a rule, patients are not supposed to incur out-of-pocket expenses with the exception of some administrative charges (Table 7.8), for treatment in public health facilities, where all costs, are to be borne by the hospital. Our findings show that whereas the hospital absorbs a substantial proportion of PAC treatment costs, the patients incur direct costs as well, which include unofficial payments made during their visit to facilitate their care. Table 8.8 shows the official and unofficial payments that patients might have to make, on an average, at various stages of their visit to the hospital.

Table 7.8: Hospital administrative charges

Hospital Charges		Average Amount (Rs.)	Burden of Cost
Admission (slip)	Official	50	Patient
Operation Theatre (slip)	Official	200	Patient
Ultrasound (slip)	Official	40	Patient
X-ray (slip)	Official	35	Patient
Peon/sweeper	Unofficial	200	Patient
Slip in-charge	Unofficial	50	Patient

i. Investigations

The cost of investigations in a government hospital is meant to cover only the costs of the slips required to have it done within the premises. Our qualitative research, based on case studies and field observation, indicates that patients are referred by hospital staff to the private laboratories near the hospital, where they have the investigations done and pay market rates for them. It is possible that a hospital staff member will collect the money for the requisite slips as well as do this referral.

The laboratories visited to which patients are referred are usually located within walking distance from the hospital. The prices of having the basic blood, hepatitis, and urine tests are listed in Table 8.9. The hospital costs and private costs are listed separately. Two separate private costs are given, from sources in the vicinity of the hospital.

Table 7.9: Investigations (2010 Pak Rupees)

Investigation	Detail	Hospital Cost (Rs)	Private Cost 1	Private Cost 2
Blood	Complete Picture	350 [slip]	300	320
	Blood Coagulation		--	180
	Blood Grouping		100	200
	RBS		150	100
Hepatitis	Hepatitis A antigen		400	550
	Hepatitis B antigen		550	550
	Hepatitis C antigen		950* v+3500	550 v+910
Urine	D/R		80	80
Xray	Abdominal/Pelvic	35 (slip)	240	
Ultra-sound	Abdominal/Pelvic	40 (slip)	250	300

**Note: this means that the cost of the initial test is Rs. 950 and if the test is positive then the confirmation test that is required will cost Rs. 3,500*

ii. Procedures

Table 7.10: Costs of procedures at hospital and in private sector (2010 Pak Rupees)

Procedure	Cost at our hospital	Cost borne by patient	Comparative cost in the private sector
D&E		50 [labour room] Rs 500	6-8,000
D&E w/ general anaesthesia		Rs 1000 Rs 200 [OT]	
Laparotomy / Exploratory laparotomy	Rs. 3000		
Basic Consultation	--	--	300
Consultant's Fee	--	--	<6,000
Surgeon's Fee	--	--	6-12,000
Anesthesia	--	--	40% of above
Hospital Stay [including tests and fees]	--	--	<24 hrs: 2-300 24-48 hrs: 10-20,000 3-5 days: 20-30,000

The costs of procedures was far less in the hospital than at a private clinic (Table 7.10), although we could not factor in the daily out of pocket costs for a patient in the ward during her hospital stay.

Family planning methods are widely available in urban centres and fairly low cost. While government facilities offer free contraception, often the facilities (particularly those located within hospitals) are over-burdened with clients and the wait is excessive. Tubal ligation in the private sector is the most expensive of the three methods shown in Table 7.11.

Table 7.11: Family Planning

Method	Hospital Cost	Market Cost
Contraceptive pill	Rs 5 (slip)	Rs 10-15/month
Tubal ligation	Free (Rs 200 to patient)	Rs 2,000
Injectable	Rs 5 (slip)	Rs 35 (1 month) Rs 55 (3 months)

iii. Medication

Public hospitals have a stated policy to provide treatment free of cost to patients, and if a medication or investigation is required but not available the patientshould be able to approach welfare services for support, or else pay for it herself. Our data set included information on who paid for medicines of patients while they were in hospital. However, this data was not collected directly from patients, and as such it could not be verified properly. Hence, our data reflects hospital policy. Table 7.12 shows the costs of various medicine packages that patients would be given while at the hospital.

Table 7.12: Hospital medication packages one-day costings (2010 Pak Rupees)

Package	Name	Dosage	Duration	Cost	Provider
Package 1	Oxytocin or	30 units	once	48	H
	Misoprostol	2 tab	once	20-36	H
Package 2	R/L*	1000ml	once	45	H
	Oxytocin	30 units	once	48	H
Total				93	
Package 3	R/L	1000ml	once	45	H
	Oxytocin	30 units	once	48	H
	Ponstan	2 tab	TDS	12	H
Total				105	
Package 4	R/L drip	1000ml	once	45	H
	Oxytocin	30 units	once	48	H
	Antibiotic 1	varies	BD	8-310	H
	Antibiotic 2	400mg	TDS	4.5	H
	Ponstan	2 tab	TDS	12	H
	Iron supplement			2.3	H
	Calcium supplement	1 tab	once	6.1	H
Total				81-380	
Package 5	Package 4 + painkiller			81-380	H
	Dicloran or	1 500mg	TDS	27	P
	Voren	Inj 75.mg 1 tab 50mg	once BD	24 10	P
Total				142-417	
Package 6	Package 2			93	H
	Package 4			81-380	H
	Blood transfusion	500ml	once	1,000	P
Total				1,093-1,473	

**This is Ringer's Lactate infusion. TDS refers to medicine dosage to be given thrice daily, and BD twice daily.*

Table 7.13: Discharge Prescriptions (2010 Pak Rupees)

Discharge Package	Private Cost BD 5 days
Package 1: Antibiotic 1 Antibiotic 2 1 iron supplement and/or 1 calcium supplement 1 Ponstan	386-590
Package 2: 2 antibiotics Ponstan 1 or 2 supplements misoprostol	457-660
Package 3: misoprostol only	40-72 [4 tablets]

These packages are worked out with the dosage and duration of antibiotics as twice daily for five days, and the supplements as one daily for 30 days; with the Ponstan as three daily for five days. Because of the range of price variance within the options for Antibiotic 1, the highest and lowest estimates are provided.

Public hospitals do not provide support towards discharge medications, these are all paid for by patients themselves. It could not be independently verified through follow-up of patients whether they actually purchased and use this medicines as prescribed.

C. Notional Costs to Health System

We are now in a position to provide notional estimates of the economic cost of unsafe abortion related morbidity to public health systems. In order to do so we combine some of the findings from the HBS and CBSW components of the IAS. Public hospital and health service budgets in Pakistan are based on historical allocations with only marginal reference to actual caseload or catchment area needs. Similar methods are used to allocate resources within hospitals between various departments and sections. Salaries constitute the largest segment of the overall budget, and these too are not directly linked to actual work done. Under these conditions it is difficult to disaggregate hospital accounts for the burden to the hospital of treating specific conditions. What is proposed here, therefore, is a method to combine information from the IAS on caseload incidence with private sector costs.

Table 8.13 summarizes the main costs of two different types of PAC to a notional public hospital budget. The costs are based on patient payments to the public hospital and comparable private sector costs of specific aspects of PAC care provided. For moderate PACs, which include cases that are discharged within 48 hours, the charges for hospital services amounted to 100 rupees. This figure only includes those hospital charges that went to the hospital itself, and not the unofficial side payment to staff. For severe cases the costs were 575 rupees (these figures are based on Tables 7.8 and 7.9). At comparable private facilities the total cost of moderate PAC care was 8,200 rupees, while for severe PACs the figure was 27,100 rupees (based on Table 7.10). The economic cost of treating moderate and severe PAC cases was 8,100 rupees and 27,100 rupees respectively, net of hospital charges.

Taking the hypothetical (high) figure of 2 million induced abortions a year, and applying ratios of the incidence of complications (30% from Table 5.1) and rate of referral to public hospital (16% from Table 6.17), and severity of referred cases (32% from Table 6.5), the total notional cost to all public hospitals in the country is estimated to be around 1.343 billion rupees. This was roughly 1.70 per cent of the total public outlay on health in 2009-2010.

Table 7.14: Estimated Costs to Public Hospitals (2010 Pakistan Rupees)

		Moderate PACs	Severe PACs
Patient payment to public hospital	Hospital charges	50	325
	Procedure	50	250
	A. Total	100	575
Patient cost at private hospital	Medicines	200	2,100
	Procedure and tests	8,000	25,000
	B. Total	8,200	27,100
Economic cost to public hospital per case - difference between private cost and patient payment	C=(B-A)	8,100	26,525
Number of cases at public hospitals, assuming 2 million cases, 30% complication rate, 16% referral rate, 32% rate of severe complication among referred cases	D	65,280	30,720
Cost to public hospitals (rupees)	E=CxD	528,768,000	814,848,000
Total cost to public hospitals (rupees)		1,343,616,000	
Estimated cost as proportion of public health expenditure	1.34 billion / 79 billion*	1.70%	

*Economic Survey of Pakistan 2009-2010, p.162

The cost estimates provided here are notional rather than real because public hospitals do not stand to make financial savings if the number of PACs declined. Given that budgets are allocated on the basis of historical patterns, the most likely outcome of a decline in PACs is the ability of a hospital to treat more maternal health cases that might be unrelated to abortion. The impact, therefore, will be some improvement in the availability of public health facilities to non-PAC conditions. Conversely, any increase in PAC cases will not lead to increased budgetary expenditure, but a crowding out of other maternal health cases. It is useful to note, however, that if the entire burden of unsafe abortion related morbidity was removed from public hospitals, resources worth 1.3 billion would have been made available for other treatment.

Summary

This chapter has reported that the economic cost of induced abortion related morbidity to households was considerably lower than that of unwanted pregnancies taken to term. The difference is partly due to the high costs of deliveries and treating delivery related complications, and partly because despite its high rate of complication induced abortion is not substantially less safe than a delivery. If the rate of complication in deliveries was much smaller, as it might have been, considering the absence of overt legal or social constraints on the provision of safe delivery services, the cost differential might have been narrower or even reversed.

Induced abortion is more costly in terms of out of pocket expenses than the other alternative, which is contraceptive use. Its main cost, however, may not be an economic one born by the household, but the unnecessary burden is places on the health of women. What households are willing to pay to procure better health chances for women depends on their wealth, but also on a range of issues related to intra-household gender dynamics. Women's agency in other areas (education, marriage decision) leads to greater outlays for maternal health, even after accounting for household wealth. A woman who has already had many sons, and thus may have fulfilled some implied target of family size and composition, may have less money spent on her next delivery, other things being equal.

The notional cost of PACs to the public health budget amounts to around 478 million rupees, or 0.6 per cent of the total health outlay. Given that budgets are allocated on the basis of historical patterns, the most likely outcome of a decline in PACs is the ability of a hospital to treat more maternal health cases that might be unrelated to abortion. The impact, therefore, will be some improvement in the availability of public health facilities to non-PAC conditions. Conversely, any increase in PAC cases will not lead to increased budgetary expenditure, but a crowding out of other maternal health cases.

CONCLUSIONS

Unwanted pregnancy and induced abortion

Induced abortion is being used in Pakistan as an alternative to contraception or as a response to contraceptive failure. Whether the next pregnancy is wanted or not depends on intuitive demographic factors such as the number of existing children, particularly male children, and the age of the woman. Agency related factors such as a woman's education and her autonomy in decision-making in other areas of her life are also important in whether or not a pregnancy might be wanted in the future.

The concept of an unwanted pregnancy is complex however, because it is dependent on a woman's agency with respect to clearly defined preferences regarding a pregnancy, her willingness to express those preferences, and her ability to act upon them. Under conditions of generally constrained agency, the articulation of a preference may, in itself, constitute an improvement over the absence of such articulation. In other words, while it is still correct to focus on the reduction through family planning of unwanted pregnancy as a policy goal, the existence of unwanted pregnancies might represent greater rather than lesser agency on the part of a woman.

