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UNSAFE ABORTIONS IN PAKISTAN

A Situation Analysis

Report Prepared by:

Shahida Zaidi

Azra Ahsan

Sadiqua N. Jafarey

Imtiaz Kamal



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For more information:

National Committee for Maternal and Neonatal Health
36-C, Street 14, Off. Khayaban-e-Shamsheer,
Phase V, D.H.A, Karachi
Tel: 0092-21-35341597-98
Fax: 0092-21-35341505
E-mail: ncmnh@cyber.net.pk

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Unsafe Abortions in Pakistan: A Situation Analysis

Shahida Zaidi¹, Azra Ahsan¹, Sadiqua N Jafarey² and Imtiaz Kamal³

¹Society of Obstetricians and Gynaecologists of Pakistan
c/o Department of Obstetrics and Gynaecology,
Jinnah Postgraduate Medical Centre, Karachi
sogjpmc@hotmail.com; sogjpmc@yahoo.com; z.shahida@gmail.com

²National Committee for Maternal and Neonatal Health
36-C, 14th Street, Off Khayaban-e Shamsheer
Phase V, DHA, Karachi 75500
ncmnh@cyber.net.pk

³Midwifery Association of Pakistan
36-C, 14th Street, Off Khayaban-e Shamsheer
Phase V, DHA, Karachi 75500
midwifepak@yahoo.com : imtiaz.kamal@gmail.com

Acronyms

BHU	Basic Health Unit
CPR	Contraceptive Prevalence Rate
CRR	Centre for Reproductive Rights
DHQ	District Headquarter Hospital
FIGO	International Federation of Gynecology and Obstetrics
ICM	International Confederation of Midwives
IPPF	International Planned Parenthood Federation
IPPF – MA	International Planned Parenthood Federation Member Associations
IUCD	Intrauterine Contraceptive Device
IWHC	International Women's Health Coalition
LHV	Lady Health Visitor
LHW	Lady Health Worker
MAP	Midwifery Association of Pakistan
MoPW	Ministry of Population Welfare
MVA	Manual Vacuum Aspiration
NCMNH	National Committee for Maternal & Neonatal Health
NGO	Non-Governmental Organisation
PAC	Post Abortion Care
PPH	Post Partum Haemorrhage
PWP	Population Welfare Programme
SOGP	Society of Obstetricians and Gynaecologists of Pakistan
TBA	Traditional Birth Attendant
THQ	Tehsil/Taluka Headquarter Hospital
TMFR	Total Marital Fertility Rate
UC	Union Council
UARM	Unsafe Abortion related Maternal Morbidity and Mortality
UNFPA	United Nations Population Fund
WHO	World Health Organisation

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FIGO Initiative for the Prevention of Unsafe Abortion and its Complications

An Initiative for the prevention of unsafe abortion and its complications has been taken by the International Federation of Gynecology and Obstetrics (FIGO) with the aim of contributing to the reduction of maternal mortality and morbidity resulting from unsafe abortion*.

A working group was set up in 2007, headed by Professor Anibal Faundes¹ of Brazil with 6 regional coordinators for areas where abortion rate was 30 or over per 1000 women aged 15 to 44 years and/or unsafe abortion cases contributed significantly to maternal mortality and morbidity. A total of 54 countries of the world, including Pakistan, is participating.

A three-pronged approach has been planned to achieve this goal:

- * Reducing unintended and unwanted pregnancies and hence induced abortion.
- * Improving access to safe abortion services to the extent permitted by the law
- * Increasing the quality and access to post abortion care including post abortion contraception.

The FIGO initiative has 3 distinct phases:

- * Phase I: Compilation of a situation analysis on unsafe abortion in each country, development of a Plan of Action and soliciting national commitment (12 months). The analysis would include information about a list of indicators. A "core" and a "long" list of these (see Appendix I for a "core" list) was drawn up at a meeting in New York in May 2007, by delegates which comprised all major stakeholders, with the provision that the countries could modify the list to cater to their local conditions and needs.
- * Phase II: Implementation of the Plan of Action (18 months)
- * Phase III: Evaluation of Impact (Two years after the initiation of Plan of Action).

It was emphasised that the goal could be achieved only if the Initiative was not just an isolated programme of Ob/Gyn professionals and / or of societies. It was deemed essential to involve the relevant government ministries and other stakeholders. These included the ministries of Health, Population Welfare, Education, Social Welfare and Women's Affairs (where these existed), and organisations such as International Planned Parenthood Federation (IPPF) Member Associations (MA), United Nations Population Fund (UNFPA), World Health Organisation (WHO), Ipas, Population Council, International Confederation of Midwives (ICM), and other interested groups such as EngenderHealth, International Women's Health Coalition (IWHC), Centre for Reproductive rights (CRR) and their local partners. The Guttmacher Institute was contracted to provide with data for the situation analysis which are not available locally.

As part of Phase I of the Initiative, a situation analysis of unsafe abortions in the country has been carried out by the Society of Obstetricians and Gynaecologists of Pakistan (SOGP) in collaboration with the National Committee for Maternal and Neonatal Health (NCMNH) and the Midwifery Association of Pakistan (MAP).

*An unsafe abortion is "a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both" (WHO 1992)

Numerous stakeholders, national and international, have been involved (Annex 2), and provided input on measures for developing strategies for reducing/preventing unsafe abortions, and preparing a plan of action at a national workshop held in Karachi in May 2008².

The pages which follow contain some demographic data, and a situation analysis of unsafe abortions in the country. A plan of action has been developed on the basis of this analysis (not included here).

Profile of Pakistan

Pakistan has an estimated population of 160 million* (mid-2007)³, and is the sixth most populous country in the world⁵. The population is growing at the rate of 1.8 percent per annum⁶ (Table 1), adding about three million persons every year⁷.

The total fertility rate (TFR) in the country is reported as 4.1³. This is much higher than that of other countries in the region e.g. Bangladesh 3.0⁸, India 2.7⁹ and Sri Lanka 1.9¹⁰. Though fertility has declined substantially from over 6 in the period between 1960s – 1980s to 5.4 in the early 1990s, to 4.8 in 2000 – 01 (Fig 1), the rate is still far above replacement level. It is the aim of the government population policy to reduce fertility to replacement level by 2020¹¹. When this target is achieved, population stabilization will take place two generations later³.

The above figures indicate that contraceptive usage is low, the contraceptive prevalence rate (CPR) being 29.6% (21.7% for a modern method, 7.9% a traditional method)³. These figures, though low, have improved during the last two decades with the proportion of women using a contraceptive method increasing from 9% in 1990-91 to 28% in 2000-01^{3,12}, and to 29.6% (rounded off to 30% in Fig 2) in 2006-07³. Fig 2 shows a decline in CPR use from 32% in 2003 to 30% in 2006-07. The reasons cited for this include non-devolution of the programme from central control, leading to its lack of ownership at provincial and district levels; lack of support from the health sector, especially its Lady Health Workers (LHWs) programme; and a disconnect between the community and facilities providing services, caused by abolishing the Village Based Family Planning³.

