



**MATERNAL HEALTH  
AND SAFE MOTHERHOOD PROGRAMME**

**ABORTION**

A TABULATION OF AVAILABLE DATA ON THE  
FREQUENCY AND MORTALITY OF UNSAFE ABORTION  
2ND EDITION



**World Health Organization**  
Division of Family Health  
Geneva

### **Abstract**

This document brings together, in a standard format, data on incidence of and mortality from unsafe abortion worldwide. The tabulations consist of data collected from a variety of sources, including health service reporting and surveys. Regional and global estimates have been derived from data in the tabulations. A full description of materials and methods is included.

Although prevention of unwanted pregnancies must be the highest priority and attempts made to eliminate the need for abortion, where contraception is unavailable or inaccessible many women will seek to terminate unwanted pregnancies despite restrictive laws and lack of adequate services. Women who resort to unauthorized providers put their health and lives at risk. Globally it is estimated that 20 million unsafe abortions take place in developing countries where the risk of death is estimated at 1 in 250 abortion procedures.

### **Acknowledgements**

The World Health Organization gratefully acknowledges the valuable input to this work provided by Dr. Stanley Henshaw of the Guttmacher Institute in New York (USA) in developing the model for estimating the incidence of, and mortality from, unsafe abortion and in preparing the regional and global estimates.

The World Health Organization gratefully acknowledges the financial assistance provided by United Nations Population Fund (UNFPA) for the preparation and publication of these tabulations.

## CONTENTS

1.	INTRODUCTION .....	1
2.	UNSAFE ABORTION: A WORLDWIDE PROBLEM .....	2
	2.1 Definition of unsafe abortion .....	2
	2.2 Health consequences .....	2
	2.3 Impact on health services .....	4
3.	DATA ON UNSAFE ABORTION .....	5
	3.1 Data sources .....	5
	3.2 The unsafe abortion database .....	6
4.	ESTIMATING REGIONAL AND GLOBAL INCIDENCE OF, AND MORTALITY FROM, UNSAFE ABORTION .....	6
	4.1 Methods and assumptions for current estimates .....	6
	4.2 Table of current estimates .....	7
5.	REGIONAL AND GLOBAL INCIDENCE OF, AND MORTALITY FROM, UNSAFE ABORTION .....	9
	5.1 Global estimates of unsafe abortion .....	9
	5.2 Regional estimates of unsafe abortion .....	9
	5.3 Trends in the incidence of and mortality from unsafe abortion .....	13
6.	THE TABULATIONS: MATERIALS AND METHODS .....	14
	6.2 Calculations .....	14
	6.3 Criteria for inclusion .....	15
	6.4 Comparisons .....	15
	6.5 Terminology .....	15
	6.6 Notes .....	15
	6.7 Description of the columns .....	15
7.	ALPHABETICAL LIST OF ABBREVIATIONS USED .....	18
8.	REFERENCES .....	19
9.	TABULATIONS OF AVAILABLE INFORMATION .....	21
	9.1 Countries with more than 300 000 inhabitants, or with data in the database, by geographical regions .....	22
	9.2 List of countries, alphabetically .....	23
	9.3 Africa .....	25
	9.4 Latin America .....	37
	9.5 North America .....	55
	9.6 Asia .....	59
	9.7 Europe .....	75
	9.8 Oceania .....	83
	9.9 Former USSR .....	85
10.	LIST OF DATA SOURCES .....	89

© World Health Organization 1994

This document is not a formal publication of the World Health Organization (WHO), and all rights are reserved by the Organization. The document may, however, be freely reviewed, abstracted, reproduced and translated, in part or in whole, but not for sale nor for use in conjunction with commercial purposes.

The views expressed in documents by named authors are solely the responsibility of those authors.

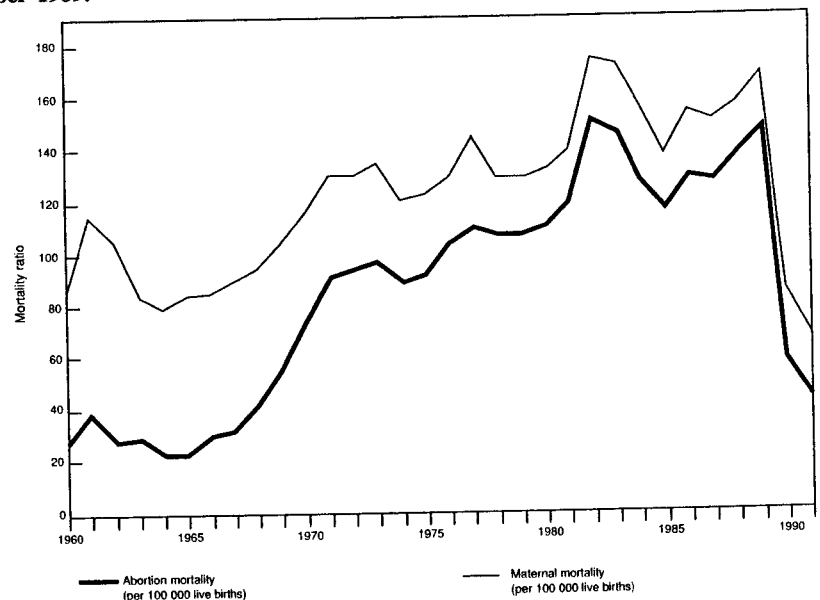
## 1. INTRODUCTION

Millions of women every year have an unwanted pregnancy. Some unwanted pregnancies are carried to term, others end in an induced abortion. An estimated 26 to 31 million legal abortions were performed in 1987.<sup>1</sup> Millions of abortions, however, were performed outside the legal system, often by unskilled providers.

Induced abortion is restricted by law in many countries. In others, pregnancy termination is legal on broad medical and social grounds. Sometimes, even where induced abortion is legal, services may be insufficient to meet demand or are inadequately distributed. Alternatively, women may be unaware of their availability. Despite restrictive laws and lack of adequate services, women continue to seek to terminate unwanted pregnancies.

Women who resort to unauthorized facilities and/or unskilled providers put their health and lives at risk. Restrictive legislation is associated with high rates of unsafe abortion. It is, however, the number of maternal deaths, not abortions, that is most affected by legal codes.<sup>2</sup> In the case of Romania, for example, the number of abortion-related deaths increased sharply after November 1966 when the government tightened a previously liberal abortion law. The figure rose from 20 per 100 000 live births in 1965 to almost 100 in 1974 and 150 in 1983.<sup>3</sup> Abortions were legalized again in December 1989 and, by the end of 1990, maternal deaths caused by abortions dropped to around 60 per 100 000 live births.

Fig. 1 Effects of the introduction in Romania in November 1966 of an anti-abortion law, and legalization of abortion in December 1989.



Source: *World Health Statistics Annual*, various years.

The World Health Organization is particularly concerned with the public health aspects of abortion. As early as 1967, the World Health Assembly passed Resolution WHA20.41 which stated that "abortions .... constitute a serious public health problem in many countries ..." and requested "...the Director-General: (a) to continue to develop the activities of the World Health Organization in the field of health aspects of human reproduction; ...."