Induced abortion, similarly, has a straightforward relationship with demographic factors but a complex one with socio-economic ones. A pregnancy is more likely to be terminated if the woman is older, and has had many children, particularly male children. The probability that a pregnancy would be aborted was also positively correlated with a woman's agency in some other areas of her life, particularly with respect to schooling. Household wealth had a dampening effect on the probability of a pregnancy being aborted.

These findings suggest that policy interventions for reducing unwanted pregnancies and induced abortions must take on board the complex demographic and agency factors that are at play. The reduction of unwanted pregnancies and induced abortions is, ultimately, an inarguable policy objective. However, some factors, such as female education and empowerment, may in the interim result in the opposite. In other words, the decline in unwanted pregnancies and unsafe abortions may follow a non-linear trajectory as a result of greater education and agency, particularly if contraceptive usage lags behind the articulation of clear fertility preferences by women.

Safe and unsafe abortion

Women having induced abortions in our survey overwhelmingly refer to modern service providers using modern clinical or medical methods. The incidence of abortions at home or those using folk methods is marginal. The presumption that the ambivalent legal status of induced abortion has forced abortion providers and abortion seekers into the 'back-street' is not borne out. The private sector is the main supplier of induced abortion services for women across the country, and a majority of women go to providers who appear on the face of it to be qualified.

Despite the relatively higher prevalence of modern providers and methods, the rate of complications is also very high at 30 per cent.[8] While most of those suffering complications have relatively moderate symptoms, around a tenth of the PAC cases are those with more severe complaints. It is not possible to distinguish safe and unsafe abortion providers with reference to the probability of complications. Complications are highly correlated with the use of folk methods, but these are very few. The use of an oral pill, particularly if prescribed by an untrained provider or self-prescribed is also correlated with higher probability of complication. For the most part, however, there is little difference in the rates of complication suffered by type of service provider. The period of gestation before termination is a strong determinant of complications.

Policy interventions that improve conditions of service provision in maternal health across the board are likely to lead to a decline in complication rates related to induced abortion. PACs, particularly severe PACs are also likely to be reduced if abortions are carried out early on in the pregnancy.

Health-seeking behavior

Women in Pakistan who opt for induced abortions appear to exercise a great deal of agency in their choice of abortion service provider. They opt for service providers whom they consider to be effective, and act upon the advice of their women neighbours and peers. More educated women and women from wealthier households choose more expensive private sector providers. While economic constraints are important in determining the choice of provider, it is not clear if the more expensive providers are actually safer.

Women are seriously hampered by not having good information to help them discriminate between safe and unsafe providers. They fall back on factors such as 'personal knowledge' when choosing a service provider. Many return to a service provider despite having suffered a complication, and thus do not necessarily attribute the occurrence of the complication to the quality of service provided. Health-seeking behaviour responds to the severity of the symptoms, but also to a woman's agency and her household's wealth, other things being equal. A more educated woman, and one with greater agency in other areas of her life, is more likely to receive treatment for a complication. A woman with a more educated husband is likely to receive treatment sooner.

Women need information about how to identify safe providers and safe abortion methods. The private sector is the main source of all abortion related services, but these are not necessarily safe and women are mistakenly using unsafe services. The reliance on other women, possibly in similar age groups, is a useful insight into the transmission of knowledge, and perhaps agency, in a key area of sexual and reproductive health. This insight may be particularly valuable if a community-based health or family planning worker might play the role of a friend or neighbour.

[8] This can be contrasted with one estimate of the risk of complications from safe abortions is 3% of medical abortions, and 0.2-2% of surgical abortions in the first trimester of pregnancy among women in North America. [http://www.prochoice.org/about_abortion/facts/safety_of_abortion.html]

Public health systems

The management of PACs in hospitals consisted of standard packages, or combinations of medicines, which included pain relief, supplements, antibiotics, and oxytocin. The discharge medication for patients consisted of a follow up package of the same medicines. Similarly, the investigations for PACs were limited to basic blood and urine tests, ultrasounds, and xrays as needed. Procedures commonly used included D&Es, D&Cs, and laparotomies for the more severe PACs. All of these investigations and procedures were substantially more costly in the private sector.

UARMM costs to households

The expected economic burden of UARMM on a household is relatively low compared to that of taking an unwanted pregnancy to term, but high compared with the cost of contraception. While women from poorer households are more likely to have induced abortions, other things being equal as compared to their wealthier counterparts, it does not follow that the non-use of contraception is due to its cost. The two possible alternatives to contraception, i.e. induced abortion or unwanted pregnancy taken to term, are more costly to households than contraception. It is quite possible that women in wealthier households are more willing to take a pregnancy to term rather than abort, because they are more able to bear the higher economic burden of a delivery.

UARMM costs to public health system

The notional financial cost of UARMM to the health system is estimated at around Rs. 458 million, or 0.6% of the total public health outlay. This cost too needs to be compared with the cost to the health system of providing care to complications arising out of unwanted pregnancies taken to term.

The main burden of UARMM is on the health of women who suffer high rates of complication, long periods of morbidity and the danger of mortality. Measured against the economic costs and even the health costs of the alternative – that is taking an unwanted pregnancy to term – induced abortion would appear to be a cheaper and safer option. When compared to the cost of providing and accessing family planning services, however, both induced abortion and unwanted pregnancies taken to term are expensive.

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APPENDICES

Appendix 1: List of Organizations

Geographic Zone	Partner Organization	Resource Person
Sindh, Balochistan and South Punjab	World Population Fund, Pakistan (Islamabad)	Dr. Qadeer Baig
Sindh overall	Health and Nutrition Development Society (HANDS) (Karachi)	Dr. Anjum Fatma, Head of Research
South Punjab	Mustashaar, Social Development Advisors (Karachi)	Dr. Inayat Thaver, Chief Executive
South Punjab	Humane Foundation (Multan)	Mr. Naveed Iqbal, Project Director
South Punjab	Al-Asar Development Organization (DG Khan)	Mr. Sajjad Hussain, Director
North-Central Punjab	Society of Obstetricians and Gynaecologists of Pakistan (SOGP)	Dr. Sadia Rizwan, Senior Registrar Lahore General Hospital
North-Central Punjab	AAHUNG (Karachi)	Dr. Sikander Sohani, Head of Clinical
North-Central Punjab	Organization for Participatory Development (OPD) (Gujranwala)	Dr Aslam Bajwa, Head of the Health, Education and Program Development (HEaP) at OPD
North-Central Punjab	Family Planning Association of Pakistan (FPAP) (Lahore)	Dr Anjum Rizvi, Director Programme Management

Appendix 2: List of Survey Sites

Sr No.	Geographic Zone	Name of Cluster	Type & Location of Cluster
	Urban Sindh		
1		Kimari Town	Urban-Karachi District
2		Orangi	Urban-Karachi District
3		Bin Qasim	Urban-Karachi District
4		Natha Khan Goth	Urban-Karachi District
5		Korangi	Urban-Karachi District
6		New Pind	Urban-Sukkur District
	Rural Sindh		
7		Hatri	Rural- Hyderabad District
8		Moosa Khatyan	Rural- Hyderabad District
9		Hala	Rural- Hyderabad District
10		Gol Ali Wan	Rural-Sukkur District
11		Luqman	Rural-Khairpur District
12		Bekhari	Rural-Shikarpur District
	Balochistan		
13		Dera Murad Jamali	Rural-Naseerabad District
14		Ward 5	Rural-Naseerabad District
	South Punjab		
15		Dahli Gate	Urban- Multan District
16		Ali Chowk	Urban- Multan District
17		Basti Basira	Rural- Muzaffar Garh District
18		Basti Ghulam Shah	Rural- Muzaffar Garh District
19		Khayaban e Sarwar	Rural- Dera Ghazi Khan District
20		Block A D.G.Khan	Rural- Dera Ghazi Khan District
	North Punjab		
21		Muhammadi Chowk	Urban- Lahore District
22		Yohanaabad	Urban- Lahore District
23		Nadirabad	Urban- Lahore District
24		Charrar Pind	Urban- Lahore District
25		Chak 225	Rural- Faisalabad District
26		Chak 195	Rural- Faisalabad District
27		Mominabad	Rural- Gujranwala District
28		Abdullah Park	Rural- Gujranwala District

Appendix 3: List of Field Staff

Core Team of Collective Supervisors
1. Ms. Saeeda Gopang
2. Mr. Azmat Budhani
3. Mr. Sohail Javed

Team 1- South Sindh (Karachi)
1. Ms. Saeeda Gopang
2. Mr. Azmat Budhani
3. Mr. Sohail Javed
4. Ms Sabeen Anwar
5. Ms Sumaya sadia
6. Ms Farzana
7. Ms Nasreen Baig
8. Ms Sana Rehman
9. Ms Bibi Fatima

Team 2- South Sindh (Hyderabad)
1. Ms. Saeeda Gopang
2. Mr. Azmat Budhani
3. Ms Farah Shaikh
4. Ms Sana Memon
5. Ms Shaista jabeen

Team 3- North Sindh [(Sukkur, Shikarpur, Khairpur and Nasirabad (Balochistan)]
1. Ms. Saeeda Gopang
2. Mr. Azmat Budhani
3. Ms Shabana Qureshi
4. Ms Bilquees Soomro
5. Ms Paris Soomro
6. Ms Anila Batool
7. Ms Qudsia
8. Ms Maryam
9. Ms Naseem Balouch
10. Ms Rukshana Balouch
11. Mr Amir Raza- Additional field supervisor
12. Mr Majid Chana- Additional field supervisor

Team 4- South Punjab (Multan, Muzaffar Garh, Dera Ghazi Khan)
1. Ms. Saeeda Gopang
2. Mr. Azmat Budhani
3. Mr. Sohail Javed
4. Ms Khalida Parveen
5. Ms Shaista
6. Ms Bushra
7. Ms Ghazia
8. Ms Shaista Khan
9. Ms Sumera Ansari
10. Mr Iftakhar Hussain- Additional field supervisor
11. Mr Majid Chana- Additional field supervisor

Team 5- North Punjab (Lahore, Faisalabad, Gujranwala)
1. Ms. Saeeda Gopang
2. Mr. Azmat Budhani
3. Mr. Sohail Javed
4. Ms Nabila Idress
5. Ms Mahreen Yousef
6. Ms Zara Dar
7. Ms Sobia Riaz
8. Ms Iram Gulnaz
9. Ms Farhat
10. Ms Shumaila Yousef
11. Mr Rana Asif- Additional field supervisor
12. Mr Majid Chana- Additional field supervisor

Appendix 4: Cluster Checklist

Respondent & Cluster Identification Form

Date of filling the form: _____ Name of Supervisor: _____

Cluster (number and names of communities within the Cluster):_____

Name of CBR:_____ Age of CBR: _____Years since she has been working in the Cluster:_____

Names & details of other informants consulted to obtain information regarding the community:

Name	Address	Designation/Occupation	Date & Time of Consultation
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

Respondent-related Information

1. Potential Respondents Identified by CBR

#	**Name of Potential Respondent**	**Name of Community and Address***(Street Name or Number)*	**Respondent Type** Induced Abortion *(1)* OR Non-Induced Abortion *(2)*	**Dead** (1) **OR Alive** (2)	**Knows/Knew the Woman Personally** *Yes*(1) *No* (2)	**Years since latest IA**	**Years since death**	**Marital Status***Currently Married* (1), *Widowed* (2), *Divorced* (3), *Separated* (4)	**Age** (Current; or at the Time of Death)	**Parity**	**Availability for Interview** Yes (1) No (2) Maybe (3)
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											

#	**Name of Potential Respondent**	**Name of Community and Address***(Street Name or Number)*	**Respondent Type** Induced Abortion *(1)* OR Non-Induced Abortion *(2)*	**Dead** (1) **OR Alive** (2)	**Knows/Knew the Woman Personally** *Yes*(1) *No* (2)	**Years since latest IA**	**Years since death**	**Marital Status***Currently Married* (1), *Widowed* (2), *Divorced* (3), *Separated* (4)	**Age** (Current; or at the Time of Death)	**Parity**	**Availability for Interview** Yes (1) No (2) Maybe (3)
13.											
14.											
15.											
16.											
17.											
18.											
19.											
20.											
21.											
22.											
23.											
24.											
25.											
26.											
27.											