In a nationwide study carried out by the Population Council in 2002-2003¹³ (published in 2004), the unmet need for contraception was found to range from 16 – 33% in different provinces from Pakistan.

Table 1: Profile of Pakistan, 2007³

Categories	Percent
Population, mid-2007	160 million
Growth Rate per annum	1.8%
Maternal Mortality Ratio	276
Infant Mortality Rate per 1000	78
Total Fertility Rate per woman	4.1
Percent of Population < age 15	40.6
Population living in the lowest wealth quintile	31.6%
Literacy Rate (primary education attainment)	Female = 27.2% Male = 32.9%
Religion	Islam = 97%

*A higher figure, viz. 169 million, is quoted by World Population Data Sheet, 2007, Population Reference Bureau, Washington DC⁴.

Figure 1: Trends in Total Fertility rates (TFR)³

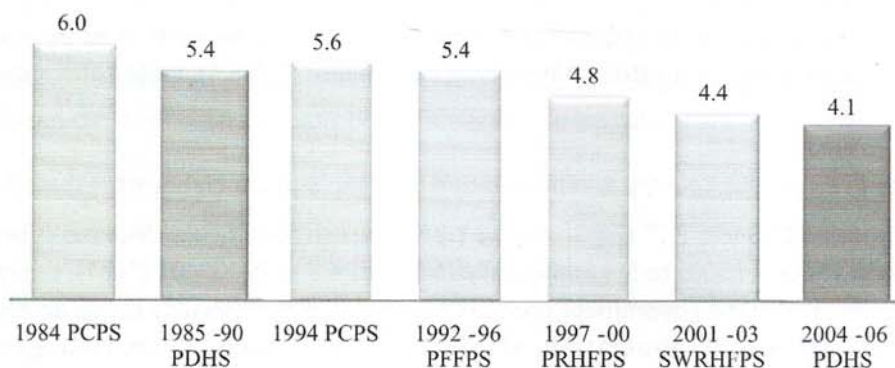
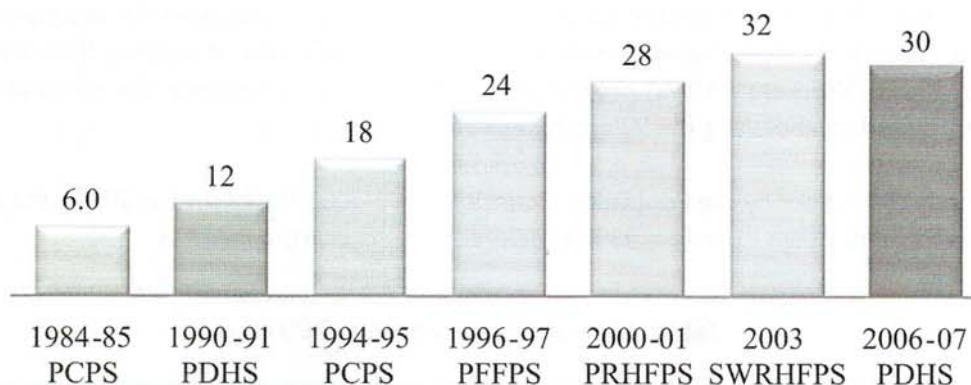


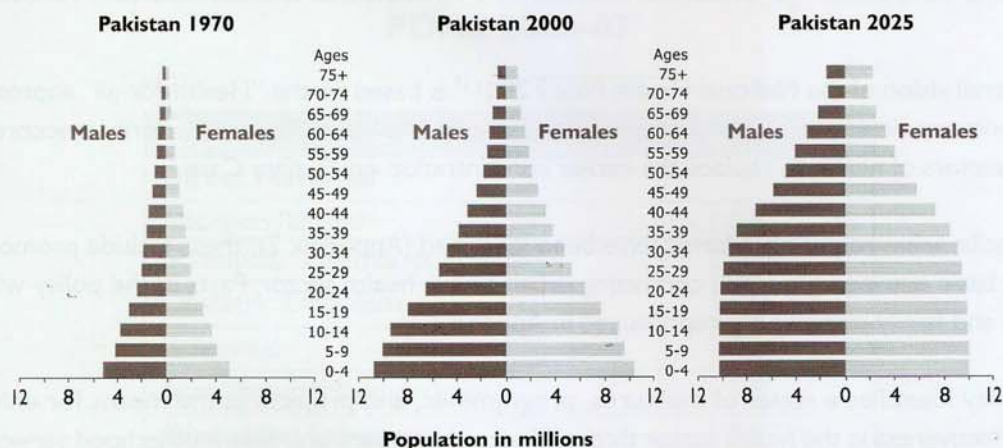
Figure 2: Trends in Contraceptive Use³



Some progress in maternal health has been made between 1990-1991 and 2006-2007^{3,4}. By 2007, women with at least one antenatal care visit with a health professional had increased from 30 percent to 61 percent, and deliveries taking place in a health facility had increased from 13 percent to 34% in 2007 (with 11 percent taking place in a public sector health facility and 23 percent in a private facility). This progress notwithstanding, the population is growing at a rate more rapid than the economy can keep pace with. Thus despite a 327-fold increase in the national GDP between 1960 and 2006, the per capita income has increased only nine-fold³.

This rapid increase in population also adversely affects the health services, especially reproductive health care. This is obvious from the population pyramid (Fig 3) which shows that between 1970 and 2000, people in the reproductive age group increased from 14 to 68 million, and are expected to increase to 121 million by 2025¹⁴.

Figure 3: Pakistan's Population by Age and Sex, 1970, 2000, and 2025



Source: UN, World Population Prospects: The 2006 Revision Population Database;

Health Services:

Health care in Pakistan is provided through the government sector, the private sector and the NGOs. The private sector covers about 70% of the population and is mostly curative. The quality of care varies from poor to excellent.

The physical infrastructure of the health delivery system in rural Pakistan is probably one of the best in the region. There is at least one Basic Health Unit (BHU) in each Union Council (UC), covering 10,000-15,000 population, and each BHU is to provide basic curative and preventive services. Four to five BHUs are attached to one Rural Health Center (RHC), which provides curative, preventive and the initial investigative services to 50,000-100,000 population. There are 25 beds also available in each RHC. At the next level there are Tehsil/Taluka Headquarter Hospitals (THQs) and District Headquarter Hospitals (DHQs). Most of the specialties and subspecialties are present in THQs and DHQs. The highest level is that of tertiary level care institutions. These are large urban hospitals attached to medical colleges¹⁵.

In the government sector the infrastructure of the health services has expanded greatly since the 1970s. The number of health facilities has risen from 6,017 in 1981 to 10,924 in 1991 and 12,000 in 1997.