The International Conference on Population, held in Mexico in 1984, urged governments "to take appropriate steps to help women avoid abortion, which in no case should be promoted as a method of family planning, and - whenever possible - to provide for the humane treatment and counselling of women who have had recourse to abortion."<sup>4</sup>

More recently, at the October 1990 Tbilisi meeting "From abortion to contraception", participants affirmed that all couples and individuals have the basic human right to decide freely, responsibly and without coercion, the number and the spacing of their children; everyone has the human right to reproductive health, choice and dignity; women must enjoy self-determination in their sexual and reproductive lives, and every child should be a wanted child. The meeting emphasized that unwanted pregnancy and unsafe abortion are major public health and social problems.<sup>5</sup>

Despite the paucity of data, inevitable in the context of a procedure that most women wish to keep secret even when it is legal, it has been clear for many years that unsafe abortion is a public health problem of considerable magnitude. More recently, evidence from Demographic and Health Surveys carried out in 40 developing countries shows that a large number of women want no more children or want to space births.<sup>6</sup> For example, between 16% and 49% of women in Sub-Saharan Africa said that they wanted no more children, between 40% and 77% of women either wanted no more children or wanted to space births. In Latin America the ranges are higher, 55-72% and 74-85% respectively.

Studies also show that many **married** women in developing countries often do not have access to the contraception they require to space their children or limit family size<sup>7</sup>. The situation is even worse for unmarried women, particularly adolescents, who rarely have access to reproductive information and counselling, and frequently are excluded from contraceptive services.

Where contraception is unavailable or inaccessible there will inevitably be large numbers of unwanted pregnancies. They will also arise following contraceptive failure. Women may resort to unsafe abortion to terminate such pregnancies. It is therefore important that governments, intergovernmental and non-governmental organizations deal openly and forthrightly with unsafe abortion as a major public health concern. Governments have to assess the health impact of unsafe abortion, reduce the need for abortion through expanded and improved family planning services and frame abortion laws and policies on the basis of a commitment to women's health and well-being rather than on criminal codes and punitive measures. Prevention of unwanted pregnancies must always be given the highest priority and all attempts should be made to eliminate the need for abortion. Women who wish to terminate their pregnancies should have ready access to reliable information, compassionate counselling and services for the prevention and management of complications of unsafe abortions.

## **2. UNSAFE ABORTION: A WORLDWIDE PROBLEM**

### **2.1 Definition of unsafe abortion**

Unsafe abortions are characterized by the lack or inadequacy of skills of the provider, hazardous techniques and unsanitary facilities.<sup>8</sup> Although the legality or illegality of the services may not be the defining factor of their safety, for the purpose of these tabulations, unsafe abortion has been defined as an "abortion not provided through approved facilities and/or persons". What constitutes "approved facilities and/or persons" will vary according to the legal and medical standards of each country. The definition does not take into consideration differences in quality, services available or the other substantial differences between health systems.

### **2.2 Health consequences**

Unsafe abortion is one of the great neglected problems of health care in developing countries and a serious concern to women during their reproductive lives. Contrary to common belief, most women seeking abortion are married or live in stable unions and already have several children. They use abortion to limit family size, or space births. They may resort to abortion in the event of contraceptive failure or the lack of access to modern contraception. However, in all parts of the

world, particularly in urban areas, an increasing proportion of those having abortions are unmarried adolescents; in some urban centres, they represent the majority of all abortion seekers.

Unsafe abortions may be induced by the woman herself, by non-medical persons or by health workers in unhygienic conditions. Such abortions may be induced by insertion of a solid object (usually root, twig or catheter) into the uterus, an improperly performed dilatation and curettage procedure, ingestion of harmful substances, or exertion of external force. The mortality and morbidity risks of induced abortion depend on the facilities and skill of the abortion provider, the method used and certain characteristics of the woman herself, such as her general health, presence of reproductive tract infections (RTI) or sexually transmitted disease (STD), age, parity, and the stage of her pregnancy. The risks involved also depend on the availability and the utilization of treatment facilities once complications have occurred.

According to the conditions in which the unsafe abortions are performed and the methods used, both of which are related to the legal status of abortion, a variety of severe complications may occur. Complications such as sepsis, haemorrhage, genital and abdominal trauma, perforated uterus or poisoning can lead to death if left untreated. Death may also result from secondary complications such as gas gangrene and acute renal failure. Typical complications from illegally induced abortion are illustrated by a study of 840 patients in Ibadan, Nigeria, in 1989: sepsis (86%), haemorrhage (35%), uterine perforation (16%), lower genital tract injury (10%), renal failure (0.4%), coma (0.4%), embolism (0.2%), and death (7%).<sup>9</sup> Another study of 230 illegally induced septic abortions in Ibadan found the following complications:<sup>10</sup>

**Table 1. Complications in patients with sepsis after induced abortion**

Complication	No.	(%)	Complication	No.	(%)
Pelvic peritonitis	94	(40.9)	Psychiatric disorders	8	(3.5)
Generalized peritonitis	63	(27.4)	Acute renal failure	7	(3.0)
Pelvic abscess	60	(26.1)	Post fornix perforation	6	(2.6)
Jaundice	28	(12.2)	Septic chock	4	(1.7)
Septicemia	29	(12.6)	DIC <sup>a</sup>	3	(1.3)
Uterine perforation	24	(10.4)	Heart failure	3	(1.3)
Maternal death <sup>b</sup>	19	(8.3)	Hepatorenal failure	3	(1.3)
Abdominopelvic abscess	15	(6.5)	Small bowel injury	3	(1.3)
Cervical laceration	10	(4.3)	Gynetresia	2	(0.9)

<sup>a</sup> DIC, disseminated intravascular coagulation

<sup>b</sup> Causes of mortality: septicemic shock (7); acute renal failure (4); hemorrhage from perforation (3); DIC (1); choriocarcinoma (1); hepatorenal failure (2); cardiopulmonary failure after repair of burst abdomen (1).

Source: Konje, J.C. et al. Health and economic consequences of septic induced abortion. *International journal of gynaecology and obstetrics*, 1992, 37(3):193-197.

The consequences of an unsafe abortion can be permanent disability. In a hospital study in Durban, South Africa (1983-84), 42 of 647 patients with septic abortion underwent laparotomy. A hysterectomy was necessary in 35 patients, 18 of whom were primigravid. Eight patients were under the age of 20 at the time of hysterectomy.<sup>11</sup> However, long-term consequences of abortion may include chronic pelvic pain, pelvic inflammatory disease, tubal occlusion and secondary infertility. High incidence of ectopic pregnancy and premature delivery, and increased risks of spontaneous abortion in subsequent pregnancies are other possible

consequences of poorly performed abortions. For example, in prospective European studies it has been demonstrated that women harbouring STD infections are at increased risk of an ascending postabortal infection: 22% to 38% of Chlamydia-infected women developed pelvic infection after legal abortion, compared with from 2% to 10% of women without Chlamydia.<sup>12 13</sup> <sup>14 15</sup> Other studies show that the risk of infertility,<sup>16</sup> for example, increases with each episode of salpingitis.<sup>17</sup> Extrapolations from these and other studies indicate that about 20%-30% of unsafe abortions may lead to reproductive tract infections of which between 20% and 40% lead to PID and infertility.

Abortion can be a relatively safe surgical procedure. In the U.S., for example, the death rate for abortion is now 0.6 per 100 000 procedures, making it as safe as an injection of penicillin.<sup>18</sup> In developing countries, however, where maternal mortality is high, the risk of death following complications of unsafe abortion procedures may be between 100 and 500 times higher than that of an abortion performed professionally under safe conditions.