#	**Name of Potential Respondent**	**Name of Community and Address***(Street Name or Number)*	**Respondent Type** Induced Abortion *(1)* OR Non-Induced Abortion *(2)*	**Dead** (1) **OR Alive** (2)	**Knows/Knew the Woman Personally** *Yes*(1) *No* (2)	**Years since latest IA**	**Years since death**	**Marital Status***Currently Married* (1), *Widowed* (2), *Divorced* (3), *Separated* (4)	**Age** (Current; or at the Time of Death)	**Parity**	**Availability for Interview** Yes (1) No (2) Maybe (3)
28.											
29.											
30.											
31.											
32.											
33.											
34.											
35.											
36.											
37.											
38.											
39.											
40.											
41.											
42.											

CLUSTER-RELATED INFORMATION

2. IDENTIFICATION OF CLUSTER

No.	Name of Urban Locality/Village	Deh/Mouza	Union Council	Approx No of Households
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				

3. OCCUPATIONS IN CLUSTER

Main occupations	First	Second	Third
Men			
Women			

WAGES AND PRICES

Casual daily labour wage rate (rupees)	Rs
Price of wheat flour (rupees per kg)	Rs

4. HEALTH FACILITY IN/NEAR CLUSTER

	Facility exists within Cluster 1 – Yes, 2 - No	Total Number within Cluster	Est. Date of Earliest (Year)	If none in cluster distance of nearest one (km)
Basic Health Unit				
Rural Health Centre				
General hospital				
Private clinic MBBS doctor				
Private clinic MBBS lady doctor				
Private hospital				
Government maternity home				
Private maternity hospital				
Marie Stopes Society (MSS) centre				

EDUCATION FACILITY IN/NEAR CLUSTER

	Facility exists within Cluster 1 – Yes, 2 - No	Total Number within Cluster	Est. Date of Earliest (Year)	If none in cluster distance of nearest one (km)
Government primary school – boys/mixed				
Government primary school – girls				
Government high school – boys/mixed				
Government high school – girls				
Private school – primary				
Private school – up to matric				
Inter college				
Degree college				
University				
Vocational training centre				

5. GENERAL ACCESSIBILITY FROM CLUSTER

	Distance km (if within Cluster then '0') (km)	If outside Cluster then mode of public transport from central spot in Cluster	Travel time (mins)	Fare (rupees)
Market/town				
Inter-city bus stop				
Railway station				
District headquarter				

6. PUBLIC UTILITY IN CLUSTER

	Facility available in the community 1 – Yes, 2 – No	(if yes) Year established	Approx % of households covered
Electricity			
Gas			
Potable water (source)		(If water supply scheme)	(If water supply scheme)
Sewerage (type)		If drainage	If drainage

Appendix 5: List of Consultations

S. No.	Date	Name	Type of Provider/ Organization	City
1	20-Jan-09	Ruksana & Khursheed Begum	Trained Midwives/private clinic	Karachi
2	21-Jan-09	Dr Ayesha	M.B.B.S/Private Clinic	Karachi
3	21-Jan-09	Subhan Khatoon(Dai)	Untrained Dai	Karachi
4	23-Jan-09	Imamzadi Memon(Dai)	Untrained Dai	Karachi
5	4-Feb-09	Dr Tasneem & Dr Tanveer	Health and Nutrition Development Society (HANDS)	Karachi
6	11-Feb-09	Dr. Shahida	M.B.B.S/Private Maternity Home	Karachi
7	20-Feb-09	Khurram Azmat	Head of Research, Marie Stopes Society	Karachi
8	23-Feb-09	Shaista	Staff Nurse, HANDS	Karachi
9	23-Feb-09	Dr Asha	HANDS	Karachi
10	23-Feb-09	Ayesha Siddiqui HANDS	Principal HANDS Midwifery College	Karachi
11	23-Feb-09	Abdul Khalil Wadhelo	District Executive Manager, HANDS Karachi	Karachi
12	23-Feb-09	Dr. Sarwan Kumar	SOGP and Koohi Goth Women's Hospital	Karachi
13	24-Feb-09	Dr. Anwar	MS Sobraj Maternity Home	Karachi
14	25-Feb-09	Amina Mazhar	IPAS Pakistan	Karachi
15	16-Mar-09	Dr. Shershah Syed	SOGP/Pakistan Medical Association/Koohi Goth Hospital/Sindh Government Qatar Hospital	Karachi
16	16-Mar-09	Dr Shabeen Naz	Fatima Bai Hospital (Charity)	Karachi
17	15-Apr-09	Shama Naz	Trained Midwife	Karachi
18	21-Apr-09	Saima Sattar	Trained Midwife	Karachi
19	24-Apr-09	Dr Hameeda Jagrani	M.B.B.S/Private Maternity Home	Hyderabad
20	24-Apr-09	Zubida Channa	LHW	Hyderabad
21	24-Apr-09	Dr Gulnar Anwar	Taluka Hospital	Hyderabad
22	24-Feb-09	Dr Pushpa Srichand	Professor Liaqat Medical University	Hyderabad
23	01-Sep-09	Dr. Luna	NCMNH	Karachi
24	03-Sep-09	Dr. Anila	Incharge Gyne OPD SG Qatar Hospital	Karachi
25	04-Sep-09	Dr. Shabeen Naz	Fatima Bai Hospital	Karachi
26	09-Sep-09	Syed Irfan Qadri	Med Superintendent, Atia Zafar Trust Hospital	Karachi
27	10-Sep-09	Dr. Asma	Junior Doctor Sindh Govt Qatar Hospital	Karachi
28	11-Sep-09	Dr. Ashraf Qamar ud Din	Assistant Med Superintendent, Lady Dufferin Hospital	Karachi
29	11-Sep-09	Dr. Faridon Setna	Med Superintendent, Lady Dufferin Hospital	Karachi
30	11-Sep-09	Dr. Ghazala, Dr Saima	Atia Hospital	Karachi
31	14-Sep-09	Dr. Nusrat Shah	Assistant Professor, Civil Hospital Karachi	Karachi

S. No.	Date	Name	Type of Provider/ Organization	City
32	14-Sep-09	Dr. Saeed Qureshi	Med Superintendent, Civil Hospital Karachi	Karachi
33	14-Sep-09	Dr. Farhat Moazzam	Chairperson, Center of Biomedical Ethics and Culture, SIUT	Karachi
34	15-Sep-09	Mehtab	LHV/HANDS Hospital	Karachi
35	18-Sep-09	Dr Kaleem Butt	ex MS Civil Hospital	Karachi
36	18-Sep-09	Dr. Ghazala	Director Access, Abortion and AIDS, Family Planning Association of Pakistan (FPAP)	Lahore
37	26-Sep-09	Dr. Hajra	Fatima Memorial Hospital	Lahore
38	29-Sep-09	Dr. Zakia, Dr. Nargis Soomro	Civil Hospital, Karachi	Karachi
39	30-Sep-09	Dr. Asma, Dr Fareeha, Dr Waqr, Dr Farzana, Qatar	Sindh Government Qatar Hospital	Karachi
40	01-Oct-09	Dr, Anila Sheikh, Dr. Farah Hussain	Civil Hospital	Karachi
41	03-Oct-09	Qudsia Mehmood	Member of Leadership Development for Mobilising Reproductive Health (LDM)	Karachi
42	06-Oct-09	Dr. Farzana	Chief Medical Officer Sindh Government Qatar Hospital	Karachi
43	06-Oct-09	Dr. Mohammad Zafar Iqbal	Additional Med Superintendent	Karachi
44	21-Nov-09	Dr. Sadia Rizwan	Senior Registrar, Lahore General Hospital	Lahore
45	03-Dec-09	Dr. Mehmooda Mubashir	President of Maternity and Child Welfare Association of Pakistan	Lahore

Appendix 6: Women's In-depth Questionnaire

Women's In-Depth Questionnaire

Collective for Social Science Research Karachi- 2010

Identification Page

Name: _____ Husband's Name:_____ Father's Name:_____

Province: _____ District_____ Tehsil/Taluka:_____

Union Council:_____ Village/Town:_____ Address:_____

Cluster name and code [Code to be filled in by Supervisor] _____

Household code [Code to be filled in by Supervisor] _____

Area of Residence: 1- Urban: large city 2- Peri-Urban: small city 3- rural

Respondent ID (same as household ID) [Code to be filled in by Supervisor] _____

History of Abortion: Yes No

Did the respondent know she was pregnant? Yes No

Did the respondent intentionally terminate the pregnancy? Yes No

Was the pregnancy terminated before her sixth month of gestation started? Yes No

How long ago was the pregnancy terminated? _____ (months/years)

Caste of Respondent _____

Caste of Respondent's husband _____

Relationship to household head_____

Codes for relationship: Wife=1; Daughter=2; Daughter-in-law=3; other (specify) =4

Enumerator Visit	1	2	Final
Date			
Time			
Enumerator name			
Result code			

(*Result codes: Complete=1; Not at home=2; Partially complete= 3; Refused=4; Incapacitated=5)

Language of Interview: 1- Urdu 2- Punjabi 3-Sindhi 4-Pushto 5- Balochi 6-Other

Name of Community Based Researcher	Name of Field Supervisor

Agreement/approval of respondent (Signature/thumb impression):_____

Signature of the Enumerator: _____

Household Module

Name of Respondent:_____ Province_____ District_____ UC_____ Cluster Code_____ Household ID_____

A1. Inquire about facilities near the household:

Serial #	Facility	Distance (Km)	Mode of Transport	Travel Time (mins)	Commuting cost (Rs)	Serial #	Facility	Distance (Km)	Mode of Transport	Travel Time (mins)	Commuting cost (Rs)
1.	Government Primary School					2.	Basic Health Unit				
3.	Government High School					4.	Private Clinic				
5.	Private School					6.	Compounder				
7.	Shops/Market					8.	Closest maternity home a woman can be taken to for delivery				
9.	Bus Stop/ Station					10.	Closest hospital anyone can be taken to in an emergency				

A2. Main material used for construction of the house:
1) mud/stones
2) unbaked bricks/mud bricks
3) baked bricks
4) cement blocks/cement
5) other_____

A3. Main material of the roof :
1) thatch/bamboo/wood
2) mud
3) cardboard/plastic
4) iron sheets
5) T-Iron
6) baked bricks
7) cement
8) asbestos sheet

A4. Ownership of the land on which the house is built?
1) Self owned (respondent owns) [Skip to A-7]
2) Owned by someone else in the household [Skip to A-5]

3) Owned by the household but without legal deed
4) Collectively owned property
5) Someone else's private property
6) Living on rent [Skip to A-6]

A5. If someone else in the household owns the land on which this house is built, what is your relationship to them?

A6. If rented, can you tell me what the monthly rent is?
(Rs) _____

A7. Do you have electricity in your house?
1) Yes
2) Yes using someone else's meter
3) Kunda
4) No

A8. What is the household's main source of drinking water?
1) Main water supply
2) Tap inside the house
3) Communal tap outside the house /tube well
4) Water well
5) Stream/lake/river
6) Other_____

A9. What type of fuel does your household use for cooking?
1) Natural gas
2) Cylinder gas
3) Firewood
4) Charcoal
5) Kerosene
6) Animal dung
7) Other_____

A10. Do you share your kitchen facilities with other households?
1) Yes 2) No

A11. What type of toilet facility does your household have?
1) Flush latrine in the house
2) Other latrine arrangement in the house
3) Communal facility outside the house
4) No toilet facilities

A12. Do you share your toilet facilities with other households?
1) Yes 2) No

A13. Does any member of the household own any piece of land that can be used for agriculture?
1) Yes 2) No [Skip to A.15]

A14. If yes then can you tell me how much land?
_____

A15. How many of the following do your household members, or how many of the following does the household collectively possess?