Though structurally strong, the health sector remains functionally weak. The services are supposedly free of cost but are not easily accessible. The quality of care is poor. The BHUs, The RHCs and the MCH centers offer care at the primary level. The MCH center, of which there are about 800, cater to the needs of women and children only. The other two facilities are for both men and women. These however, are either nonfunctional (15-20%), or do not function full-time. About 30% of all sanctioned posts and up to 58% of sanctioned female posts are vacant. The staff attendance is irregular and there is practically no accountability.

Family planning services are the responsibility of the Ministry of Population Welfare. The Population Welfare Program (PWP) of MoPW is a nationwide federal program implemented through the provincial Population Welfare Departments (PWD). It includes 1,518 family welfare centers, 266 RH services centers, 131 mobile services and 12,000 village-based family planning workers, mainly providing family planning services and minor curative care. About 1,800 NGOs provide family planning and other RH care. The National Trust for Population Welfare provides

financial and technical support to 264 NGOs. Social marketing of contraceptives projects covers some 30,000 private retail outlets¹⁶.

The overall vision of the National Health Policy 2001¹⁷ is based on the "Health-for-all" approach, and health sector investments are viewed as part of Government's Poverty Alleviation Plan, and priority is accorded to primary and secondary sectors of health to replace the earlier concentration on Tertiary Care.

Ten specific areas requiring reforms have been identified (Appendix 2); these include promotion of gender equity, bridging basic nutrition gaps, and correcting urban bias in health sector. Parts of the policy which pertain to maternal health and family planning are reproduced in Appendix 3.

The policy identifies a series of measures, programmes, and projects as the means for enhancing equity, efficiency and effectiveness in the health sector through focused interventions. Safe motherhood services and focused reproductive health services through a life cycle approach are to be provided at the doorstep¹⁷. Primary health care services are also extended through the Lady Health Worker (LHW) programme, which provides services through home visits especially in rural areas. LHWs contribute directly to improved hygiene and higher levels of contraceptive use, iron supplementation, growth monitoring and vaccinations³.

Sixty-one percent of mothers receive antenatal care from skilled health providers³, that is, from a doctor, nurse, midwife, or Lady Health Visitor (LHV); 3 percent of women receive antenatal care from a traditional birth attendant (*dai*) and 1 percent from an LHW, a hakim (a practitioner in homeopathy), a dispenser or a compounder. Thirty-five percent of women receive no antenatal care at all. Younger mothers (under 35 years of age) and primigravidae are more likely to receive antenatal care from a skilled health provider than older mothers or those with higher order births³.

A great deal needs to be done if the goal of "Health-for-all" is to be achieved, or if the Millennium Development Goals are to be reached¹⁸. At present, the public sector caters for the needs of about 30% of the population; the private health sector serves nearly 70% of the population¹⁹. This is primarily due to paucity of funds and of human resources, especially female health workers.

Maternal deaths constituted about 20.3% of deaths of women in the reproductive age group³. According to a nationwide household survey carried out in 2006, the maternal mortality ratio (MMR) was calculated as 276 maternal deaths (per 100,000 live births). This is lower than the ratio of 320 reported by WHO in 2005²⁰. Balochistan had the highest ratios, followed by Sindh, NWFP and Punjab.

In common with other developing countries with similar socio-economic conditions and healthcare scenario, the most frequent causes for maternal deaths are haemorrhage, sepsis and pregnancy-induced hypertension². Deaths due to unsafe abortion are responsible for 5.6% of the deaths³ (Table 2) i.e. over 800 of an estimated 15,000 maternal deaths which occur annually²⁰. The figure of 5.6% is half that of the 11% deaths as a result of abortion during 1989-1990 in a nationwide hospital-based study conducted by the Society of Obstetricians and Gynaecologists of Pakistan²¹. These deaths are, however, merely the tip of the iceberg, with about 197,000 women requiring admission for treatment of complications, and an incalculable number of women undergoing serious and even long term morbidity¹³.

Table 2: Percent distribution of Maternal Deaths by cause of death, PDHS 2006-07³

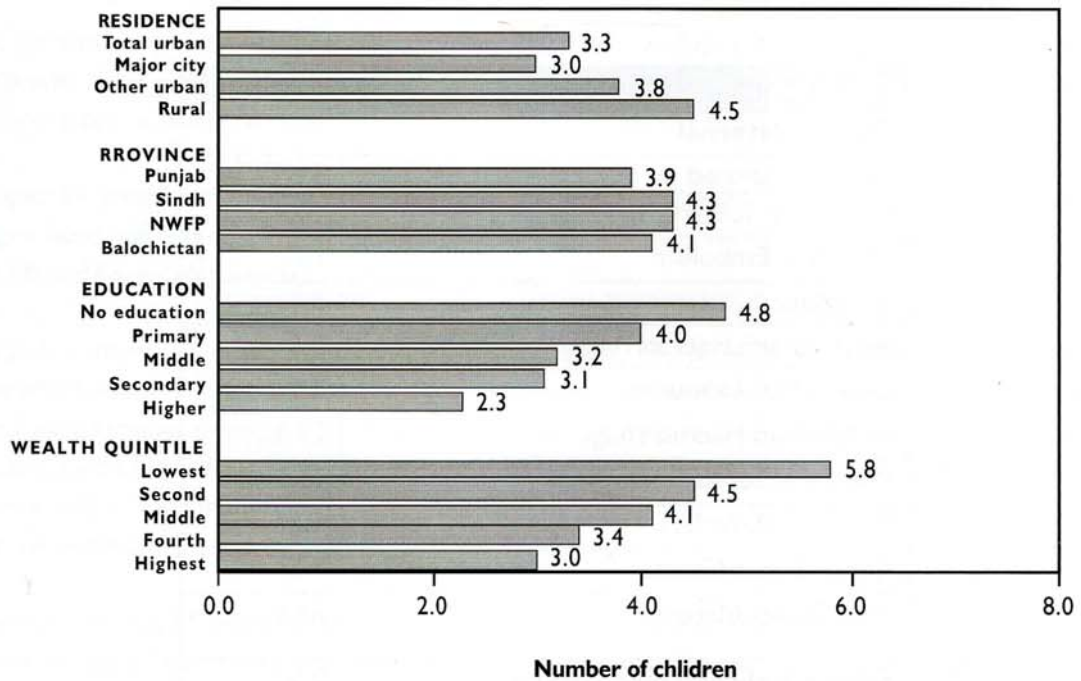
Cause	Percent
Direct Maternal	
Abortion Related	5.6
Eclampsia/ Toxemia of Pregnancy	10.4
Obstetric Embolism	6.0
Iatrogenic	8.1
Ante partum Haemorrhage	5.5
Obstructed-Labour	2.5
Postpartum Haemorrhage	27.2
Puerperal Sepsis	15.7
Placental Disorders	1.2
Other Direct Causes	4.5
Total Direct Maternal	84.6
Direct/ Indirect/ Not able to Categorize	2.5
Indirect Maternal	15
Total	100
Number of deaths analysed	210

Total Fertility Rate:

The recent Pakistan Demographic and Health Survey (PDHS) 2006-07³ records a TFR of 4.1 and Total Marital Fertility Rate (TMFR) of 6.6 for the three-year period preceding the survey. Fertility is considerably higher in the rural areas (4.5) than the urban areas (3.3). This disparity in rates is most probably due to factors associated with urbanization, such as better education, higher status of women, better access to health and family planning information and services, and later marriage³.