**Table 2. Mortality risks associated with pregnancy and selected health procedures**

Procedure	Deaths per 100 000 cases	
	United States of America	Developing Countries*
Legal abortion	1	4-6
Female sterilization	4	10-100
Delivery of live birth	14	250-800
Cesarean section	41	160-220
Illegal abortion**	50	100-1000
Hysterectomy	160	300-400

\* Estimated

\*\* Performed by untrained practitioners or outside medical facilities

Source: Population Crisis Committee, World abortion trends, Briefing Paper No. 9 September 1982

### 2.3 Impact on health services

Spontaneous abortions seldom present complications and are rarely fatal. However, in some countries, up to 80% or more of all abortion cases admitted to hospitals may have been induced. While a spontaneous or an uncomplicated abortion may require up to 3 days of hospitalization, complicated cases may require a stay 5 times longer.

The treatment of abortion complications in hospitals uses a disproportionate share of resources, including hospital beds, blood supply, medication, as well as access to operating theatres, anaesthesia and medical specialists. Thus unsafe abortion and its consequences places great clinical, material and financial demands on the scarce hospital resources of many developing countries.<sup>10 19 20 21</sup> Up to 50% of the resources of some hospitals are often used to treat patients admitted for complications of unsafe abortions.<sup>22</sup> This undoubtedly compromises other maternity services.

### 3. DATA ON UNSAFE ABORTION

Data on unsafe abortion are scarce and inevitably unreliable because of legal and ethical/moral constraints which hinder data collection. Under-reporting and misreporting are common because women may be reluctant to admit to an induced abortion especially when it is illegal.

Few studies have achieved higher than 75% accuracy of reporting and in some cases only a quarter of abortions known to have been performed have been admitted to by respondents.<sup>23 24</sup> <sup>20 25</sup> In a rare follow-up study of 118 women admitting only to spontaneous abortion in Merida, Mexico in 1979, 77% later admitted that the abortion had been induced.<sup>26</sup>

#### 3.1 Data sources

**Hospital admissions** for abortion complications are often used as an indicator of the problem of unsafe abortion. Hospital records show the number of women admitted for abortion complications and the number of subsequent deaths in a given period. This is particularly useful when information on hospital admissions, births and maternal deaths is also available for the same period of time. Assuming that spontaneous abortions are relatively constant in a given population, and that they are unlikely to cause sepsis and death, the excess may be considered to be the result of unsafe abortion.

Hospital records rarely differentiate between induced and spontaneous abortions. When they do, induced abortions invariably are under-reported. A WHO protocol<sup>20</sup> has been developed to assist researchers to distinguish between induced, probably induced and possibly induced abortions in hospital studies.

Between 10% and 50% of unsafe abortion cases will need medical attention.<sup>27 28</sup> However, not all women seek health care when complications arise. Their decision to seek help depends on the accessibility (geographic and financial) of the health service and social attitudes, as well as the attitudes of health centre staff. Admissions data are, therefore, only indicative of a small proportion of the total number. On admission, women are reluctant to admit the true nature of the abortion and usually insist it is spontaneous.

**Community surveys** attempt to collect data on incidence by interviewing a random sample of women of reproductive age in the community. The success of this approach depends on factors such as the legal status of abortion and on the skill of the interviewers. These studies are vulnerable to under-reporting of induced abortions, coupled with over-reporting of spontaneous abortions. Indirect methods such as the Random Response Technique (RRT)<sup>29</sup> have been used in community studies to establish the proportion of women ever resorting to induced abortion. Prospective community studies follow women in a community and record the pregnancy outcomes.

**Abortion providers' surveys** are rare but, when available, may be used to estimate the incidence of abortion. These studies tend to report higher rates than other research methods, but may be the least biased method.

**Mortality studies** are often used in developing countries where vital registration systems are poor or nonexistent. Many deaths, particularly in rural areas, are not registered at all. When a death is reported, the cause is frequently not known, not indicated or deliberately concealed.



An abortion may not be mentioned in order to protect the family and all references to pregnancy may be avoided, particularly in the case of unmarried women. Case findings, using a variety of sources of information, may actually be the most successful form of mortality studies. These studies usually begin by identifying all deaths of women of reproductive age, and then go on to determine the cause of death.<sup>30</sup> No single source of information is likely to yield all of the deaths. The sisterhood method<sup>31</sup> for estimating maternal deaths has also been used to identify deaths from abortion.<sup>32</sup>

### **3.2 The unsafe abortion database**

The tabulations in Section 9.3 to 9.9 list studies extracted from the database on unsafe abortion maintained by the WHO's Maternal Health and Safe Motherhood Programme. This is part of a broader database covering other aspects of women's reproductive health, including maternal mortality, and coverage of care.

The studies listed in this document are an attempt to bring together all available data on the frequency of unsafe abortions and associated mortality. It is hoped that they will draw attention to the global need for action on the problem of unsafe abortion and the deaths they cause, renew dialogue, stimulate further research studies and provide health managers with comparative information on the nature and dimensions of the problem in their countries. They can also serve as a basic tool for decision-making regarding prevention and intervention strategies and indicate areas in which further research is needed.

This document is one in a series of informal information-exchange documents. Companion documents give information on Maternal Mortality Ratios and Rates (WHO/MCH/MSM/91.6), the Prevalence of Anaemia in Women (WHO/MCH/MSM/92.9), the Prevalence of Primary and Secondary Infertility (WHO/MCH/91.9), Low Birth Weight (WHO/MCH/92.2) and Coverage of Maternity Care (WHO/FHE/MSM/93.7).

The database upon which these tabulations are based is continually being updated and there is a need for additional epidemiological information on the extent of the problem of unsafe abortion worldwide. Readers are encouraged to share their knowledge and materials to assist WHO in maintaining the database as up-to-date and comprehensive as possible. Information should be sent to the Maternal Health and Safe Motherhood Programme, Division of Family Health, World Health Organization, 1211 Geneva 27, Switzerland.

## **4. ESTIMATING REGIONAL AND GLOBAL INCIDENCE OF, AND MORTALITY FROM, UNSAFE ABORTION**

This is the second edition of the abortion tabulations. The first edition, issued in 1990, made no attempt to develop regional and global estimates and simply brought together all available data for each country. More data are now available than was the case only a few years ago. For this reason, the Maternal Health and Safe Motherhood Programme has updated the 1990 edition and taken this opportunity to estimate, for the first time, the incidence of, and mortality from, unsafe abortion globally and by region.

#### 4.1 Methods and assumptions for current estimates

Because of the difficulties surrounding the measurement of unsafe abortion, estimates of its incidence and mortality cannot be exact. The approach used varies according to the information available for the particular area. Estimates were made for each country with a population of one million or more from which sub-region, region and world totals were derived.

For the estimates of the numbers of unsafe abortions, the starting point was usually information about the ratio of abortion (both induced and spontaneous) treated in hospitals to deliveries in the same hospitals. The information came from individual hospital studies, or in a few cases, from national statistics on some or all of the country's hospitals. Differences between countries in the propensity to utilize hospitals for pregnancy-related conditions were thus taken into account to the extent that they apply equally to treatment of abortion complications and deliveries.

The abortion/birth ratio was adjusted by subtracting 0.034 to account for spontaneous abortions, following the procedure suggested by S. Singh and D. Wulf.<sup>33</sup> The fraction subtracted corresponds to the expected number of miscarriages at 13 to 22 weeks gestation. It was assumed that these would necessitate hospital treatment whilst women in developing countries having earlier miscarriages rarely turn to hospitals.