A16. Does anyone in your household run his/her own business?
1) Yes 2) No [Skip to A.18]

A17. If yes then what?
1) pushcart
2) cabin
3) shop
4) mill
5) workshop
6) storage facility

7) manufacturing unit
8) other_____

A18. Does anyone in your household own livestock?
1) Yes 2) No [Skip to A. 20]

A19. If yes then how many of:

Ownership*	Cows	Bulls	Calves	Goats / sheep	Horses	Donkeys	Camel	Chickens
Own								
Looking after some-one else's								

A20. Approximately how much flour is consumed by your household in a week? (Kg) _____

A21. Did you ever have to borrow flour from anyone?
1) Yes 2) No [Skip to A23]

	Item	Quantity
1.	Car/jeep	
2.	Tractor	
3.	Motorcycle/scooter	
4.	Rickshaw/Qinchi	
5.	Cycle	
6.	Tractor	
7.	Pickup/truck	
8.	Animal-drawn cart	
9.	Television	
10.	Radio/tape recorder	
11.	Fans	
12.	Air conditioner	
13.	Room cooler	
14.	Refrigerator	
15.	Washing machine	
16.	Sewing machine	
17.	Beds/charpoy	
18.	Mobile phones	

A22. If yes, from whom did you borrow?
1) Shopkeeper
2) Landlord
3) Neighbors
4) Your or your husband's employer
5) Close relatives
6) Distant relatives
7) Other_____

A23. How frequently is food cooked in your household?

1) Three times a day
2) Twice a day
3) Once a day
4) Every other day
5) Other_____

A24. How often are the following food items consumed by your household?

	Wheat flour	Tea	Sugar	Milk	Eggs	Rice	Oil/ ghee	Tomatoes	Potatoes	Green Chilies	Onions	Other Vegetables	Pulses/ chick-peas	Chicken	Beef	Mutton	Fish	Fruits
How many days in the past week?																		
How many times in the past month?																		
How many times in the past year?																		

A25. Who takes main responsibility of and who helps in the following household chores?

A. No.	B. Name of household work	C. Who takes the main responsibility for this activity?	D. Who helps in this activity?	A	B Name of household work	C. Who takes the main responsibil-ity for this activity?	D. Who helps in this activity?
1.	Cooking			10.	Children's health		
2.	Cleaning up after meal			11.	Helping children with homework		
3.	Cleaning the house			12.	Caring for the elderly-feeding them		
4.	Washing clothes			13.	Caring for the elderly-looking after their health		
5.	Ironing			14.	Bringing groceries for the household		
6.	Fetching water			15.	Shopping for personal and household items		
7.	Collecting wood/firewood			16.	Paying utility bills		
8.	Chopping wood/firewood			17.	House maintenance and/or repair		
9.	Feeding children			18.	Community related work /services		

Codes for Columns C and D

Woman herself (respondent) =1 No one=2 Husband=3 Father=4 Mother=5 Brother=6 Sister=7 Son=8 Daughter=9
Daughter-in-law=10 Grandson=11 Granddaughter=12 Grandson=13 Granddaughter=14 Father-in-law=15 Mother-in-law=16si
Sister-in-law=17 Nephew=18 Niece=19 Domestic servant=20 Other=21

A26. Roster of household members

A #	B. Name	C Relationship with the household head	D Gender Male=1 Female=2	E Age	F Marital status	G Ever been to school? Yes=1 No=2	H Level of Education	I Literacy level	J Occupation (1)	K Occupation (2)	L. Does the member hold a National ID card? Yes=1, No=2
1.											
2.											
3.											
4.											
5.											
6.											
7.											
8.											
9.											
10.											
11.											
12.											
13.											
14.											

Codes for Q.26

For Column C: Self=1 Husband=2 Father=3 Mother=4 Brother=6 Sister=6 Son=7 Daughter=8 daughter-in-law=9 Grandson=10 Granddaughter=11 Grandson=12 Granddaughter=13 Father-in-law=14 Mother-in-law=15 Sister-in-law=16 Nephew=17 Niece=18 Servant=19 Other=20

For Column F: Married=1 Unmarried=2 Widow/Widower=3 Divorced=4 Separated = 5

For Column H: less than 1 year of education=0 1st grade=1 2nd grade=2 3rd grade=3 4th grade=4 5th grade=5 6th grade=6 7th grade=7 8th grade=8 9th grade=9 matric=10 first year of college=11 intermediate=12 graduate=14 master's=16 diploma=17 technical/vocational training= 18 other=17

For Column I: Can only read=1 Can read and write=2 Can read the Quran=3 Can Not read or write at all=4

For Column's J & K: farming=1 raising livestock=2 daily laborer (farming)=3 daily laborer (non-farming)=4 carpenter=5 landlord's servant=6 someone else's private servant=7 government servant=8 retired government servant=9 employee of a private company=10 Shop-owner=11 pushcart=12 bus/taxi driver=13 factory worker=14runs own business=15 working abroad=16 working some other city=17 housewife/housework=18 embroidery/stitching=19 domestic servant=20 unemployed=21 disabled/elderly=22 underage=23 student=24 contractor=25 other= 26

B. Woman's Profile

I would like to ask you a few questions about yourself.

B1. Can you tell me your age? _____

B2. How old were you when you got married? _____

B3. What is your current marital status?
1. Married
2. Widowed
3. Divorced
4. Separated

B4. How many times have you been married?

1) Only once 2) More than one

B5. How many pregnancies have you had in your life? _____

B6. How many daughters do you have? _____

B7. How many sons do you have? _____

B8. Are you currently pregnant?

1) Yes 2) No 3) Don't know

C. Employment and Access to Resources

C1. Have you ever done paid work?
1. Yes
2. No [Skip to C13]

C2. Work status:
1. Currently working
2. Stopped working [Skip to C12]

(Questions C3 to C11 relate to current or prior paid work)

C3. What kind of paid work are you currently, or were previously, doing?

_____

C4. How long have you been doing this work?

Months _____ 999. Don't remember

C5. What was the main reason for taking up this activity? (can be more than one reason)
1. To help family out financially
2. To bear the expenses of children's education
3. To bear the expenses of own education
4. For financial independence/ pocket money
5. To bear own marriage expenses
6. To bear children's marriage expenses
7. Forced by others
8. Other [specify]_____

C6. Who took the decision for you to start working?

1) I myself
2) My husband decided
3) Joint decision by me and my parents
4) Joint decision by me and my husband
5) Other [specify]_____

C7. What is/was your monthly salary?
(Rs)_____

C8. Who keeps/kept your earnings? [Can be more than one]

1. I myself
2. My husband
3. My parents in law
4. My own parents
5. Other_____

C9. Can you/could your keep some portion of your own income for spending by your own will?

1. Yes
2. No [skip to C11]

C10. If yes, then what portion of your own income can/could you keep?

1. All of it
2. More than half
3. Half
4. Less than half
5. Other_____

C11. Do you/did you spend your income on the following?

	Item	**Yes=1, No=2**
1.	Food for the household	
2.	Clothes for yourself and family	
3.	Children's education	
4.	Children's/husband's health care	
5.	Own health care	
6.	Utility bills	
7.	Personal care items for husband and children	
8.	Personal care items for yourself	
9.	Transport/commuting	
10.	Give to natal family	
11.	Saving	
12.	Loan Repayment	
13.	Other	

C12. Why did you stop working?

1. Got married
2. In-laws did not allow me to work
3. Husband did not allow me to work
4. Become pregnant
5. Was no need to continue working
6. Other

(Now go back and ask C3 to C11)

C13. Do you get any money from your natal family?

1. Yes No [Skip to C17]

C14. If yes then how often in a year?
1. once a month
2. every other month
3. twice a year
4. once a year
5. occasionally
6. when needed

C15. How much cash/money do you receive like this in the last year?
Rs _____

C16. Do you spend this money on the following?

	Item	**Yes=1, No=2**
1.	Food for the house	
2.	Clothes for yourself and family	
3.	Children's education	
4.	Children's/husband's health care	
5.	Own health care	
6.	Utility bills	
7.	Personal care items for husband and children	
8.	Personal care items for yourself	
9.	Give to affinal family	
10.	Saving	
11.	Loan Repayment	
12.	Other	

C17. Do you receive any gifts from your natal family?
1) Yes 2) No [Skip to C20]

C18. If yes then how often in a year?
1. once a month
2. every other month
3. twice a year
4. once a year
5. occasionally
6. when needed

C19. If yes then what kinds of gifts do you receive?
1. clothes for myself
2. clothes for my children and husband
3. clothes for other in-laws
4. jewelry for myself
5. jewelry for my in-laws
6. electronics for my use
7. electronics for use by my in-laws
8. household items
9. food items
10. other_____

C20. Do you have any cash savings of your own?
1. yes
2. No [Skip to D1]

C21. If yes then by whose decision do you save?
1. My own decision
2. Husband's decision
3. Mine and my husband's joint decision
4. Mine and my parents' joint decision
5. In-laws' decision

6. Husband's and in- laws' decision
7. Other, please specify_____

C22. What is the purpose of these savings?
1. Education of children
2. House building
3. Marriage of children
4. Loan repayment
5. Starting business
6. For my own health expenses
7. For my family's health expenses
8. Generally, for my own expenses
9. Unforeseen future expenditure/emergency
10. Other_____

C23. What are these savings actually used for?
1. Education of children
2. House building
3. Marriage of children
4. Loan repayment
5. Starting business
6. For my own health expenses
7. For my family's health expenses
8. Generally, for my own expenses
9. Unforeseen future expenditure/emergency
10. Other_____

C24. Who decides how your savings are actually used?
1. My own decision
2. Husband's decision
3. Mine and my husband's joint decision
4. Mine and my parents' joint decision
5. In-laws' decision
6. husband's and in- laws decision
7. Other, please specify

D. Husband's Background and Marriage

D1. Is/was there a blood relationship between you and your husband?
5. Yes
6. No [Skip to D3]

D2. What type of blood relation is/was it?
_____

D3. The type of marital arrangement you are/were in is/was:
1. *watta satta*
2. *vani/swara*
3. decision of *jirga*
4. my family's decision
5. love-marriage
6. other_____

D4. Were you consulted at the time your marriage was arranged?
1. Yes
2. No [Skip to D6]

D5. If yes, then who else was involved? [Can select more than one]

1. My mother
2. My father
3. My brother
4. Other_____

(Now skip to D7)

5.

D6. If not, who decided? [can select more than one]

1. My mother
2. My father
3. My brother
4. Other_____

D7.At the time of your wedding (ask questions in Column A):

A	B Yes= 1 No=2	C (If answer to B is yes) Cash/money= 1 non-cash items=2	D (If answer to C is non-cash items) What kind of non-cash items?*
1. Did your family give you anything?			
2. Did your family give your in-laws anything?			
3. Did your in-laws give you anything?			
4. Did your in-laws give your family anything?			

Codes for non-cash items: Electronics=1; Jewelry=2; Clothes=3; Furniture=4; Car/automobile=5; Motorcycle=6; Cycle=7; Livestock=8; Crockery/cutlery=9; Kitchen items/accessories=10; Land=11; Other= 99

D8. Is your husband, God forbid, a drug addict?

1. Yes
2. No
3. Don't know

D9. Does your husband have other wives?

1. Yes
2. No [Skip to E1]
3. Don't know

D10. If yes, do you know why he took another wife?