Differentials in fertility levels vary not only by urban-rural residence, but by province, educational attainment, and wealth quintile (Fig 4). Fertility is slightly lower in Punjab province (3.9 children per woman) than the other three provinces (Sindh and NWFP with 4.3 each, and Balochistan with 4.1 children per woman). Fertility is also strongly associated with wealth - the lower the wealth quintile, the higher the fertility. The difference in fertility between the poorest and the richest women is close to three children per woman³.

Figure 4: Total Fertility Rate by Background Characteristics³



Contraception:

Knowledge

Knowledge of family planning in Pakistan is nearly universal; 96 percent of ever-married and currently married women age 15-49 know of at least one method of family planning. Modern methods are more widely known than traditional methods. For example, 96 percent of currently married women have heard of at least one modern method, while only 64 percent have heard of a traditional method³.

Among currently married women, the methods most widely known are pills (92 percent), injectables (90 percent), female sterilization (87 percent), IUD (75 percent), and condoms (68 percent). The least widely known methods are emergency contraception (18 percent), implants (32 percent), and male sterilization (41 percent).

Differences in the level of contraceptive knowledge between urban and rural areas are insignificant. This is probably due to the wide usage of the electronic media by the Population Welfare Ministry to inform the people about family planning issues³.

Practice

Despite almost universal knowledge of methods of contraception, the practice of contraception in Pakistan is low, being affected by rural or urban residence, level of education and wealth quintile. Table 3 shows the current usage of the different contraceptive methods.

Table 3: Contraceptive usage of different methods³

Specific methods	Percent
Pill	2.1
IUD	2.3
Injectables	2.3
Implants	0.1
Male condom	6.8
Periodic abstinence	3.6
Withdrawal	4.1
Folk method	0.2
Female sterilization	8.2
Male sterilization	0.1
Total	29.8

Differentials in contraceptive use by background characteristics

Women in urban areas are more likely to use contraceptives (41 percent) than those in rural areas (24 percent), a pattern that also applies for each of the specific methods except injectables, which are used by equal proportions of urban and rural women³.

Contraceptive use increases with women's level of education, from 25 percent among women with no education to 43 percent among those with higher education. In general, women do not begin to use contraception until they have had at least one child, after which use increases rapidly with the number of children³. Contraceptive use among currently married women is highest in Punjab (33%), followed by Sindh (27%) and Khyber Pakhtoon Khwa (KPK)(25%) and is lowest in Balochistan (14%).³ The declining level of fertility in spite of low levels of contraceptive use suggests that induced abortion is likely to be an important contributing factor in controlling fertility. The fact that CPR is lower and abortion rates higher in Balochistan and KPK than in the more developed provinces supports this interpretation.²²

Use of social marketing contraceptive brands³

Social marketing plays an important role in provision of contraceptive methods in Pakistan. The "Greenstar" and "Key" programmes are the two components of contraceptive social marketing in Pakistan, working since 1991 and 1996, respectively. They provide family planning information and services to mainly urban and peri-urban residents at reduced rates. The range of activities includes advertisement/promotional campaigns; training of doctors, paramedics, and chemists; and sales of several contraceptives. The different methods/facilities provided by the "Greenstar" are included in Appendix 5.

Source of distribution of contraceptives to users

An analysis of the source of distribution of modern contraceptives to users³ shows that 48 percent of modern method users rely on public sector institutions, while 30 percent use the private medical sector and 12 percent use other sources.

Much of the findings in the PDHS 2006-07 survey are echoed in several studies on contraception published in national journals²³⁻²⁹. A wide gap between knowledge and practice of contraception was noted in twelve rural districts of Pakistan in the year 2000²³. Besides education, women employment status was significantly associated with use of contraception²³. A reason cited for non-use of FP methods and large family size was the desire for a male child²⁴.

A cross-sectional survey in urban Karachi to collect information of family planning knowledge and practices of 3,301 households confirmed that respondents (2,651 ever-married women aged 54 or younger) had more education and higher socioeconomic status than the national average. The most commonly used contraceptive method among current users was the condom (40%), followed by IUCD (27%) and tubal ligation (12%). Overall, 53% of users obtained their method at pharmacies or markets, and 24% used private hospitals or clinics. Some 71% of currently married, non pregnant respondents reported having achieved their desired family size²⁹.

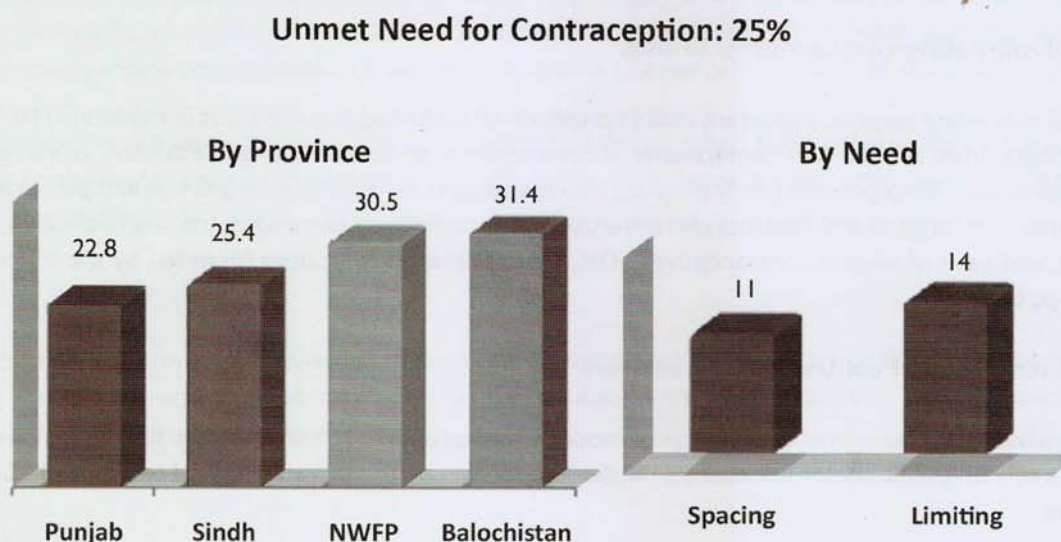
Amongst those using a contraceptive, a proportion had poor knowledge of the appropriate use and efficacy of the method they were practicing. This was evident from a study from two urban low socioeconomic settlements in Karachi²³.

A nationally representative survey covering 1113 providers and 7431 clients in low to middle income urban areas³⁰ showed that women who had secondary or higher level of education and three or more children had elevated odds of accepting a method. Women were also more likely to use facilities which displayed educational materials about family planning than at those that did not, and the likelihood of using these facilities increased with the proportion of contraceptive methods offered that were in stock, the number of staff doctors and the number of staff members who provided family planning.