The ratio was further adjusted on the assumptions that half or more of induced abortions are accomplished without complications requiring hospitalization, and that abortion ratios are lower in rural than in urban areas. These adjustments took into account the existing abortion law (de jure) and its interpretation (de facto), information on the providers of unsafe abortions, and cultural and rural/urban differences. Careful consideration was given to total fertility rates, contraceptive prevalence, and the proportion of deliveries that take place in hospitals or other health care facilities.

To arrive at the estimated number of induced abortions, the adjusted ratio was applied to the number of births which, in turn, was calculated from the 1990 population and birth rate estimates of UN Population Division. A few countries for which no data on the abortion ratio were available were assumed to have the same ratio as other countries in the region or as other countries having similar fertility and development indicators, and abortion laws.

To estimate the number of maternal deaths resulting from unsafe abortions, the starting point was information on abortion deaths as a percentage of all maternal deaths. For many countries, this information also came from individual hospital studies. However, where such information was available from community studies it was used in preference to that derived from hospital data. After the results of individual studies were combined and adjustment for rural/urban differences made, the percentage of abortion deaths to total maternal deaths in each country was weighted by the estimated number of births to arrive at regional estimates of the proportion of maternal mortality caused by abortion-related complications. These were then applied to the estimated number maternal deaths in the region<sup>34</sup> to arrive at regional and world totals.

The estimates of the incidence of unsafe abortion and resulting maternal mortality necessarily have a high degree of uncertainty and may be either too low or too high. They reflect the epidemiological judgment of experts but should be viewed as "best guesses" based on the information currently available.

**Table 3. Global and regional estimates on incidence of, and mortality from, unsafe abortions**

Region	Number of unsafe abortions (1000s)**	Unsafe abortions per 1000 women 15-49	Number of deaths from unsafe abortion**	Mortality from unsafe abortion per 100 000 live births	% of maternal deaths
WORLD TOTAL	20000	15	70000	49	13
MORE DEVELOPED COUNTRIES*	2340	8	600	4	14
LESS DEVELOPED COUNTRIES	17620	17	69000	55	13
AFRICA	3740	26	23000	83	13
Eastern Africa	1340	31	10000	101	15
Middle Africa	180	12	2000	77	11
Northern Africa	510	16	1000	23	7
Southern Africa	230	22	500	36	13
Western Africa	1480	34	10000	104	14
ASIA *	9240	12	40000	47	12
Eastern Asia*	***	***	***	***	***
South-eastern Asia	2850	25	5000	43	13
Southern Asia	6000	21	33000	81	14
Western Asia	380	13	1000	22	8
EUROPE	260	2	100	2	10
Eastern Europe	110	5	<100	4	13
Northern Europe	***	***	***	***	***
Southern Europe	150	4	<100	2	16
Western Europe	***	***	***	***	***
LATIN AMERICA	4620	41	6000	48	24
Caribbean	170	19	400	50	19
Central America	890	31	800	23	14
South America	3560	47	5000	58	26
NORTHERN AMERICA	***	***	***	***	***
OCEANIA*	20	17	<100	29	5
USSR (former)	2080	30	500	10	23

*Figures may not add to totals due to rounding.*

\* Japan, Australia and New Zealand have been excluded from the regional estimates, but are included in the total for developed countries.

\*\* Based on 1990 UN projections of births

\*\*\* For regions where the incidence is negligible no estimates have been made.

## 4.2 Table of current estimates

The regional and global estimates presented in Tables 3 and 4 and illustrated in Figures 2 to 5 are based on the analysis of data collected from a variety of sources and presented in the tabulations in sections 9.3 to 9.9. The following rates and ratios have been calculated from the estimated number of unsafe abortion and deaths.

**Incidence rate:** Unsafe abortions per 1000 women of reproductive age.

**Unsafe abortion mortality ratio:** Deaths from unsafe abortion per 100 000 live births.

**Proportion of maternal deaths:** Deaths from unsafe abortion as a per cent of all maternal deaths.

## 5. REGIONAL AND GLOBAL INCIDENCE OF, AND MORTALITY FROM, UNSAFE ABORTION

### 5.1 Global estimates of unsafe abortion

The global estimate of the incidence of unsafe abortion in Table 3 and illustrated in Figure 2 show that worldwide some 20 million unsafe abortions take place each year. This represents almost one in ten pregnancies, or a ratio of one unsafe abortion to seven births. Nearly 90% of unsafe abortions take place in the developing world. Despite liberalization of abortion laws in several countries during the 1980s and some improvement in service provision many women still resort to abortions outside of approved facilities or with unskilled providers.

On the basis of the assumptions and methodology described above and bearing in mind the large degree of uncertainty due to the incompleteness of the original data sources, it appears that around 70 000 women die each year as a result of complications following unsafe abortions (Table 3 and Figure 3). These estimates inevitably have a large margin of error; the numbers could be as low as 50 000 or as high as 100 000.

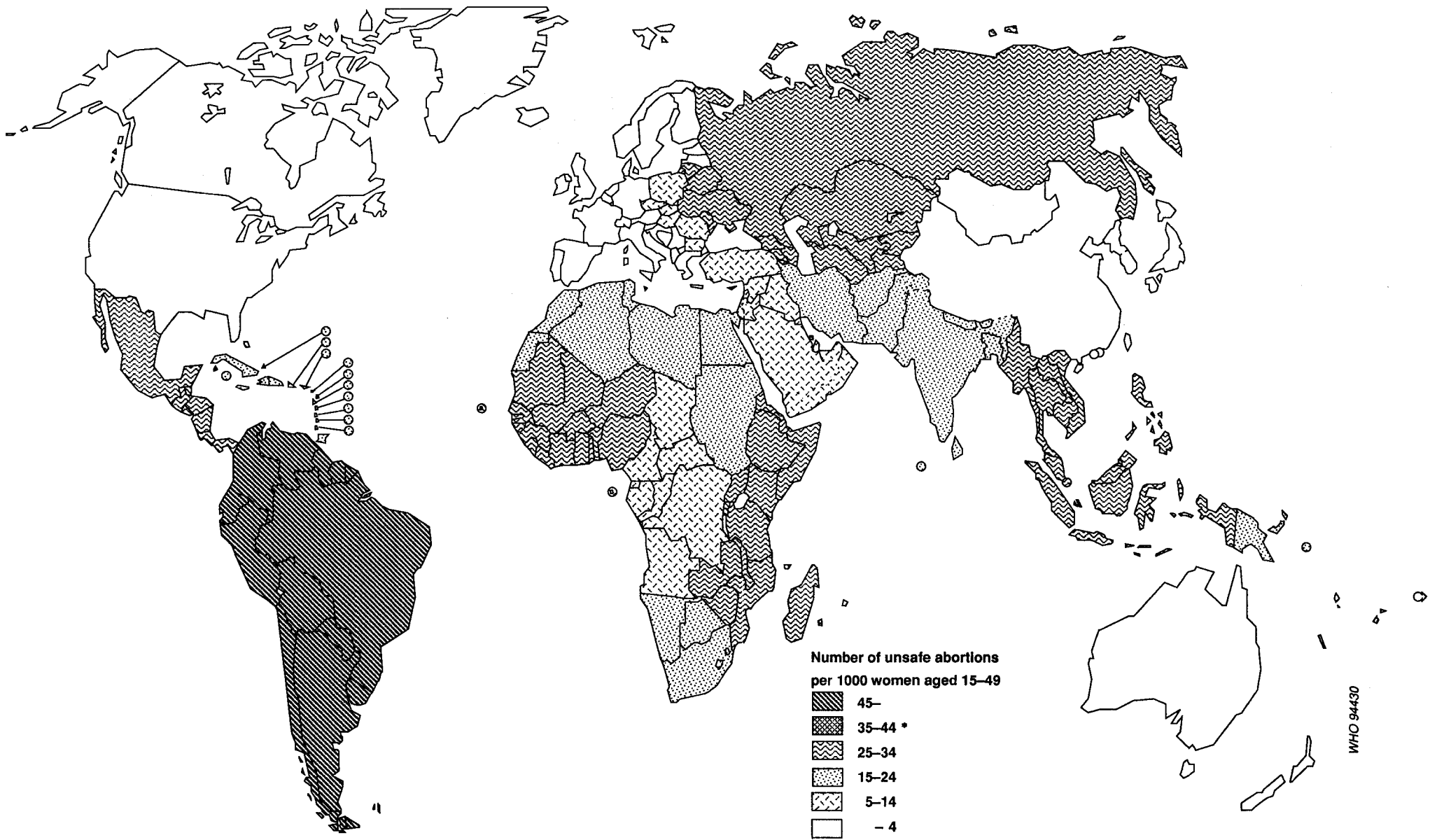
Unsafe abortion is, therefore, one of the leading causes of the more than 500 000 maternal deaths that occur each year. An estimated 13% of pregnancy-related deaths, or one in eight, are due to an unsafe abortion. The tragedy is all the greater because abortion-related deaths are entirely preventable.