1. To try to have a son
2. Found someone else to care for
3. Was already married before marrying me
4. Other_____

E. Mobility and Communication

E1. Have you visited any of the following places in the past six months? If you did, then how frequently and with whom?

A **Place**	**B** **Visited**	**C** **If yes, then**	**D** **If yes then**	**E** **If no then**
	Yes=1, No=2	Accompanied by	Frequency	Reasons for not visiting
1. Small health facility (local clinic or health centre/clinic etc				
2. Hospital				
3. Market (to shop for Household items)				
4. Rural Committee /community meeting				
5. Workplace				
6. To visit friends/ relatives				
7. Neighboring houses				
8. Children's school				
9. Any place/centre for own learning				
10. Park/picnic				
11. Cinema				
12. Shopping for clothes/personal use items for yourself				
13. Other (Specify)				

Codes for Column C: Alone=1: Husband=2; Father-in-law= 43; Mother-in-law=53; Father=3; Mother=4; Brother=5; Sister=6; Son=7; Daughter=8; Brother-in-law = 36, Sister-in-law = 362; Nephew= 257; Niece= 258, Other=999

Codes for Column D: Never=0; Once=1; Twice or thrice=2; Every month=3; Every other week=4; Weekly=5; After every few days=6; Every day=7

Codes for Column E: Husband does not permit=1; In-laws do not permit=2; No means of commuting=3; No need to visit=4; No one to accompany me=5; Don't know=6; Other=7

E2. Do you visit your natal house?
1) Yes [If yes, skip to E4] 2) No

E3. If not then why not?
1. not allowed to by husband
2. not allowed by in-laws
3. not allowed by natal family
4. natal house is in another city/village/town
5. have no means of transport
6. have no one to accompany me
7. not well enough to travel
8. no need to visit them
9. other_____

E4. If yes then how often have you visited them in the past twelve months?
1. Once or twice during the year
2. Every other month
3. Every month
4. Twice a month
5. Every week
6. After every few days
7. Everyday
8. other_____

E5. Do you talk to your parents or siblings on the phone?
1) Yes [If yes then skip to E7] 2) No

E6. If not then why not?
1. don't have a phone
2. not allowed to use phone
3. cannot go anywhere to make a call
4. don't have money to call from PCO
5. other_____

E7. If yes, then how often in a year do you talk to them?
1. Once or twice during the year
2. Every other month
3. Every month
4. Twice during the month
5. Every week
6. After every few days
7. Everyday
8. other_____

F. General Health Seeking Behavior

I would now like to talk to you about your health.

F1. Sometimes a person can have serious health problem for a long time. Do you have any of the following such problems? (can be more than one)

1. Anemia/weakness
2. Seizures
3. Pain in legs or arms
4. Pain in any other area of the body
5. Fever
6. Headaches
7. Blood pressure
8. Diabetes
9. Tuberculosis

10. Fistula (constant dribbling of urine/faeces usually after prolonged childbirth)
11. Other _____
12. None [Skip to G1]

F2. Did this/these problem(s) develop after any of your births?

1) Yes 2) No 3) Don't Know

F3. How long have you had the problem?

1. Less than a month
2. One month
3. 2 to 3 months
4. 3 to 6 months
5. 6 months to 1 year
6. More than a year
7. Other_____

999. Don't know

F4. Did you ever seek treatment for this problem?

1) Yes [If yes skip to F6] 2) No

F5. If not, what were the reasons for not seeking treatment? (can be more than one)

1. Costs to much
2. Not necessary or important
3. Too far
4. No transport
5. Did not have anyone to accompany me
6. Did not have time to go
7. Did not want to leave my children alone
8. Did not know where to go for treatment
9. Did not want to see a male doctor
10. Not allowed to go
11. Fear of service provider/medicines
12. Other _____

[Now skip to G1]

F6. Who did you go to for treatment? (can be more than one)

1. Doctor
2. Dai/TBA
3. LHV
4. LHW
5. Dispenser / Compounder
6. Self Treatment
7. Hakim
8. Pir / Maulvi
9. Other _____

F7. How long after the symptoms appeared did you seek treatment?

1. Within a week
2. Within a month
3. Within 6 months
4. More than 6 months (specify) _____

999. Don't know

F8. Did you seek permission to get treatment?

1) Yes 2) No [If no then skip to F10]

F9. If yes then from whom did you seek permission? (can be more than one)

1. Husband
2. Parents
3. Mother in law
4. Father in law
5. Sister in law
6. Other _____

F10. Are you being treated for this problem now?

1) Yes [If yes then skip to F12] 2) No

F11. If not, why not? (can be more than one)

1. The illness was cured
2. Treatment not necessary or important
3. Too far
4. No transport
5. Did not have anyone to accompany me
6. Did not have time to go
7. Did not want to leave my children alone
8. Did not know where to go
9. Did not want to see a male doctor
10. Not allowed to go
11. Fear of service provider/medicines
12. treatment was costly
13. Other _____

[Now skip to G1]

F12. If yes then who do you go for treatment? (can be more than one)

1. Doctor
2. Dai/TBA
3. LHV
4. LHW
5. Dispenser / Compounder
6. Self Treatment
7. Hakim
8. Pir / Maulvi
9. Other _____

F13. Why do you go to this provider?

1. Knew the provider; friend or relative
2. Instructed by mother/sister
3. Instructed by mother in law/sister in law
4. Recommended by friend, neighbor or other relative
5. Close to home
6. Affordable
7. The provider has a friendly attitude
8. knew that the provider will not talk to anyone else about my treatment/illness
9. Believed that treatment would be safe and effective
10. Was known to perform such procedures
11. Other_____

G. Contraception

G1. Do you know about the following methods of family planning and what is your source of information about these methods?

	Method	**Source of Information***
1.	Pill	
2.	Condom	
3.	IUD (loop/coil placed inside the uterus)	
4.	Injection	
5.	Operation/Tubal Ligation	
6.	Male sterilization	
7.	Withdrawal (Azal)	
8.	Rhythm method (avoiding sexual intercourse during the days the woman is most likely to conceive)	
9.	Emergency contraception (taking pills after sexual intercourse to avoid pregnancy)	
10.	Other [specify, eg Norplant]	
11.	None	

*Codes for possible sources: FP radio message=1; FP TV message=2; LHV or maternity/child care centre=3; LHW=4; Dai/TBA=5; Private Doctor=6; husband=7; Mother in law=8; Mother=9; Sister=10; Sister in law=11; Friend or neighbor=12; Compounder/pharmacist=13; NGO=14; Homeopath =15; hakim=16; other=17

G2. Have you ever used any family planning method?

1) Yes [if yes then skip to G4] 2) No

G3. Can I ask you why you have never used any family planning method? (can be more than one)

1. Wanted more children
2. Infrequent/no sex
3. No menstruation after birth
4. Breastfeeding
5. Opposition from husband
6. Opposition from others in the family (in laws)
7. Own opposition
8. Religion forbids
9. Know no method
10. Know no source
11. Fear of side effects
12. History of contraceptive failure
13. Source far away
14. Cannot afford
15. Never thought about it
16. Infecund/menopausal
17. Other (Specify) _____

[Now Skip to G10

G4. If yes then why did you use the method?

1) For spacing 2) For limiting
2) 3)Other_____

G5. Which method have you used? (can be more than one)

1. Pill
2. Condom
3. IUD (loop/coil placed inside the uterus)
4. Injection
5. Operation/Tubal Ligation
6. Male sterilization
7. Withdrawal (Azal)
8. Rhythm method (avoiding sexual intercourse during the days the woman is most likely to conceive)
9. Emergency contraception (taking pills after sexual intercourse to avoid pregnancy)
10. Other [specify]_____

G6. Were you practicing family planning at the time of the latest pregnancy that was terminated (by induced or spontaneous abortion)?

1) Yes [If yes then skip to G8] 2) No

G7. If not, for which reasons? (can be more than one)

1. Wanted more children
2. Infrequent/no sex
3. No menstruation after birth
4. Breastfeeding
5. Opposition from husband
6. Opposition from others in the family (in laws)
7. Own opposition
8. Religion forbids
9. Know no method

10. Know no source
11. Fear of side effects
12. History of contraceptive failure
13. Source far away
14. Cannot afford
15. Never thought about it
16. Infecund/menopausal
17. Other (Specify) _____

[Now skip to G10]

G8. If yes then why were you using the method?

3) For spacing 2) For limiting
3)Other_____

G9. Who took the decision to use contraception? [can be more than one]

1. Me and my husband together
2. I decided alone
3. Husband decided for me
4. Mother in law
5. Other_____

G10. Are you currently using any method of family planning?
1) Yes 2) No [if no then skip to G12]

G11. If yes then why?

1) For spacing 2) For limiting
2) 3)Other_____

G12. If no, why not? (can be more than one)
1. Wanted more children
2. Infrequent/no sex
3. No menstruation after birth
4. Breastfeeding
5. Opposition from husband
6. Opposition from others in the family (in laws)
7. Own opposition
8. Religion forbids
9. Know no method
10. Know no source
11. Fear of side effects
12. History of contraceptive failure
13. Source far away
14. Cannot afford
15. Never thought about it
16. Infecund/menopausal
17. Other (Specify) _____

G13. Do you intend to use contraception in the future?

1) Yes 2) No [if no Skip to G15]

G14. If yes then why?

1) For spacing 2) For limiting
3)Other_____

G15. If no, then why not? (can be more than one)
1. Wanted more children
2. Infrequent/no sex

3. No menstruation after birth
4. Breastfeeding
5. Opposition from husband
6. Opposition from others in the family (in laws)
7. Own opposition
8. Religion forbids
9. Know no method
10. Know no source
11. Fear of side effects
12. History of contraceptive failure
13. Source far away
14. Cannot afford
15. Never thought about it
16. Infecund/menopausal
17. Other (Specify) _____

G16. Where do you generally obtain contraceptives from?

1. Government hospital	10. NGO
2. Local health clinic/MCH	11. Pharmacy
3. Family welfare centre	12. Private doctor
4. Mobile service camp	13. Homeopath
5. LHV	14. Dispenser/Compounder
6. LHW	15. Shop (not pharmacy)
7. Basic Health Unit	16. Friend/relative
8. Male/female mobilizer	17. Dai/TBA
9. Private hospital/clinic	18. Hakim
	19. Other

H1. Pregnancy History (separate form attached)

1. Age at first menarche:____ 2. How long after your first menstrual period did you get married? _____3. How long after your marriage did you become pregnant for the first time? _____ Age at the time of first pregnancy _____

	A. Age of woman at the time of pregnancy	B. Contraceptive use before the pregnancy Yes=1 No=2	C. Antenatal visits [no.]	D. Place of ANC	E. Termination (induced/spontaneous)	F. Gestational age at the time of termination (months)	G. Provider of abortion services	H. Was the pregnancy wanted?	I. Assistance at the time of Delivery	J. Place of delivery or Abortion	K. Pregnancy Outcome	L. Sex of the child Male=1 Female=2	M. Total cost of delivery or Abortion	N. Expense borne by
1														
2														
3														
4														
5														
6														
7														

Codes:

Column D: 1. Government Hospital 2. BHU/Maternal Child Health Centre 3. Private Hospital/Clinic 4. Other

Column E: 1. Induced abortion 2. Spontaneous abortion 3. Pregnancy to term

Column G: 1.Doctor 2.Nurse/TBA/LHV 3.Dai 4. LHW 5.Dispenser/compounder/homeopath/hakim 6. No one

Column H: 1. Wanted a child at that time 2. Wanted a child but later 3.Did not want another child (at all)

Column I: 1. Doctor 2. Nurse/TBA/LHV 3. Dai 4. LHW 5. Other 6. No one

Column J: 1. Government Hospital 2. BHU/Maternal Child Health Centre 3. Private Hospital/Clinic 4. Own home 5. Other home 6. Other

Column K: 1. Live birth 2. Still birth 3. Died within a month of birth 4.Pregnancy was terminated

Column N: 1. Herself 2. Husband 3. Parents 4. Parent's in law 5. Own siblings 6. Husband's siblings 7. Other relatives 8. Friend/neighbor 9. Other

H2. History of Maternal Complications

A	B. Did you suffer any complications at the time of delivery or after abortion Yes=1 No=2	C. What was the complication ? (describe)	D. Did you seek treatment ? Yes=1 No=2	E. Who did you go to for treatment ?	F. How much did the treatment cost?
1					
2					
3					
4					
5					
6					
7					

Codes for Column E: 1. Doctor 2. Nurse/LHV 3.Dai 4.LHW
5. Homeopath 6. Hakim/Pir/Maulvi 7. Compounder

8. Other _____

I. Latest Pregnancy Loss

Now, I want to talk to you about your latest pregnancy loss

I1. How many months pregnant (gestational age) were you when the pregnancy ended?