Unmet need for Family Planning:

Unmet need refers to women whose last birth or current pregnancy was mistimed or unwanted or who are not currently using contraception but do not want another child soon. The total unmet need in Pakistan is reported as 25% in 2006-07³(Figure 5). As expected unmet need for spacing purposes is higher among younger women, while unmet need for limiting childbearing is higher among older women. Women living in rural areas tend to have a greater unmet need than women in urban areas. Urgent attention of policy makers and Population Welfare Departments is required to minimize unmet need by transforming it into met need.

Figure 5: Unmet Need by Province and by Need³



Legal Status of Abortion in Pakistan

The legal status of abortion in Pakistan changed in 1997. Until this time, abortion was permitted only to save the life of the woman. This was amended to bring the law in conformity with the injunctions of Islam as laid down in the holy Quran and Sunnah³¹. Most scholars agree that ending of a pregnancy may be carried out before ensoulment of the fetus^{32,33} which is usually described as occurring 120 days after conception. Usually, a justifiable reason is needed for terminating a pregnancy e.g. to protect a breastfeeding child, socio-economic concerns or health reasons³⁴.

As a result of the amendment, abortion is allowed in the early stages of pregnancy not only to save the life of the woman, but also for providing "necessary treatment"³¹. However, the public, policy makers and even the majority of health care providers in Pakistan are not generally aware of this widened legal permission. A highly restrictive legal (pre-1997) and religious interpretation prevails, with women continuing to resort clandestinely to unsafe abortions. It is, however, noteworthy that no woman or doctor has been persecuted in the country for procuring or carrying out an abortion².

Several recommendations pertaining to women's health and rights were made by a **Commission of Inquiry for Women, Pakistan, which** was appointed by the Government of Pakistan. The Commission headed by Justice Nasir Aslam Zahid, Judge Supreme Court of Pakistan³⁵ recommended in August, 1997, that:

- * allocations to the health and population sectors should be gradually increased to 6% of GDP, in keeping with the WHO philosophy
- * regulations should be amended to ensure women the right to avail of tubal ligation without the husband's permission
- * women's right to obtain an abortion by her own choice within the first 120-days of pregnancy be unambiguously declared an absolute legal right

Women's right to obtain an abortion beyond the 120 day period be made permissible only in the event of pregnancy due to rape, in the case of seriously disabled girls and women, in case of danger to the woman's life or serious threat to her health, and in the case of any exposure to disease or other hazards which may result in abnormality of the child.

These recommendations are yet to be legislated.

Induced Abortion in Pakistan

Prevalence

It is difficult to assess the exact magnitude of unsafe abortion. There are few community-based studies; most published data is hospital-based, and does not reflect the complete picture, as usually only women who develop serious complications find their way to hospitals. There is no documentation of those with less serious complications, or no complications.

An idea can be had from a nationwide study conducted by the Population Council in 2002^{13,36,37} which estimated that one pregnancy in five is terminated, a total of 890,000 induced abortions are performed annually, and that 197,000 women are treated in public and private hospitals for complications of unsafe abortions. The abortion rate calculated was of 29/1000 women of age group 15 – 49 years. These estimates were produced by applying an indirect estimation method to the number of women treated for post-abortion care in public sector hospitals and private sector teaching hospitals³⁷.

Several community-based studies from the urban as well as the rural areas have been published. None of these were nationwide studies. The earliest conducted in 1969 in an urban community in Punjab, reported a follow-up of 1447 women throughout pregnancy; of these, 5.7% had an induced abortion³⁸. In 1993, in a follow up of 2991 pregnancies, 4.9% admitted terminating their pregnancies³⁸. In another longitudinal study, carried out in 22 villages in Punjab, 1576 pregnancies were followed up between July 1997 and February, 1999; 4.2% women had their pregnancies terminated³⁹. In a study from Karachi, of 1214 women interviewed in three squatter settlements, 100 (8.2%) admitted to ever seeking to terminate a pregnancy; 31 women reported seeking two or more abortions. The same number of women, 31, reported having had an abortion in the past year, an abortion rate of 25.5 per 1000 women for that year, 1996, in Karachi⁴⁰.

Profile of women seeking induced abortions:

The Population Council study of perceptions of health professionals revealed that 96.1% of the women who had an induced abortion were married, 66.8% were aged 30 years or over, and 88.7% had three or more children, with 68.2% being grandmultiparae, having had 5 or more children (Table 4)³⁶. Roughly, half of them reported that they became pregnant while using a method, revealing ineffective contraceptive practice. Many others became pregnant after discontinuing contraception. The husband was involved in the decision to have an induced abortion, in accompanying the woman to have the abortion, in discussion of PAC and in seeking treatment.

Of 452 women attending 32 clinics carrying out abortions in three provincial capitals of the country (Lahore, Karachi and Peshawar) in 1997, 91.4% were married, 63.3% were aged 30 years or more (with mean age 32.3 +/- 7.5 years), 15 (3.3%) were under 20 years of age, and 61% were grandmultiparae³⁸.

Hospital-based studies report a higher incidence of induced abortion amongst all women admitted with a history of an abortion, spontaneous and induced: an analysis of 22 papers^{41-62*} all from public sector tertiary care hospitals, showed an incidence ranging from 2.34 – 22%. These studies covered a total of 3489 women, of whom 88.11% were from the Punjab, 9.43% from Sindh and 2.46% from the NWFP. There were no studies from Balochistan.

*16 published articles⁴¹⁻⁵⁶, and 6 theses submitted to the College of Physicians and Surgeons, Pakistan (CPSP) as partial fulfilment for the requirement of the Fellowship of the College (FCPS).⁵⁷⁻⁶²

Table 4: Profile of women seeking an induced abortion:³⁶

Age group (in years)	Percent
15-19	3.9
20-24	8.4
25-29	20.8
30-34	39.6
35-39	20.1
40+	7.1
Marital status	
Married	96.1
Single	3.9
Education	
No education	62.5
Literate	9.2
Primary or less	2.6
Middle or higher	25.6
No. of Living Children	
No children	4.6
1-2	4.6
3-4	22.5
5+	68.2

High parity was also seen in almost half the women in these hospital-based studies. Of a total of 2887 women in whom parity was reported in a comparable manner, 16% were nulliparous, 40% were of parity 1-4, and 45% were grandmultiparae.

Providers of Abortion Services and Methods Used:

Providers of abortion services include all categories of health care providers' viz. doctors, nurses, midwives and dais (traditional birth attendants, TBAs). According to the Population Council study mentioned earlier³⁶, a majority of health professionals reported that the most common method used was surgical intervention, most frequently by D & C (Table 5). Infrequently, abortions are self-induced with a variety of methods including drugs, herbs (taken orally or vaginally), insertion of objects, strenuous exercise, or vigorous abdominal massage⁶³.