The calculations in Table 4 indicate that in 1990, the mortality risk associated with unsafe abortion is at least 15 times higher in developing areas than in industrialised areas and in some regions it may be as much as 40-50 times higher. However, even in developed areas, the risk of death from unsafe abortion is substantially higher than when abortion is legal. In the USA the case fatality rate from legal induced abortion is 0.6 per 100 000 procedures.

### 5.2 Regional estimates of unsafe abortion

There are large differences in incidence of and mortality from abortion between regions (Figure 4) and important variations within regions and sub-regions. In Latin America, every year there are 40 unsafe abortions per 1000 women of reproductive age, representing more than one unsafe abortion for every three births. The abortion mortality ratio of 48 per 100 000 live births represents nearly a quarter of all maternal deaths.

**Fig. 2 Unsafe abortions per thousand women aged 15-49 by UN region**



**Number of unsafe abortions per 1000 women aged 15-49**

	45-
	35-44 *
	25-34
	15-24
	5-14
	- 4

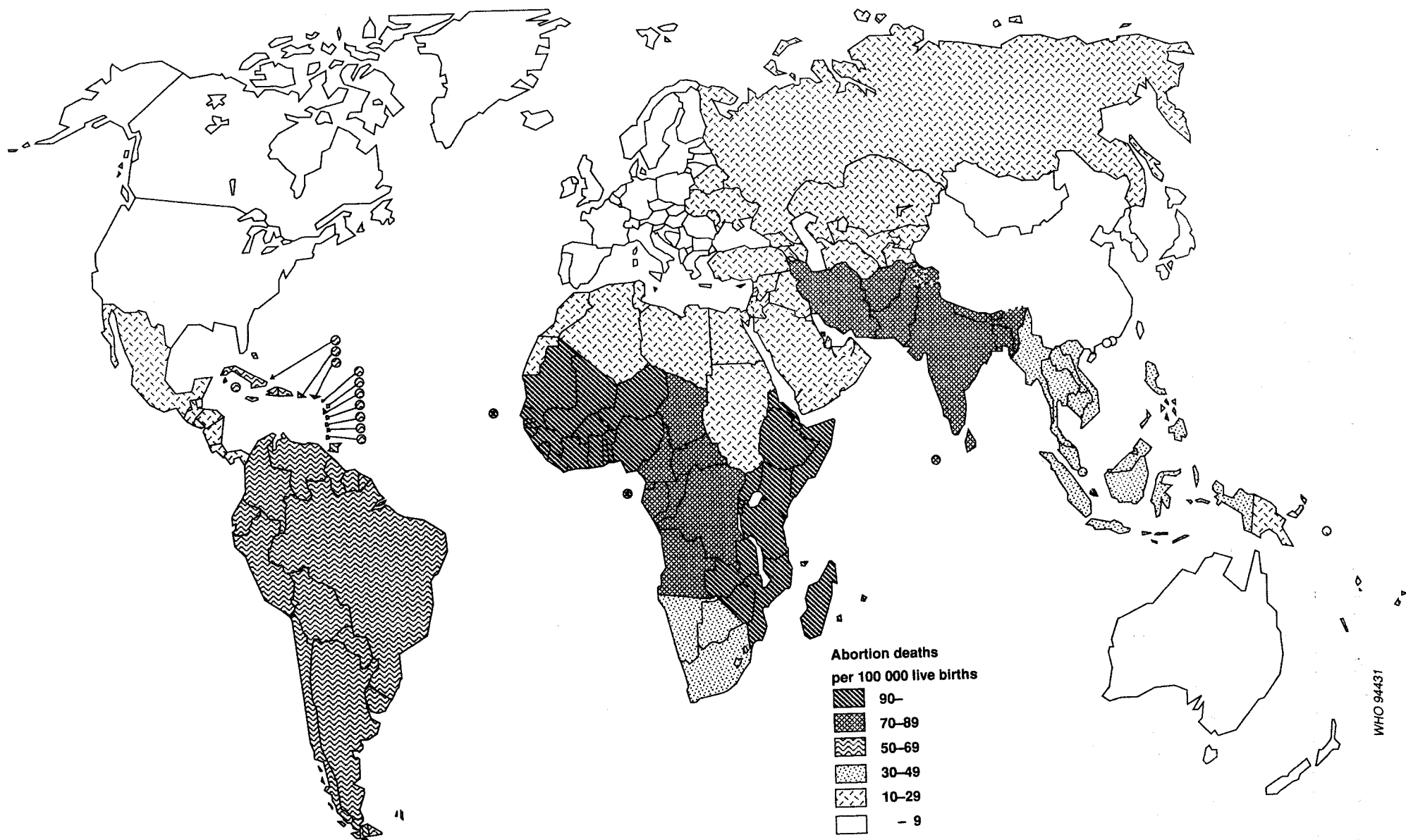
The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines represent approximate border lines for which there may not yet be full agreement.

\* no region in this range

WHO 94430

BR R5000 SH 01 10 F6V

**Fig. 3 Abortion deaths per 100 000 live births by UN region**



The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines represent approximate border lines for which there may not yet be full agreement.