1. up to 2 months
2. between 2 and 4 months
3. between 4 and 6 months
4. more than 6 months
5. Don't know

I2. Did you get an ultrasound done before the abortion?
1) Yes 2) No [If no then skip to I4]

I3. What did you find out through the ultrasound?

1. That there was some complication
2. Sex of the baby
3. Missed abortion
4. That there was no complication

I4. How did you lose this pregnancy?

1. missed abortion
2. miscarriage/spontaneous abortion
3. spontaneous abortion due to domestic violence
4. induced abortion [if induced skip to I6]
5. slipped/fell down
6. other_____
7. don't know

I5. How did you know there was something wrong? (can be more than onesymptom)

1. Excessive bleeding
2. Abdominal pain
3. Vomiting

4. High fever
5. Low fever
6. Any other_____

[Now skip to I16]

I6. Can I ask you the reason for the induced abortion? (can be more than one)

1. My ill health
2. Husband's ill health
3. Husband's request/demand
4. Health of existing children
5. Poverty (could not afford)
6. Wish to space
7. Wish to limit family size
8. Wanted a son
9. Wanted a daughter
10. Changed my mind regarding wanted pregnancy
11. Medical reasons-threat to woman's life
12. Medical reasons-fetal abnormality
13. Other_____

I7. If you changed your mind regarding wanted pregnancy, what were the reasons?

1. Divorce from husband
2. Separation from husband
3. Pressure from in-laws to abort
4. Pressure from husband to abort
5. Other [specify] _____

I8. Where did you go to for the induced abortion?

1. Private hospital
2. Government hospital
3. NGO
4. Community health centre/maternity child health centre
5. LHV clinic
6. Dai's clinic
7. Nowhere, stayed at home
8. other_____

I9. Who performed the induced abortion?

1. Private Doctor
2. Nurse/trained midwife (Dai)
3. untrained midwife (Dai)
4. don't know whether midwife (dai) was trained or untrained
5. LHV/LHW
6. I myself
7. other_____

I10. Did someone tell you to go to this provider?

1) Yes 2) No [If no then skip to I13]

I11. If yes then who told you to go to this provider?

1. husband
2. mother-in-law
3. mother
4. sister-in-law
5. sister
6. brother
7. friend/neighbor
8. other_____

I12. Why did this person tell you to go to this provider?

1. They knew the provider
2. They had gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby
5. They knew that the provider performs induced abortions
6. They knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. They believed the provider's treatment to be effective
9. They believed the provider's treatment to be safe
10. No special reason
11. Other_____

[Now skip to I14]

I13. If the decision to go to the provider was your own then why did you decide to go to that provider?

1. Knew the provider
2. Gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby
5. Knew that the provider performs induced abortions
6. Knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. Believed the provider's treatment to be effective
9. Believed the provider's treatment to be safe
10. No special reason
11. other_____

I14. What was the procedure of induced abortion?

1. Given vaginal pill
2. Given oral pill
3. D&E/D&C
4. MVA
5. Other_____
6. Don't know/remember

I15. How much did the procedure cost?

_____

I16. Did you have any complication after the abortion?

1) Yes 2) No [If not skip to Family Planning Counseling section (N1)]

I17. What complication(s) did you have? (can be more than one)

1. Bleeding
2. Abdominal pain
3. Vomiting
4. High fever
5. Low fever
6. Retained products (from abortion)
7. Perforation
8. Sepsis
9. Organ failure
10. Other (specify)

_____

I18. Did you seek treatment for this complication?

1) Yes [If yes skip to J1] 2) No

I19. If no then what was the reason for not seeking treatment.

1. Costs to much
2. Not necessary or important
3. Too far
4. No transport

5. Did not have anyone to accompany me
6. Did not have time to go
7. Did not want to leave my children alone
8. Did not know where to go for treatment
9. Did not want to see a male doctor
10. Not allowed to go
11. Afraid that other people might find out about the abortion
12. Other_____

I20. If you did not seek treatment, how long did the complication/problem last?

1. up to one week
2. up to a month
3. more than a month, how long (months)_____
4. still have the problem (to date)

I21. Did you have to stop doing your household work for some time, because of the complication?

1. Yes 2. No [if no then skip to I24]

I22. If yes then for how long did you have to stop doing your household work?

1. less than a week
2. up to one week
3. between 2 and 3 weeks
4. up to one month
5. more than one month
6. up to three months
7. still not able to do any household work (to date)
8. other_____

I23. During this time when you were unable to do your housework, who took the responsibility for housework? (can be more than one)

1. Mother in law
2. Sister in law
3. Mother
4. Sister
5. School-going daughter
6. Daughter not attending school
7. Daughter doing paid work
8. School-going son
9. Son not attending school
10. Son doing paid work
11. Husband
12. Other_____

I24. Were you doing any paid work at the time you had the complication?

1. Yes 2. No [If no skip to N1]

I25. Did you have to stop doing that work for sometime?

1. Yes 2. No [if no skip to N1]

I26. For how long did you have to stop doing this work?

1) Less than a week
2) Up to a week
3) Between 2 and 3 weeks
4) Up to one month
5) More than a month
6) Up to 3 months
7) Still not able to do the work (to date)
8) Other_____

[Now skip to section N]

J. First Treatment

J1. Where did you first go for treatment?

1) same place where induced abortion was done
2) some other place [Skip to J3]

J2. Why did you go back to the same place?

1. to get the problem fixed
2. knew the provider
3. not allowed to go anywhere else
4. other places were too far
5. cheaper to go to that provider than anyone else
6. did not know of any other place
7. other_____

[Now skip to J4]

J3. Where did you go for treatment?

1. Private hospital/private clinic
2. Government hospital/BHU
3. NGO hospital/clinic
4. Government maternal child health centre
5. LHV clinic
6. Homeopath's clinic
7. Dai's clinic
8. Hakim/pir
9. Dispenser/compounder
10. Other

J4. Did someone tell you to go to this provider?

1) Yes 2) No [If no then skip to J7]

J5. If yes then who told you to go to this provider?

1. husband
2. mother-in-law
3. mother
4. sister-in-law
5. sister
6. brother
7. friend/neighbor
8. other_____

J6. Why did this person tell you to go to this provider?

1. They knew the provider
2. They had gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby
5. They knew that the provider performs induced abortions
6. They knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. They believed the provider's treatment to be effective
9. They believed the provider's treatment to be safe
10. No special reason
11. Other_____

[Now skip to J8]

J7. If the decision to go to the provider was your own then why did you decide to go to that provider?

1. Knew the provider
2. Gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby

5. Knew that the provider performs induced abortions
6. Knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. Believed the provider's treatment to be effective
9. Believed the provider's treatment to be safe
10. No special reason
11. Other_____

J8. How long after the complication started did you first seek treatment?

1. Within 3 days
2. Within a week
3. 1 to 2 weeks
4. 3 to 4 weeks
5. More than one month (how long)_____

999. Don't know

J9. What was the procedure used for treatment? (can be more than one)

1. Given medicine
2. fetus evacuated with anesthesia (D&E/D&C)
3. fetus evacuated without anesthesia (MVA)
4. Other evacuation procedure
5. Given drip/injection (specify what kind)_____
6. other_____

J10. Did you seek permission to get treatment?

1. Yes 2. No [skip to J12] 2. Not applicable (in case she was unconscious and taken by someone else) [Skip to J12]

J11. If yes, whose permission did you seek? (Can be more than one)

1. Husband
2. Mother in law
3. Father in law
4. Sister in law
5. Mother
6. Sibling (brother or sister)
7. Other _____

J12. Did someone accompany you?

1) Yes 2) No [If no skip to J14]

J13. If yes, then who accompanied you? (can be more than one)

1. Husband
2. Mother in law
3. Father in law
4. Sister in law
5. Mother
6. Sibling (brother or sister)
7. Other _____

J14. Would you return to that provider if you have a pregnancy-related complication in the future?

1) Yes 2) No [if no skip to J16] 3) Don't know

J15. If yes, why?

1. Know the provider
2. Gone to her for treatment earlier
3. The provider is affordable
4. The provider is nearby

5. Know that the provider performs induced abortions
6. Know that the provider will not talk to anyone else about the procedure
7. The provider's attitude is friendly
8. Believe the provider's treatment to be effective
9. Believe the provider's treatment to be safe
10. No special reason
11. other_____

[Now skip to J17]

J16. If no, why not?

1. Instructed by someone not to go to the provider
2. Want to go to some other provider
3. Provider's treatment is expensive
4. Provider's premises is far
5. The provider inquires/inquired about the induced abortion
6. Afraid that the provider will talk to others about the induced abortion/complications
7. Unfriendly/bad attitude of the provider
8. Believe that the treatment provided was not effective
9. Believe that the treatment provided was not safe
10. No special reason
11. Other_____

J17. Can you tell me how much money was spent on the procedure (only)?

Rs. _____

J18. Other than the procedure itself, how much was spent on the following items?

	Expenditure Item	Amount Spent (Rs)
1.	Food	
2.	Ultrasound	
3.	Medicine	
4.	Room charges	
5.	Blood	
6.	Investigations	
7.	Transport	
8.	Board and Lodging for Care-givers	
9.	fees to doctor	
10.	Money to nurse	
11.	Money to ayah	
12.	Money to ensure you would be seen by doctor	
13.	Any other:	

*If she can recall the amount spent, record that, otherwise use the following codes: nothing spent= 0; don't know=999

J19. Enumerator to compute total from preceding question

1. <1,000
2. 1,000-2,000
3. 2,000-3,000
4. 3,000-5,000
5. More than 5,000 Rs_____

J20. Can you tell me who paid for the treatment and other costs? (can be more than one)

1. paid myself
2. husband paid

3. mother in law/father in law paid
4. sister in law/brother in law paid
5. parents paid
6. siblings paid
7. Some other relative paid
8. Don't know

[If she or her husband <u>did not</u> pay skip to J25]

J21. If you or your husband paid for the treatment, what source of payment? (can be more than one source)

1. monthly income
2. cash savings
3. took advance on salary (husband or wife)
4. borrowed money from relatives
5. borrowed money from neighbors/friends
6. borrowed money from someone else
7. sold asset (what?)_____
8. Other_____

J22. After paying for this treatment did you have money left for your routine monthly expenditures such as rent, food, utility bills, and children's school fees?

1. Yes had money for all the expenditures [Skip to J25]
2. Had money only for some of the expenditures
3. Had no money left for any expenditure

J23. How were your monthly expenses affected?

1. Could not pay rent
2. Reduced expenditure on food
3. Could not pay utility bills
4. Could not pay school fees
5. Other_____

J24. How long did this continue?

1. Two or three weeks after paying for treatment
2. A month after paying for treatment
3. Up to 3 months after paying for treatment
4. Between 3 and 6 months after paying for treatment
5. Up to a year after paying for treatment
6. More than a year after treatment

J25. Did you still have complications after the first treatment?