In a study carried out in 1997, D & C was employed in 31 of 32 clinics providing abortion services (the one remaining using MVA) in three provincial capitals (Karachi, Lahore and Peshawar) of the country³⁸. Of these, 10 (31.1%) clinics were run by qualified female doctors, 13 (40.6%) by Lady Health Visitors (public health nurses with training in midwifery), 6 (18.7%) by nurses and 3 (9.4%) by paramedics.

The majority of induced abortions are performed in the private sector. This was true before 1997 when abortions could be legally carried out only to save life, and continues to be true today when indications for an abortion have been liberalized to include "necessary treatment"³¹. Despite this liberalization, no public sector hospital carries out safe abortion for an indication other than saving life of mother. The selection of abortion provider depends on the client's or couple's ability to pay¹³: the poor go to dais (traditional birth attendants), and the non-poor go to qualified

doctors. Abortion services are provided by private practitioners and a few service outlets run by NGOs, notably Rahnuma (Family Planning Association of Pakistan, a member association of the International Planned Parenthood Federation), and more recently by the Marie Stopes Society.

Table 5: Percentage of health professionals who reported commonly used methods (based on multiple responses) ³⁶

Methods	Percent
Surgical	
Manual/Electric Vacuum Aspiration (M/E VA)	11.3
Dilation and Curettage (D&C)	72.0
Evacuation and Curettage (E&C)	32.0
Oral Methods	
Hormonal Drugs	10.7
Contraceptive Pills	33.3
Herbal teas or solution	18.0
Anti-malarial drugs	33.3
Ergots (Alkaloids)	10.7
Hot dietary items	16.7
Other oral methods	8.7
Vaginal method: Drugs	
Hormonal Drugs	6.0
Contraceptive Pills	22.7
Vaginal method: Instruments	
Catheter	10.0
Laminaria tent	61.3
Intra Uterine Contraceptive Device (IUCD)	44.0
Sticks	43.3
Cotton swabs	44.0
Instrumentation	14.0
Other vaginal method	15.3

In the studies from public sector hospitals alluded to earlier⁴¹⁻⁶², the most frequently used method was surgical intervention, usually by a dilatation and curettage, performed in 48.06% of women (Table 6), and followed by insertion of laminaria tents and IUCD in 35.47%. Knitting needles were used in 89 (2.92%), all in women admitted to a tertiary care hospital in Lahore (48). The status of abortion provider was mentioned in only 613 women. It was a doctor in 14.68 %, an LHV or a nurse in 38.34 % and a dai (traditional birth attendant) in 37.03% of the women. In 2.28%, the abortion was self-induced.

Table 6: Method used to induce abortion in hospital-based studies ⁴¹⁻⁶²

Methods	Total	Percent
Surgical intervention (including D&C)	1465	48.06
Insertion of laminaria tent IUCD	1081	35.47
Oral medication, injection	137	4.49
Intravaginal insertion of pessary	135	4.43
Insertion of knitting needle, hairpin	89	2.92
Warm Oil	89	2.92
Not Known	32	1.05
Others	17	0.56
Herbal medicine in cotton swabs	3	0.10
Total	3048	1.00

Cost of an Abortion:

Several studies report the financial cost of an abortion. In a study carried out in 32 abortion-providing clinics, the average cost of an abortion carried out in 1997 was Rs 1500 (equivalent to US \$ 30 at the time)³⁸. The perceptions of the health professionals regarding cost of an abortion to a woman are mentioned in Table 7.

The current charges in one NGO-run service* are Rs 2700 (about \$ 35, 2008).

The cost of an abortion to the woman, the family, the country is being worked out by an Organization, Collective, under an initiative called Measuring Economic costs of Unsafe Abortion related Maternal Morbidity and Mortality (UARMM)².

Table 7: Average costs for abortion services provided by various health professionals, by residence and economic status of abortion seekers. (Cost in Pak Rupees) ¹³

Health Professionals	Urban Poor	Rural Poor
Doctor in private practice	3,500	2,600
Doctor in public practice	1,000	2,600
Nurse	1,800	1,200
TBA	1,000	770
FP worker or center	1,000	900
Health Professionals	Urban Non Poor	Rural Non Poor
Doctor in private practice	7,300	3,800
Doctor in public practice	300	2,000
Nurse	2,900	1,800
TBA	2,300	1,200
FP worker or center	1,200	850
<i>Pharmacists charge about Rs 200, irrespective of area of residence and socio-economic status.</i>		

*Marie Stopes Society, 2008

Reasons for Induced Abortion:

Information on reasons for abortion was studied. Of 452 women attending 32 abortion clinics in three provincial capitals of Pakistan³⁸, 64% did not want any more children, 20% reported contraceptive failure, and 8.6% were unmarried (Table 8). In another study from Karachi, of 93 women who presented to 10 Family Planning/MCH Centres requesting an abortion⁶⁴, the common reasons were related to non-use or problems associated with contraceptive methods (44% being related to misuse of condoms).

Among the hospital-based studies⁴¹⁻⁶², information about reason for the induced abortion was available for 3325 women. Just over half the women 1664 (50.04%) gave birth spacing, family being complete or pregnancy "unwanted" as a reason for terminating the pregnancy. A little over 20% cited socio-economic concern as their reason, while a lack of knowledge of contraception (0.66 %) or a failure of a method (3.88 %) were given by a relatively small number. An unexpectedly high percentage (24.06) of the pregnancies was extra-marital. This is mainly due to a high number, 724 (34.72%), of extra-marital pregnancies in a single study from Lahore covering 2085 women during a 10-year period⁴⁹; of these, 372 were nulliparous (most presumably unmarried), and 352, probably divorced or widowed. If the data from this study are excluded, 6.01% of 1347 induced pregnancies were extra-marital; their breakup, shown in Table 9, is much closer to the findings of the nationwide study conducted by the Population Council, in which 3.1% of the women having an induced abortion were single (Table4)³⁶

Table 8: Reasons for seeking abortion by women attending 32 clinics providing abortion services in 3 provincial capitals of Pakistan (Lahore, Karachi, Peshawar) ³⁸

Categories	No.	Percent
No more children wanted	291	64.4
Socio economic concerns	0	0
Unmarried	39	8.6
Extra marital pregnancy	6	1.3
Contraception failure	92	20.3
Maternal illness/ill health/ weakness	24	5.4
Total	452	100

Table 9: Reasons for inducing abortions in hospital-based studies ⁴¹⁻⁶²

Reasons for inducing abortions	No.	Percent
Family building preference	908	67.41%
Birth spacing	179	13.29
Family complete	520	38.6
"Unwanted pregnancy"	209	15.52
Socio-economic concerns	156	11.58%
Financial constraints	126	9.35
Disruption of women employment	28	2.08
Husband an addict	2	0.15
Extra-marital pregnancy	81	6.01
Pregnancy continuing after husband's death	6	0.45
Non-use/failure of contraception	156	11.58%
Lack of its awareness	22	1.63
Poor access	5	0.37
Failure	129	9.58
Maternal illness/weakness	40	2.97
Total	1347	100.00

Post-Abortion Complications:

The complications of unsafe abortion may range from immediate (e.g. haemorrhage and visceral injury), delayed (sepsis) to long term sequelae. The latter may be particularly difficult to quantify. Little is documented about late postabortion morbidity, especially conditions such as chronic pelvic inflammatory disease, secondary infertility, increased risk of future ectopic pregnancy, spontaneous abortion and premature labour.