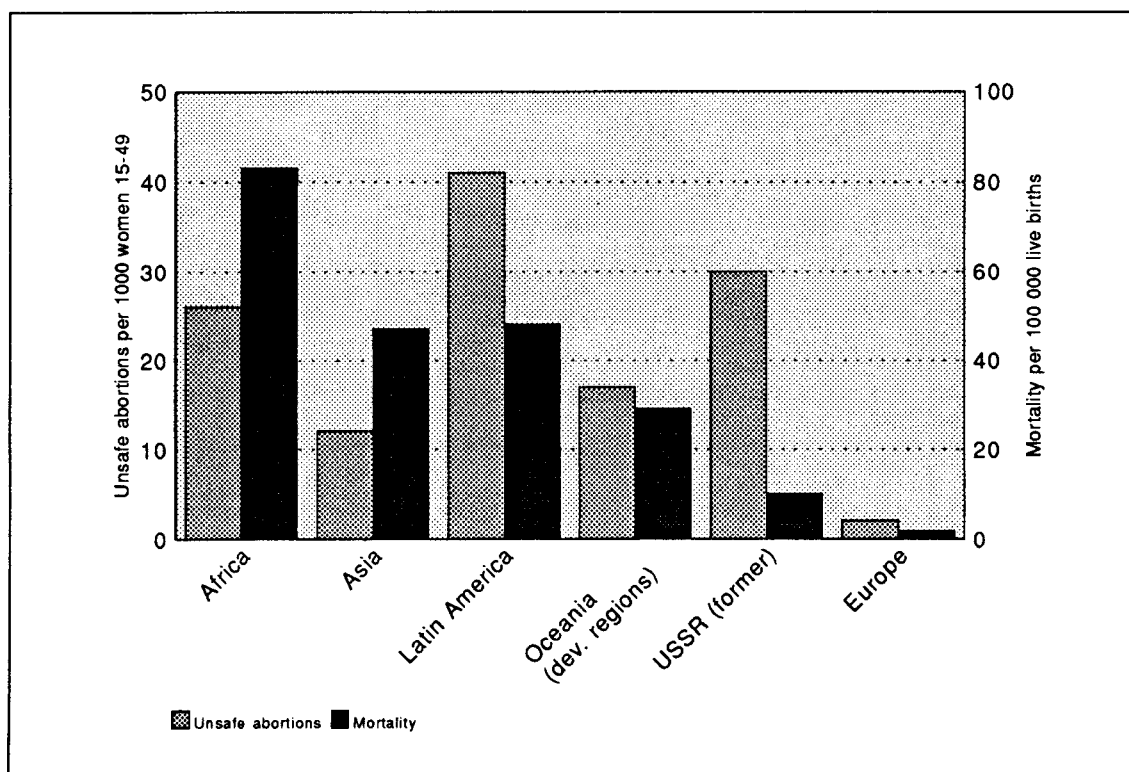
**Table 4. Global and Regional estimated risk of death from unsafe abortion**

Region	Number of unsafe abortions (1000s)**	Number of deaths from unsafe abortion**	Case fatality per 100 unsafe abortions	Risk of death
WORLD TOTAL	20000	70000	0.4	1 in 300
MORE DEVELOPED COUNTRIES*	2340	600	0.03	1 in 3700
LESS DEVELOPED COUNTRIES	17620	69000	0.4	1 in 250
AFRICA	3740	23000	0.6	1 in 150
ASIA *	9240	40000	0.4	1 in 250
EUROPE	260	100	0.04	1 in 2600
LATIN AMERICA	4620	6000	0.1	1 in 800
OCEANIA*	20	<100	0.2	1 in 400
USSR (former)	2080	500	0.03	1 in 3900

*Figures may not add to totals due to rounding.*

\* Japan, Australia and New Zealand have been excluded from the regional estimates, but are included in the total for developed countries.

\*\* Based on 1990 UN projections of births

**Fig. 4 Incidence of and mortality from unsafe abortion**

Among developing regions, Asia has the lowest abortion rate at 12 per 1000 women of reproductive age but the largest absolute number of unsafe abortions because it has the largest population of women of reproductive age. Nearly half of the world's unsafe abortions take place in Asia, almost one third occur in Southern Asia alone which also has the largest absolute number of abortion-related maternal deaths, some 33 000 deaths annually.

In Africa there are almost four million unsafe abortions each year - nearly 30 unsafe abortions per 1000 women of reproductive age. One third of the total deaths from unsafe abortion occur in Africa and the abortion mortality ratio is over 80 per 100 000 live births. The highest ratios occur in Eastern and Western Africa at 101 and 104 per 100 000 live births respectively. Abortion-related deaths account for 12-13% of all maternal deaths in Africa and Asia, a relatively low percentage because of overall high maternal mortality.

Although induced abortion is legal in the countries of the former USSR problems of confidentiality and quality of care result in a high unsafe abortion rate at 30 per 1000 women of reproductive age, the world's second highest, after Latin America. Abortion related deaths account for almost 25% of maternal deaths.

Over 20 000 unsafe abortions are estimated to take place in the developing region of Oceania, 17 per 1000 women of reproductive age.

### **5.3 Trends in the incidence of and mortality from unsafe abortion**

There have been several attempts to estimate abortion-related maternal mortality. A calculation by R. RoCHAT in the late 1970s, based on data from the International Planned Parenthood Federation in 65 Asian, African, Middle Eastern, and Latin American countries, concluded that some 84 000 maternal deaths resulted from abortion.<sup>35</sup>

The first WHO estimate of abortion-related maternal mortality were made in 1988 and were derived from fragmentary information on incidence and a studies of the proportion of maternal death due to abortion. It was then estimated that there were between 115 000 and 200 000 abortion-related deaths annually.<sup>3</sup> The evidence today points to the lower end of the range as the most likely figure. The often quoted upper end of the range is probably rather high, and reflects extrapolation to a national or global level of data derived from hospital-based studies in urban areas, where the problem of unsafe abortion appears to be most severe. Even at the time this figure was published reservations were expressed as to its accuracy.<sup>30</sup>

Morbidity and mortality due to abortion may have declined because of a number of factors, including: changes in abortion laws and increased access to safe medical abortions and menstrual regulation; increased fertility regulation through contraception; increased skills on the part of providers outside the health system who have taken advantage of modern procedures such as vacuum aspiration or modern drugs;<sup>36</sup> and an increase in the numbers of qualified physicians and other health personnel who are able to provide life-saving services in health centres and hospitals when complications arise.

Although the evidence remains incomplete and patchy, it is becoming increasingly apparent that the overall decline in mortality from unsafe abortion masks an increase among certain groups. For example, both incidence of unsafe abortion and resulting mortality may well be rising among unmarried adolescents in urban areas, particularly where abortion is illegal and fertility regulation services inadequate or inappropriate. A variety of demographic and socioeconomic developments - early menarche, rising age at marriage, loosening of traditional constraints, and the influence of the media in promoting alternative lifestyles - all contribute to



increasing the likelihood of sexual activity outside marriage. Where information about sexuality, safe sexual practices and contraception are unavailable or poorly targeted to the needs of the young there are likely to be many unwanted pregnancies, a proportion of which will be terminated by abortion, whether safe or unsafe. Because they lack the information and knowledge to make informed decisions and do not know where to go for assistance, young women may fall victim to unsafe abortion procedures even when abortion is permitted. Where abortion is strictly illegal they have no other option than to continue the pregnancy - with all the attendant social and educational consequences - or to seek an unsafe abortion.

The need for generally available information and services for abortion care is not confined to young people. In several countries, the legalization of abortion has not always been followed by the elimination of the incidence of unsafe abortion. Women may be unaware that safe abortion services are available, they may lack the resources, time or decision-making power to avail themselves of such services, or the services may be inadequate to meet demand. Other factors inhibiting recourse to safe abortion where it is legal are the attitudes of health care providers and the degree of privacy and confidentiality available.