1) Yes 2)No [If no skip to M1]

J26. What complication did you have? (can be more than one)

1. Bleeding
2. Abdominal pain
3. Vomiting
4. High fever
5. Low fever
6. Retained products (from abortion)
7. Perforation
8. Sepsis
9. Organ failure
10. Other (specify)

_____

J27. Did you seek treatment for this complication?

1) Yes [If no skip to K1] 2) No

J28. If no then what was the reason for not seeking treatment?

1. Costs to much
2. Not necessary or important
3. Too far
4. No transport
5. Did not have anyone to accompany me

6. Did not have time to go
7. Did not want to leave my children alone
8. Did not know where to go for treatment
9. Did not want to see a male doctor
10. Not allowed to go
11. Fear of service provider/medicines
12. Other _____

J29. If you did not seek treatment then how long did the complication last?

1. Up to one week
2. Up to one month
3. More than a month (how long)_____
4. Still have the complication (to date)

[Now skip to M1]

K. <u>Second Treatment</u>

K1. Where did you go for treatment the second time?

1. the same place I received first treatment
2. some other place [skip to K3]

K2. Why did you go back to the same place?

1. to get the problem fixed
2. knew the provider
3. not allowed to go anywhere else
4. other places were too far
5. cheaper to go to that provider than anyone else
6. did not know of any other place
7. other_____

[Now skip to K4]

K3. Where did you go for treatment?

1. Private hospital/private clinic
2. Government hospital/BHU
3. NGO hospital/clinic
4. Government maternal child health centre
5. LHV clinic
6. homeopath's clinic
7. Dai's clinic
8. Hakim/pir
9. dispenser/compounder
10. other

K4. Did someone tell you to go to this provider?

1) Yes 2) No [If no then skip to K7]

K5. If yes then who told you to go to this provider?

1. husband
2. mother-in-law
3. mother
4. sister-in-law
5. sister
6. brother
7. friend/neighbor
8. other_____

K6. Why did this person tell you to go to this provider?

1. They knew the provider
2. They had gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby

5. They knew that the provider performs induced abortions
6. They knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. They believed the provider's treatment to be effective
9. They believed the provider's treatment to be safe
10. No special reason
11. other_____

[Now skip to K8]

K7. If the decision to go to the provider was your own then why did you decide to go to that provider?

1. Knew the provider
2. Gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby
5. Knew that the provider performs induced abortions
6. Knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. Believed the provider's treatment to be effective
9. Believed the provider's treatment to be safe
10. No special reason
11. other_____

K8. How long after the complication started did you first seek treatment?

1. Within 3 days
2. Within a week
3. 1 to 2 weeks
4. 3 to 4 weeks
5. More than one month (how long)_____

999. Don't know

K9. What was the procedure used for treatment? (can be more than one)

1. Given medicine
2. fetus evacuated with anesthesia (D&E/D&C)
3. fetus evacuated without anesthesia (MVA)
4. Other evacuation procedure
5. Given drip/injection (specify what kind)_____
6. other_____

K10. Did you seek permission to get treatment?

1. Yes 2. No [skip to K12] 2. Not applicable (in case she was unconscious and taken by someone else) [Skip to K12]

K11. If yes, whose permission did you seek? (Can be more than one)

1. Husband
2. Mother in law
3. Father in law
4. Sister in law
5. Mother
6. Sibling (brother or sister)
7. Other _____

K12. Did someone accompany you?

1) Yes 2) No [If no skip to K14]

K13. If yes, then who accompanied you? (can be more than one)

1. Husband
2. Mother in law
3. Father in law
4. Sister in law
5. Mother

6. Sibling (brother or sister)
7. Other

_____

K14. Would you return to that provider if you have a pregnancy-related complication in the future?

1) Yes 2) No [if no skip to K16] 3) Don't know

K15. If yes, why?

1. Know the provider
2. Gone to her for treatment earlier
3. The provider is affordable
4. The provider is nearby
5. Know that the provider performs induced abortions
6. Know that the provider will not talk to anyone else about the procedure
7. The provider's attitude is friendly
8. Believe the provider's treatment to be effective
9. Believe the provider's treatment to be safe
10. No special reason
11. other_____

[Now skip to K17]

K16. If no, why not?

1. Instructed by someone not to go to the provider
2. Want to go to some other provider
3. Provider's treatment is expensive
4. Provider's premises is far
5. The provider inquires/inquired about the induced abortion
6. Afraid that the provider will talk to others about the induced abortion/complications
7. Unfriendly/bad attitude of the provider
8. Believe that the treatment provided was not effective
9. Believe that the treatment provided was not safe
10. No special reason
11. Other_____

K17. Can you tell me how much money was spent on the procedure (only)?

Rs. _____

K18. Other than the procedure itself, how much was spent on the following items?

	Expenditure Item	Amount Spent (Rs)
1.	Food	
2.	Ultrasound	
3.	Medicine	
4.	Room charges	
5.	Blood	
6.	Investigations	
7.	Transport	
8.	Board and Lodging for Care-givers	
9.	Fees to doctor	
10.	Money to nurse	
11.	Money to ayah	
12.	Money to ensure you would be seen by doctor	
13.	Any other:	

*If she can recall the amount spent, record that, otherwise use the following codes: nothing spent= 0; don't know=999

K19. Enumerator to compute total from preceding question

1. <1,000
2. 1,000-2,000
3. 2,000-3,000
4. 3,000-5,000
5. More than 5,000 Rs_____

K20. Can you tell me who paid for the treatment and other costs? (can be more than one)

1. paid myself
2. husband paid
3. mother in law/father in law paid
4. sister in law/brother in law paid
5. parents paid
6. siblings paid
7. Some other relative paid
8. Don't know

[If she or her husband <u>did not</u> pay skip to K25]

K21. If you or your husband paid for the treatment, what source of payment? (can be more than one source)

1. monthly income
2. cash savings
3. took advance on salary (husband or wife)
4. borrowed money from relatives
5. borrowed money from neighbors/friends
6. borrowed money from someone else
7. sold asset (which?)_____
8. 0ther_____
_____

K22. After paying for this treatment did you have money left for your routine monthly expenditures such as rent, food, utility bills, and children's school fees?

1. Yes had money for all the expenditures [Skip to K25]
2. Had money only for some of the expenditures
3. Had no money left for any expenditure

K23. How were your monthly expenses affected?

1. Could not pay rent
2. Reduced expenditure on food
3. Could not pay utility bills
4. Could not pay school fees
5. Other_____

K24. How long did this continue?

1. Two or three weeks after paying for treatment
2. A month after paying for treatment
3. Up to 3 months after paying for treatment
4. Between 3 and 6 months after paying for treatment
5. Up to a year after paying for treatment
6. More than a year after treatment

K25. Did you still have complications after the first treatment?

1) Yes 2)No [If no skip to M1]

K26. What complication did you have? (can be more than one)

1. Bleeding
2. Abdominal pain
3. Vomiting
4. High fever
5. Low fever
6. Retained products (from abortion)
7. Perforation

8. Sepsis
9. Organ failure
10. Other (specify)

_____

K27. Did you seek treatment for this complication?
1) Yes [If no skip to L1]2) No

K28. If no then what was the reason for not seeking treatment?

1. Costs to much
2. Not necessary or important
3. Too far
4. No transport
5. Did not have anyone to accompany me
6. Did not have time to go
7. Did not want to leave my children alone
8. Did not know where to go for treatment
9. Did not want to see a male doctor
10. Not allowed to go
11. Fear of service provider/medicines
12. Other _____

K29. If you did not seek treatment then how long did the complication last?

1. Up to one week
2. Up to one month
3. More than a month (how long)_____
4. Still have the complication (to date)

[Now skip to M1]

L. Third Treatment

L1. Where did you go for treatment the third time?

1. the same place I received second treatment
2. some other place [skip to L3]

L2. Why did you go back to the same place?

1. to get the problem fixed
2. knew the provider
3. not allowed to go anywhere else
4. other places were too far
5. cheaper to go to that provider than anyone else
6. did not know of any other place
7. other_____

[Now skip to L4]

L3. Where did you go for treatment?

1. Private hospital/private clinic
2. Government hospital/BHU
3. NGO hospital/clinic
4. Government maternal child health centre
5. LHV clinic
6. homeopath's clinic
7. Dai's clinic
8. *Hakim/pir*
9. dispenser/compounder
10. other

L4. Did someone tell you to go to this provider?

1) Yes 2) No [If no then skip to L7]

L5. If yes then who told you to go to this provider?

1. husband
2. mother-in-law
3. mother
4. sister-in-law
5. sister
6. brother
7. friend/neighbor
8. other_____

L6. Why did this person tell you to go to this provider?

1. They knew the provider
2. They had gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby
5. They knew that the provider performs induced abortions
6. They knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. They believed the provider's treatment to be effective
9. They believed the provider's treatment to be safe
10. No special reason
11. other_____

[Now skip to L8]

L7. If the decision to go to the provider was your own then why did you decide to go to that provider?

1. Knew the provider
2. Gone to her for treatment earlier
3. The provider was affordable
4. The provider was nearby
5. Knew that the provider performs induced abortions
6. Knew that the provider will not talk to anyone else about the procedure
7. The provider's attitude was friendly
8. Believed the provider's treatment to be effective
9. Believed the provider's treatment to be safe
10. No special reason
11. other_____

L8. How long after the complication started did you first seek treatment?

1. Within 3 days
2. Within a week
3. 1 to 2 weeks
4. 3 to 4 weeks
5. More than one month (how long)_____

999. Don't know

L9. What was the procedure used for treatment? (can be more than one)

1. Given medicine
2. fetus evacuated with anesthesia (D&E/D&C)
3. fetus evacuated without anesthesia (MVA)
4. Other evacuation procedure
5. Given drip/injection (specify what kind)_____
6. other_____

L10. Did you seek permission to get treatment?

1. Yes 2. No [skip to L12] 2. Not applicable (in case she was unconscious and taken by someone else) [Skip to L12]

L11. If yes, whose permission did you seek? (Can be more than one)

1. Husband
2. Mother in law
3. Father in law
4. Sister in law
5. Mother
6. Sibling (brother or sister)
7. Other _____

L12. Did someone accompany you?

1) Yes 2) No [If no skip to L14]

L13. If yes, then who accompanied you? (can be more than one)

1. Husband
2. Mother in law
3. Father in law
4. Sister in law
5. Mother
6. Sibling (brother or sister)
7. Other

_____

L14. Would you return to that provider if you have a pregnancy-related complication in the future?

1) Yes 2) No [if no skip to L16] 3) Don't know

L15. If yes, why?

1. Know the provider
2. Gone to her for treatment earlier
3. The provider is affordable
4. The provider is nearby
5. Know that the provider performs induced abortions
6. Know that the provider will not talk to anyone else about the procedure
7. The provider's attitude is friendly
8. Believe the provider's treatment to be effective
9. Believe the provider's treatment to be safe
10. No special reason
11. other_____

[Now skip to L17]

L16. If no, why not?

1. Instructed by someone not to go to the provider
2. Want to go to some other provider
3. Provider's treatment is expensive
4. Provider's premises is far
5. The provider inquires/inquired about the induced abortion
6. Afraid that the provider will talk to others about the induced abortion/complications
7. Unfriendly/bad attitude of the provider
8. Believe that the treatment provided was not effective
9. Believe that the treatment provided was not safe
10. No special reason
11. Other_____

L17. Can you tell me how much money was spent on the procedure (only)?

Rs. _____

L18. Other than the procedure itself, how much was spent on the following items?