According to the perceptions of Pakistani health professionals, about 10% of women undergoing induced abortions by a gynecologist and 66 percent of those performed by dai or traditional birth attendants develop serious complications¹³. The health facilities survey reveals that each year approximately 250,000 women are treated for postabortion complications — both spontaneous and induced — in mid-size and large public-sector facilities and in private teaching hospitals.

In general, while women tend to go to a private provider for induced abortion, they go to a public facility for postabortion care. This is so with poor women, and those with serious complications e.g. life-threatening sepsis and visceral injury. In the hospital-based studies mentioned earlier⁴¹⁻⁶², sepsis was the most common complication reported in 1195 (35.14 %) women (Table 10). Of these, peritonitis was present in 469 (39.25 %) and localized pelvic infection in 527 (44.10%)

Table 10: Complications in women admitted to hospitals after induced abortion (n=3401)⁴¹⁻⁶²

Complications	No.	Percent
Haemorrhage	381	11.20
Visceral Injuries	652	19.17
Sepsis	1195	35.14
Renal Failure	549	16.14
Hepatic Failure/ Jaundice	178	5.23
Anemic Failure/ Cardiac Failure	7	0.21
DIC	3	0.09
DVT	24	0.71
Pelvic Thrombophlebitis	1	0.03
Pulmonary Embolism	65	1.91
Others:		
“Mild Symptoms”	219	6.44
“Mixed Picture”	106	3.12
Vulvul burns with CuSO ₄	1	0.03
No details	20	0.59
Total	3401	100.00

women. Visceral injuries were present in 652 (19.17 %). Of the women with visceral injuries 384 (61.15%) had uterine perforation. Of these, 28.67% had additional injury of the small or large bowel, 3.34% had injury of the urinary bladder or ureter.

Renal failure occurred in 549 (16.14%) of cases, the large majority being in women admitted to a tertiary care hospital in Lahore⁴⁹. An additional 178 (5.23 %) developed hepatitis or hepatic failure, again the large majority in women admitted to the tertiary care hospital in Lahore⁴⁹.

Maternal Deaths:

Earlier studies between 1961 to 1983 indicated that 2-12% of maternal deaths in Pakistan were due to complication of abortion^{64,65}. In a nationwide hospital-based study conducted by the SOGP in 1989-90, 11% of the deaths were due to abortion²⁰. The recent PDHS (2006-07) reported that abortions accounted for 5.6% of maternal deaths³.

In the 22 hospital-based studies⁴¹⁻⁶², a total of 244 deaths (6.88%) were reported in 3545 women admitted with induced abortion. In 90 women only were the causes of death mentioned; amongst these, sepsis was by far the most frequent cause of death (58.89%) followed by visceral injury in 27.78% (Table 11).

Table 11: Causes of Maternal Deaths⁴¹⁻⁶²

Cause	No.	Percent
Sepsis	53	58.89
Visceral injury	25	27.78
Renal failure	6	6.67
DIC	3	3.33
Hepatic failure	1	1.11
Cardiac failure	1	1.11
Pelvic thrombophlebitis	1	1.11
Total	90	100

A report of other relevant indicators mentioned in Appendix I

- * Access to methods of contraception by young people, unmarried women and other marginalized groups (rural people, indigenous groups, refugees, IDPs) Many FP methods available are over the counter. However, organized data are not available.
- * Are there governmental programs for comprehensive sexuality education?
Not yet.
- * How comprehensive is the coverage of sexuality education programs? Out of school youth?
This is not at all comprehensive; there is none in schools. Some NGOs e.g. HANDS, Ahung, Rahnuma (IPPF MA) are making an effort to provide this service. Also, SOGP and Procter & Gamble Pakistan have been partners in the field of promotion of health, hygiene and awareness of important issues related to puberty and feminine hygiene since 2005, and are addressing some of the issues.
- * How comprehensive and adequate is the training of teachers to provide sexuality education?
No training at all, even for the doctors.
- * Which methods are distributed free or at subsidised price through public or private health networks in the country?
Lists of drugs from the Green Star are attached at Appendices 5. These are provided at greatly reduced rates.
- * Is employment of pregnant women protected by law during pregnancy and after delivery and for how long?
Maternity leave six weeks before and six weeks after delivery.
- * Is the law implemented?
Maternity leave laws are implemented in the public sector, not always in the private sector.
- * Availability of misoprostol, is it registered/approved, what indications? Distribution channels, cost
Not registered for use for abortion or in preventing or controlling PPH. Available over the counter. (Later registered as ST.Mom for prevention and treatment of PPH)
- * Are physicians and other health professionals following the WHO recommended methods for treatment of incomplete abortion?
No training specifically for abortion PAC or CAC. Ipas has since 2007 started a programme for training doctors in selected public sector hospitals in Karachi, and will now extend to other parts of country.

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Appendix I: Core List of Items

Unwanted Pregnancies:

- * Incidence of unwanted pregnancies
- * Vulnerable groups (refugees, internally displaced populations, youth, HIV positive women, etc)
- * Determinants of unwanted pregnancies (including access to contraceptive and contraceptive and user failure, violence against women, and lack of social support of pregnant women).
- * Barriers to certain methods (providers and health system barriers)

Interventions to prevent Unwanted Pregnancies and Induced Abortions:

Contraceptive information and services including EC

- * Overall and method specific prevalence rate
- * Which methods are distributed for free or at subsidized price through public or private health networks in the country?
- * What data are available on access to methods by young people, unmarried women and other marginalized groups (rural people, indigenous groups, refugees IDPs).

Comprehensive Sexuality Education

- * Are there governmental programs for comprehensive sex education?
- * How comprehensive is the coverage of sexuality education programs? Out of school youth?
- * How comprehensive and adequate is the training of teachers to provide sexuality education?

Social protection of pregnant women and mothers of small children

- * Is employment of pregnant women protected by law during pregnancy and after delivery and for how long?
- * Is the law enforced?

Abortion:

- * Incidence
- * Reliability of data
- * Sources of data

Unsafe Abortion:

- * Incidence
- * What data are available on the magnitude and severity of the problem of unsafe abortion?
- * Source of data
- * Characteristics of women who come for abortion (age, place of residence, marital status, income)
- * Availability of misoprostol, is it registered/approved, what indications? Distribution channels, cost?