## **6. THE TABULATIONS: MATERIALS AND METHODS**

### **6.1 Data collection**

The present update has focused on adding information published or issued since the publication of the first edition in 1990. Older, but only recently available publications or reports have been included to illustrate time trends. Reports were identified through a search of library databases (Medline, Healthplan, Popline and Lilacs), and by tracing references therein. Information from articles and reports in the WHO library, in Swiss libraries and other reference centres were included. In addition, data from WHO-supported country studies, studies supported by other UN agencies and NGOs, and unpublished papers have been incorporated into this update.

All available articles and reports relevant to the issue of unsafe abortion have been examined, and data on frequency and mortality systematically extracted. Every effort has been made to ensure uniformity and consistency in reporting. Responsibility for the accuracy of the data, however, rests with the authors of these reports.

In establishing the format of the tabulations, a compromise had to be reached between the usefulness of different indicators and the type of data available. Although not all of studies lent themselves easily to tabulation, as much information as possible was extracted. Much of the information available on this topic is qualitative rather than quantitative and the bibliographic database contains a large number of articles and reports which are descriptive in nature and do not provide information that could be included in the tabulations.

### **6.2 Calculations**

Frequently the registered rates were provided in the articles and/or reports. However, whenever the necessary data were provided, but rates or ratios were not, they were calculated.

### 6.3 Criteria for inclusion

Only data that relate specifically or presumably to non-legally induced abortions have been included in the tabulations. If the study also includes legal abortion data, this has been indicated in the 5th and/or 6th columns. The cut-off point for inclusion in these tabulations was 1960 although earlier data are stored in the database, as are data on women obtaining abortion outside their countries of residence. When data were available for many consecutive years in the same report, only selected years have been tabulated. In other instances, annual data have been grouped.

### 6.4 Comparisons

Some cautious comparisons and conclusions may be drawn from the data presented, but they are not suitable for statistical manipulation. In making comparisons, due consideration should be given to the information (or lack of information) provided in the sample description and any additional information in the notes.

### 6.5 Terminology

The terminology used by the authors of the various reports has been retained where possible. If a report refers to "abortions" this is the term used in the tabulations even if it is evident that the data refer to spontaneous and/or non-legally induced abortions. Similarly, the term "induced" has been maintained although the abortions under study were non-legal and/or most likely unsafe.

### 6.6 Notes

The note section contains additional information and explanations. It is also used to draw attention to data that help interpret the results or call for further study. It sometimes gives additional data that did not fit within the existing format, e.g. abortions per 1000 women. An "\*" in any of the columns indicates that there is a comment in the notes.

### 6.7 Description of the columns

The findings of the individual surveys or studies are summarized in the tabulations in Sections 9.3 to 9.9. Each line in the tabulations represent a single **data set**. Where a report or study dealt with two or more separate population groups or points in time, each is assigned a line, e.g. one line for the admitted or identified induced cases and another line for all abortion cases (spontaneous and induced). A **blank column** indicates that there were no relevant information or data, while an asterisk, \*, in any of the columns refers the reader to a specific comment in the notes. **Abbreviations** are listed in Section 7.

The tabulations are arranged in 17 columns. These are from left to right:

**Column 1 - Region, country or area.** Countries are arranged by geographic region as defined by the United Nations. Within countries, national and larger groupings are listed first, followed by places or areas presented alphabetically, all in chronological order. Unidentified locations have been marked "unknown" or, for example, "rural area" (if known).

**Column 2 - Year.** Indicates the year or period in which the data were collected. "P" indicates the year of publication when the year of study was not provided.

**Columns 3-6 - DATA CHARACTERISTICS:**

**Column 3 - Type of data.** Describes the nature of the data presented. The following abbreviations are used to describe the type of data:

CS	Community study of a group of women or events as specified in column 5. Usually data reflect the reproductive history of this group. However, at times the research has focused on one year (usually the one preceding the study) or on the reproductive history during a specified period. This has been mentioned in the note section.
HS	Hospital study. The group of women under study has been drawn from hospital admissions, usually for abortion, delivery or contraception.
H	Hospital statistics or data, i.e., events registered in the hospital during the indicated time.
PP	Private practice, similar to HS.
PS	Provider study. Data have been extracted from a study of abortion providers.
STA	Data obtained from a statistical source registering events during the period indicated.
VAR	Various or a number of sources have been used for the research, usually to compensate for poor vital statistics.
E	Estimate.
EA	Estimated annual figure.

**Column 4 - Number or sample size.** Indicates the number of individuals or events under study. In some instances, this refers to the total number of events or total estimated number of abortions.

**Column 5 - Study group.** Describes the group of individuals or events studied in the report. Definition of some terms used in these columns:

abo.adm.	admissions for complications from abortion (including spontaneous induced, illegal, septic, complete, incomplete and inevitable)
abos	abortions, excluding legal abortions
maternal deaths	maternal deaths, i.e., death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

**Column 6 - Type of abortion.** Describes the type(s) of abortion being referred to:

ABO	abortion, unspecified but presumed to be non-legal
ILL	illegal, criminal or "back street" abortion
IND	induced abortion, presumed to be non-legal
PIND	induced and probably induced abortion (non-legal)
PPIND	induced, and possibly and probably induced abortion (non-legal)
SP	spontaneous abortion
SE	septic abortion
HAE	abortion haemorrhage
ABO(L)	abortion, unspecified but including legal

**Columns 7-12 - FREQUENCY:**

**Column 7 - Abortions as a percentage of all admissions for abortion.** Frequency of the abortion (as specified in column 6) as a percentage of all admissions to an institution for complications from abortion.

**Column 8 - Abortions as a percentage of gynaecological and obstetric admissions.** Frequency of the abortion (as specified in column 6) as a percentage of all gynaecological and obstetric admissions. Letter "H" or "G" or an "\*" may follow the percent figure indicating that it represents a percentage of:

- H hospital admissions
- G gynaecological admissions only
- \* see note column, usually indicating obstetric admissions only

**Column 9 - Abortions as a percentage of live births.** Frequency of abortion (as specified in column 6) as a percentage of live births.

D deliveries, when data on the number of deliveries were available and not those on live births.

**Column 10 - Abortions as a percentage of pregnancies.** Frequency of abortion (as specified in column 6) as a percentage of pregnancies or conceptions.

**Column 11 - Percentage of women ever aborting.** Number of women who ever had an abortion (as specified in column 6) as a percentage of all women under study.

A per annum; data refer to the number of women who had an abortion (as specified in column 6) during one year.

**Column 12 - Average number of abortions per women aborting.** Indicates the average number of abortions (as specified in column 6), that the women under study have had (they may also have had other kinds of abortion in addition).

**Columns 13-16 - MORTALITY:**

**Column 13 - Case fatality.** Deaths from abortion (as specified in column 6) as a percentage of all abortion cases (as specified in column 6) under study.

**Column 14 - Abortion deaths per 100 000 live births.** Deaths from abortion (as specified in column 6) per 100 000 live births.

D deliveries, when data on the number of deliveries were available and not those on live births.

**Column 15 - Abortion deaths per 100 000 women of reproductive age.** Number of deaths from abortion (as specified in column 6) per 100 000 women of reproductive age.

**Column 16 - Abortion deaths as a percentage of all maternal deaths.** Deaths from abortion (as specified in column 6) as a percentage of all maternal deaths.

**Column 17 - Notes.** The notes column contains additional information or explanations. An "\*" links the information to a specific column.