	Expenditure Item	Amount Spent (Rs)
1.	Food	
2.	Ultrasound	
3.	Medicine	
4.	Room charges	
5.	Blood	
6.	Investigations	
7.	Transport	
8.	Board and Lodging for Care-givers	
9.	Fees to doctor	
10.	Money to nurse	
11.	Money to ayah	
12.	Money to ensure you would be seen by doctor	
13.	Any other:	

*If she can recall the amount spent, record that, otherwise use the following codes: nothing spent= 0; don't know=999

L19. Enumerator to compute total from preceding question

1. <1,000
2. 1,000-2,000
3. 2,000-3,000
4. 3,000-5,000
5. More than 5,000 Rs_____

L20. Can you tell me who paid for the treatment and other costs? (can be more than one)

1. paid myself
2. husband paid
3. mother in law/father in law paid
4. sister in law/brother in law paid
5. parents paid
6. siblings paid
7. Some other relative paid
8. Don't know

[If she or her husband <u>did not</u> pay skip to L25]

L21. If you or your husband paid for the treatment, what source of payment? (can be more than one source)

1. monthly income
2. cash savings
3. took advance on salary (husband or wife)
4. borrowed money from relatives
5. borrowed money from neighbors/friends
6. borrowed money from someone else
7. sold asset (what?)_____
8. Other_____

L22. After paying for this treatment did you have money left for your routine monthly expenditures such as rent, food, utility bills, and children's school fees?

1. Yes had money for all the expenditures [Skip to L25]
2. Had money only for some of the expenditures
3. Had no money left for any expenditure

L23. How were your monthly expenses affected?

1. Could not pay rent
2. Reduced expenditure on food
3. Could not pay utility bills
4. Could not pay school fees
5. Other_____

L24. How long did this continue?

1. Two or three weeks after paying for treatment
2. A month after paying for treatment
3. Up to 3 months after paying for treatment
4. Between 3 and 6 months after paying for treatment
5. Up to a year after paying for treatment
6. More than a year after treatment

L25. Did you still have complications after the first treatment?

1) Yes 2)No [If no skip to M1]

L26. What complication did you have? (can be more than one)

1. Bleeding
2. Abdominal pain
3. Vomiting
4. High fever
5. Low fever
6. Retained products (from abortion)
7. Perforation
8. Sepsis
9. Organ failure
10. Other (specify)

_____

L27. Did you seek treatment for this complication?

1) Yes [If no skip to L30] 2) No

L28. If no then what was the reason for not seeking treatment?

1. Costs to much
2. Not necessary or important
3. Too far
4. No transport
5. Did not have anyone to accompany me
6. Did not have time to go
7. Did not want to leave my children alone
8. Did not know where to go for treatment
9. Did not want to see a male doctor
10. Not allowed to go
11. Fear of service provider/medicines
12. Other _____

L29. If you did not seek treatment then how long did the complication last?

1. Up to one week
2. Up to one month
3. More than a month (how long)_____
4. Still have the complication (to date)

L30. Do you still have the complication?

1) yes 2) no

M. <u>Impact of PAC and Treatment on Work</u>

M1. When you had this complication, did you have to stop doing your housework for sometime?

1) Yes 2) No [if no skip to M4]

M2. If yes then for how long?

1. Less than 1 week
2. Up to 1week
3. Between 2 and 3 weeks
4. Up to 1 month
5. More 1 month
6. More than 3 months
7. Still not able to work

999. Other_____

M3. Who did the housework during this time? (can be more than one)

1. Mother in law
2. Sister in law
3. Mother
4. Sister
5. School-going daughter
6. Daughter not attending school
7. Daughter doing paid work
8. School-going son
9. Son not attending school
10. Son doing paid work
11. Husband
12. Other_____

M4. Were you doing any paid work at that time?

1) Yes 2) No [If not skip to N1]

M5. Did you have to stop doing that work for some time while you were ill and being treated?

1) Yes 2) No [If no skip to N1]

M6. For how long did you have to stop doing that work?

1. Less than 1 week
2. Up to 1week
3. Between 2 and 3 weeks
4. Up to 1 month
5. More 1 month
6. More than 3 months
7. Still not able to work

999. Other_____

N. Family Planning Counseling

N1. At any stage during this process of abortion and PAC treatment, did you receive any counseling/advice on family planning methods from any of the providers?

1) Yes 2)No[If no Skip to O1]

N2. Who gave you this advice?

1. Abortion service provider
2. Provider of first treatment
3. Provider of second treatment
4. Provider of third treatment
5. Someone else, specify_____

N3. What Family Planning methods were you told about?

	Method	Yes=1, No=2
1.	Pill	
2.	Condom	
3.	IUD (loop/coil placed inside the uterus)	
4.	Injection	
5.	Operation/Tubal Ligation	
6.	Male sterilization	
7.	Withdrawal (Azal)	
8.	Rhythm method (avoiding sexual intercourse during the days the woman is most likely to conceive)	
9.	Emergency contraception (taking pills after sexual intercourse to avoid pregnancy)	
10.	Other	

O. <u>Fertility Preference/desire for more children</u>

O1. [if she is currently pregnant then ask] How do you feel about this pregnancy?

1. Happy
2. Not happy [Skip to O3]
3. Don't know

O2. Reason(s) for being happy?

1. Increase family size
2. Husband's desire
3. Desire for son
4. Desire for daughter
5. Does not want another abortion
6. Other _____

O3. Reason(s) for being unhappy?

1. Limit family size
2. Wish to space
3. Husband does not want
4. Ill health of other children/husband
5. own ill health
6. Financial constraints
7. Other _____

O4. In the future, would you like to have another child, or would you prefer not to have anymore children?

1. If respondent pregnant	2. If respondent not pregnant
01. Have another child [skip to O5]	11. Have another child [skip to O5]
02. No more [Skip to O7]	12. No more [Skip to O7]
03. Undecided	13. Undecided
	14. Too old to conceive
	15. Cannot get pregnant because of tubal ligation

O5. How long would you like to wait before the next birth?

1. If respondent pregnant	2. If respondent not pregnant
01. <2 years	11. <2 years
02. At least 2 years	12. At least 2 years
03. unsure of timing	13. Unsure of timing

O6. Why do you want another child? [can be more than one]

1. Increase family size
2. Husband's desire

3. In-laws wish for son/daughter
4. My own desire for son
5. My own desire for daughter
6. To please someone [specify] _____
7. No reason
8. Other_____

[Now skip to P1]

O7. If no, why not?

1. Limit family size
2. Husband does not want
3. Ill health of other children/husband
4. She herself is sick
5. Financial constraints
6. In-laws desire
7. My own desire not to get pregnant
8. To please someone [specify] _____
9. Other _____

[Only ask if she does not want more children or wants to space childbirth but is not using contraception]

You say you do not want anymore children OR you want to wait at least two years before your next birth but you are not using any family planning method, why?

1.Wants to Space	**2.Wants to Cap**
1. Infrequent/no sex	17. Infrequent/no sex
2. No menstruation after birth	18. No menstruation after birth
3. Breastfeeding	19. Breastfeeding
4. Opposition from husband	20. Opposition from husband
5. Opposition from others in the family (in laws)	21. Opposition from others in the family (in laws)
6. Own opposition	22. Own opposition
7. Religion forbids	23. Religion forbids
8. Knows no method	24. Knows no method
9. Knows no source	25. Knows no source
10. Fear of side effects	26. Fear of side effects
11. History of contraceptive failure	27. History of contraceptive failure
12. Source too far	28. Source too far
13. Cannot afford	29. Cannot afford
14. Not thought about it	30. Not thought about it
15. Cannot conceive/infecund/ menopausal	31. Cannot conceive/infecund/ menopausal
16. Other (Specify)	32. Other (Specify)

P. <u>Domestic Violence (type, severity and frequency)</u>

P1. Have you ever experienced physical abuse at the hands of your husband?

1) Yes 2)No [Skip to P8]

P2. How long after you got married did your husband start physically abusing you?

_____

P3. Does anyone other than your husband partake in the physical abuse?

1) Yes 2)No [Skip to P5]

P4. If yes then who?
1. mother-in-law
2. father-in-law
3. husband's brother
4. husband's sister
5. others_____

P5. How does your husband (physically) abuse you and how often?

Act	Frequency *
1. Slaps me	
2. Pushes me	
3. Hits me with his fist	
4. Throws things at me that could hurt me	
5. Kicks me	
6. Drags me	
7. Hits me with a club or staff *(danda)*	
8. Tried to choke me	
9. Points a gun/knife at me (threatens to use it)	
10. tried to burn me or through acid at me	

*Codes for Frequency: Never=0; Once since marriage=1; More than once since marriage=2; once a year=3; more than once a year=4; once a month=5; more than once a month=6; weekly occurrence=7; daily occurrence=8

P6. Do you know what triggers the physical abuse?
1) Yes 2)No [Skip to P8]

P7. If yes, then can you tell us what?
1. pregnancy
2. financial stress
3. leaving the house without permission
4. arguing/talking back to husband
5. disagreement over issues related to children
6. when he is angry at someone else
7. when my in laws instigate him
8. other_____

P8. Did you experience physical abuse before you got married?

1) Yes 2)No [Skip to P10]

P9. Who abused you?

1. mother
2. father
3. brother
4. other_____

P10. Does your husband abuse you verbally?
1) Yes 2)No [Skip to P16]

P11. How long after you got married did your husband start verbally abusing you?

_____

P12. Does anyone other than your husband partake in the verbal abuse?
1) Yes 2)No [Skip to P14]

P13. If yes then who?
1. mother-in-law
2. father-in-law
3. husband's brother
4. husband's sister
5. others_____

P14. Do you know what triggers the verbal abuse?
1) Yes 2)No [Skip to P16]

P15. If yes, then can you tell us what?
1. pregnancy
2. financial stress
3. leaving the house without permission
4. arguing/talking back to husband
5. disagreement over issues related to children
6. when he is angry at someone else
7. when my in laws instigate him
8. other_____

P16. During your last pregnancy, did you find that the level of violence:
1. Increased
2. Decreased
3. Did not happen
4. Stayed the same

Q. Death related to maternal complications

Q1. Do you personally know anyone who has died during pregnancy or childbirth?
1) Yes 2)No [Skip to Q5]

Q2. How many women do you know, who died during pregnancy/childbirth
_____

Q3. How was the deceased (the latest such death she can recall) related to you?
_____

Q4. Do you know what caused her death?
1) Yes [if yes then find out the reason] 2)No
_____

Q5. Do you personally know anyone who has recently died after/during induced abortion?
1) Yes 2)No [Skip to R1]

Q6. How was the deceased (the latest death she can recall) related to you?
_____

Q7. Do you know what caused her death?
1) Yes [if yes then find out the reason] 2)No
_____

R. Decisions regarding children's wellbeing

R1. Who is primarily responsible for the following decisions regarding your children?

	Decision regarding	Primary responsibility
1	Nutrition/food	
2	Education	
3	Clothing	
4	Health	
5	Recreation/entertainment	

Codes for responsibility: Herself=1; husband=2; mother-in-law=3; father-in-law=4; mother=5; father=6, other elder in the household=7;

R2. Who is primarily responsible for bearing the following expenses of your children?

	Decision regarding	Primary responsibility
1	Nutrition/food	
2	Education	
3	Clothing	
4	Health	
5	Recreation/entertainment	

Codes for responsibility: Herself=1; husband=2; mother-in-law=3; father-in-law=4; mother=5; father=6, other elder in the household=7;

S. Exposure to Media & Social Networking

S1. How often do you view/read/listen to the following?

	TV	Radio	Newspaper
How many days in a week?			
How many times in a month?			
How many times in a year?			

S2. Do you need permission to:

	Need Permission Yes=1, No=2	IF yes then whose permission
Watch TV		
Listen to the radio		
Read newspaper		

S3. If you watch TV, then what do you like watching?_____

S4. If you listen to the radio, then what do you like listening to?_____

S5. Are you a member of any group or association?
1) Yes 2)No [End questionnaire]

S6. If yes then what type of group/association are you a member of?

Type of group/association	Name
1. Committee	
2. Community Based Organization	
3. NGO Group	
4. Professional Association	
5. Social/Political Movement	
6. Other	