Quality of the care of women consulting for complications of abortion

- * How is the access to treatment of incomplete abortion services by young people, unmarried women and other marginalized groups (rural people, indigenous groups, refugees, IDPs)?
- * Is physicians and other health professionals training following WHO recommended methods for treatment of incomplete abortion?
- * Is the country implementing WHO guidance?

Consequences of Unsafe Abortion

- * The abortion related maternal mortality
- * Magnitude and severity of complications of unsafe abortion
- * Is there an established national level mechanism for monitoring and evaluation of maternal mortality and morbidity resulting from unsafe abortion?

Legal Situation of Abortion and Regulatory Framework:

- * International standards
- * National Laws
- * Regulatory framework-key elements

Provision of Legal Abortion Services

- * Is the law being complied with for each legal indication?
- * How is the access to legal abortion services by young people, unmarried women and other marginalized groups (rural people, indigenous groups, refugees).
- * Is the physician and mid level provider training following the WHO recommended methods for legal abortion?
- * Is the country implementing the WHO recommended list of essential medicines that includes mife/miso and essential commodities list of WHO and UNFPA that includes MVA? Are these being used?
- * Are FIGO Ethics Committee Recommendations recognized and followed by the OBGYN society? Extend this point.

In situations of restrictive laws

- * Are women being prosecuted and jailed after induced abortion?
- * What are the consequences for physicians and other health professionals?
- * Are professionals being prosecuted and jailed for providing induced abortion?

Appendix 2: List of Participating Organisations

Government Ministries/Organizations:

Minister of Health (MoH), Population Welfare Department Sindh (PWDS), National Institute of Population Studies (NIPS), Minister of Information (Mo Info)

International: *(in alphabetical order)*

Eliminating National Gaps and advancing global equity/ Population Reference Bureau (ENGAGE/PRB), Guttmacher Institute, Ipas, Marie Stopes Society (MSS), Packard Foundation, Population Council of Pakistan, Rahnuma (Family Planning Association of Pakistan - International Planned Parenthood Federation Member Association), United Nations Population Fund (UNFPA), World Health Organization (WHO), United Nations Children's Fund (UNICEF, Sindh), World Health Organization, World Population Fund (WPF), Plan, Leadership Development Program for mobilizing reproductive health (LDM)

National/Local: *(in alphabetical order)*

Aahung, Aga Khan University Hospital, Community Health Sciences (AKUH, CHS), Aurat Foundation, Family Advancement for Life and Health (FALAH), Green Star social marketing Pakistan, Human Rights Commission of Pakistan (HRCP), Pakistan Initiative for Mothers and Newborns (PAIMAN), Shirkat Gah, Youth Organizations, Pakistan Women Lawyers Association (PAWLA), Religious Organizations, War Against Rape (WAR), Collective for Social Science Research (CSSR)

Professional Bodies and Academic Institutions: *(in alphabetical order)*

College of Physicians and Surgeons of Pakistan (CPSP), College of Family Physicians, Lahore Institute of Public Health, Midwifery Association of Pakistan (MAP), National Committee of Maternal and Neonatal Health (NCMNH), Pakistan Medical Association (PMA), Pakistan Medical and Dental Council (PMDC), Pakistan Nursing Council (PNC), Society of Obstetricians and Gynecologists of Pakistan (SOGP)

Appendix 3: Ten specific areas requiring reforms in the National Health Policy 2002

1. Reducing widespread prevalence of communicable diseases;
2. Addressing inadequacies in primary/secondary health care services;
3. Removing professional/managerial deficiencies in the District Health System;
4. Promoting greater gender equity;
5. Bridging basic nutrition gaps in the target-population;
6. Correcting urban bias in health sector;
7. Introducing required regulation in private medical sector;
8. Creating Mass Awareness in Public Health matters;
9. Effecting Improvements in the Drug Sector;
10. Capacity-building for Health Policy Monitoring

Appendix 4: Excerpts from National Health Policy related to maternal health, 2001

The focus has shifted to primary and secondary health care, with trained Lady Health Workers (LHWs) being utilized at primary level to provide FP and PHC services at the doorstep

2.1.1 Trained Lady Health Workers will be utilized to cover the un-served population at the primary level. This would ensure family planning and primary healthcare services at the doorstep of the population through an integrated community-based approach.

2.1.2 58,000 Lady Health Workers under Ministry of Health and 13,000 Village based Family Planning Workers under Ministry of Population Welfare will be integrated from 1st July 2001 to create a cadre of 71,000 Family Health Workers under the National Programme for Family Planning and Primary Health Care. This cadre will be increased to 100,000 by the year 2005.

2.1.3 Provinces undertake improvement of District/Tehsil Hospitals under a phased plan. A minimum of 6 specialties (Medicine, Surgery, Pediatrics, Gynae, ENT and Ophthalmology) will be made available at these facilities.

2.1.4 Promoting greater gender equity

Key Area No. 4: To promote greater gender equity in the health sector.

4.1 Implementation Modalities:

4.1.1 Focussed reproductive health services to childbearing women through a life cycle approach will be provided at their doorsteps. This will ensure provision of Safe Motherhood facilities to the majority of mothers, thereby enhancing child survival rates.

4.1.2 Access to primary health services will be provided to the majority of women by expanding the Lady Health Workers Programme at the grassroots level. A cadre of 100,000 community-based trained lady health workers will provide basic services to the family at the household level.

4.1.3 Emergency Obstetric Care facilities will be provided through the establishment of "Women-Friendly-Hospitals" in 20 districts of Pakistan under Women Health Project.

4.1.4 A referral system between the village level and the Health Care facilities upto District Hospital level will be established under the Women Health Project.

4.1.5 More job opportunity will be provided to women as LHWs under the above programme. Additionally enrolment of midwives, LHVs and Nurses will be progressively increased in Nursing Schools, Midwifery Schools and Public Health Schools.

4.1.6 All vacancies in Government Sector of WMOs, Nurses, LHVs and Women cadres will be filled up on priority basis.

Appendix 5: Greenstar Product Profile

- * **Sathi Condoms**
- * **Touch Condoms**
- * **Hormonal Contraceptives :** 1. Nova-Oral, 2. Nova-Ject injectable, 3. Microgynon, 4. Lo-Feminal, 5. Megestron, a three-month injectable, 6. Femi-ject, the first combined estrogen-progesterone injectable formulation,
- * **Vitalet :** multivitamin supplement, contains iron, zinc, vitamin A and other key micronutrients
- * **Sehat Wali Gari:** A fully equipped mobile health van provides highly subsidized general and reproductive health care in identified underserved communities. Currently only one van operates in Karachi
- * **VSC :** Female Voluntary Surgical Contraception or sterilization
- * **Clean Delivery Kit :** pre-packaged disposable delivery kit which provides a mix of clean objects for cleaner and safer deliveries at homes
- * **EC:** emergency contraceptive pill, indicated for the prevention of unplanned pregnancies in event of unprotected intercourse, contraceptive failure i.e. condom burst, displaced/expelled IUD, missed dosage of OC or injectable and/or rape.