**7. ALPHABETICAL LIST OF ABBREVIATIONS USED**

1+	one plus, one or more
10-49	the figures indicate the age range in years
A	per annum, one-year
AA	annual average
abo.adm.	abortion admissions
abo.adm/nat.stat	abortion admissions combined with national statistical data
abo.adm/W 15-49	abortion admissions combined with number of W 15-49 in area of hospital(s)
ABO	abortion, unspecified but non-legal
ABO(L)	abortion, unspecified (also including legal)
abo. deaths	abortion deaths
abos	abortions
adm.	admissions
CS	community study
D	deliveries
del.	delivery
E	estimate
EA	estimated annual
ex.	excluding
FPL	family planning
G	gynaecological admissions
gyn.	gynaecological
H	hospital data
HAE	abortion haemorrhage
HS	hospital study
ILL	illegal abortion
incl.	including
IND	induced abortion, non-legal
IUD	Intra Uterine Device
L	legal abortion
M	married, cohabiting
M 1x	married 1 time only
MR	menstrual regulation
MTP	Medical Termination of Pregnancy
non-L	non-legal abortion
obs.	obstetric
P	year of publication
pat.s	patients
PIND	induced and probably induced abortions
PPIND	induced, possibly and probably induced abortions
PP	private practice
priv.	private
prosp.study	prospective study
PS	provider study
repr. age	reproductive age
retrosp.study	retrospective study
RRT	Random Response Technique
RS	random sample
SE	septic abortion
SP	spontaneous abortion
STA	statistical source
TFR	Total Fertility Rate
VAR	various sources
W	women
WM	women, married

## 8. REFERENCES

1. Henshaw, SK and Morrow, E. *Induced abortion. A world review.* 1990 supplement. New York, The Alan Guttmacher Institute.
2. Jacobson, JL. The global politics of abortion. *Worldwatch Paper 97*, 1990.
3. Royston, E and Armstrong S. *Preventing maternal deaths.* Geneva, World Health Organization, 1989.
4. *Report of the International Conference on Population, 1984. Mexico City, 6-14 August 1984.* New York, United Nations, 1984.
5. The Tbilisi Declaration, "From abortion to contraception", 10-13 October 1990. Regional Office for Europe of the World Health Organization.
6. Westoff, CF. *Demographic and Health Surveys. Reproductive preferences: a comparative view. Comparative studies 3.* Columbia, MD, Institute for Resource Development/Macro Systems, Inc., 1991.
7. Westoff, CF and Ochoa, LH. *Demographic and Health Surveys. Unmet need and the demand for family planning. Comparative studies 5.* Columbia MD, Institute for Resource Development/Macro International, Inc., 1991.
8. *The prevention and management of unsafe abortion. Report of a Technical Working Group*, Geneva, 12-15 April 1992.
9. Adewole, IF. Trends in postabortal mortality and morbidity in Ibadan, Nigeria. *International journal of gynecology and obstetrics*, 1992, 38(1):115-118.
10. Konje, JC et al. Health and economic consequences of septic induced abortion. *International journal of gynecology and obstetrics*, 1992, 37(3):193-197.
11. Richards, A et al. The incidence of major abdominal surgery after septic abortion - an indicator of complications due to illegal abortion. *South African medical journal*, 1985, 68:799-800.
12. Moller, BR et al. Pelvic infection after elective abortion associated with Chlamydia trachomatis. *Obstetrics and gynecology*, 1982, 59(2):210-213.
13. Giertz, G et al. A prospective study of Chlamydia trachomatis infection following legal abortion. *Acta obstetrica et gynaecologica*, 1987, 66:107-109.
14. Westergaard, L et al. Significance of cervical Chlamydia trachomatis infection in postabortal pelvic inflammatory diseases. *Obstetrics & gynecology*, 1982, 60(3):322-325.
15. Osser, S and Persson, K. Postabortal pelvic infection associated with Chlamydia trachomatis and the influence of humoral immunity. *American journal of obstetrics and gynecology*, 1984, 150(6):699-703.
16. Robertson, JN and Ward, ME. Gonococcal and chlamydial infection in infertility and ectopic pregnancy. *Contemporary review in obstetrics and gynaecology*, 1988, 1(9):60-66.
17. Weström, L. Incidence, prevalence and trends of acute pelvic inflammatory disease and its consequences in industrialised countries. *American journal of obstetrics and gynecology*, 1980, 138:880-892.
18. Gold, RB. *Abortion and women's health. A turning point for America?* New York and Washington, DC, The Alan Guttmacher Institute, 1990.

19. Tshibangu K et al. Avortement clandestin, problème de santé publique a Kinshasa (Zaire). *Journal de gynecologie, obstetrique et biologie de la reproduction*, 1984, 13(7):759-763.
20. Figa-Talamanca, I et al. Illegal abortion: an attempt to assess its costs to the health services and its incidence in the community. *International journal of health services*, 1986, 16(3):375-389.
21. Fortney, JA. The use of hospital resources to treat incomplete abortions: examples from Latin America. *Public health reports*, 1981, 96(6):574-579.
22. Genasci, L. Brazil to launch national programme. *People*, 1986, 13(3):25.
23. Wilcox, AJ and Horney, LF. Accuracy of spontaneous abortion recall. *American journal of epidemiology*, 1984, 120(5):727-733.
24. Jones, EF and Forrest, JD. Under-reporting of abortion in surveys of U.S. women: 1976 to 1988. *Demography*, 1992, 29(1):113-126.
25. Van der Tak, J. *Abortion, fertility and changing legislation: an international review*. Lexington, Lexington Books, 1974.
26. Canto de Cetina, TE et al. Aborto incompleto: características de las pacientes tratadas en el Hospital O'Horan de Merida, Yucatan. *Salud pública de México*, 1985, 27(6):507-513.
27. Armijo, R and Monreal, T. Epidemiology of provoked abortion in Santiago, Chile. In: Muramatsu, M and Harper, PA, eds, *Population dynamics: international action and training programmes*, Baltimore, 1965, Johns Hopkins Press.
28. Morris, L et al. Contraceptive use and demographic trends in El Salvador. *Studies in family planning*, 1979, 10(2):43-52.
29. Abernathy, J, Greenberg, B & Horvitz, D. Estimates of induced abortion in urban North Carolina. *Demography*, 1970, 7(1):19-29.
30. Royston, E. Estimating the number of abortion deaths. In: Coeytaux, F. et al.(eds) *Methodological Issues in Abortion Research. Proceedings of a seminar presented under the Population Council's Robert H. Ebert Program on Critical Issues in Reproductive Health, in collaboration with International Projects Assistance Services and the World Health Organization*. New York, 1989.
31. Graham, W et al. Estimating maternal mortality: the sisterhood method. *Studies in family planning*, 1989, 20(3):125-135.
32. Chiphangwi, JD et al. Maternal Mortality in the Thyolo district of Southern Malawi. *East African medical journal*, 1992, 69(12):675-679.
33. Singh, S and Wulf, D. Estimated levels of induced abortion in six Latin American countries. *International family planning perspectives*, 1994, 20(1):4-13.
34. *Maternal mortality ratios and rates. A tabulation of available information*. Third edition (WHO/MCH/MSM/91.6). Geneva, World Health Organization, 1991.
35. Liskin, LS. Complications of abortion in developing countries. *Population reports*, Series F(7). 1980.
36. Barbosa, R and Arilha, M. The Brazilian experience with Cyotec. *Studies in family planning*, 1993, 24(4):236-240.

**9. TABULATIONS OF AVAILABLE INFORMATION**



**9.1 Countries with more than 300 000 inhabitants, or with data in the database,  
by geographical regions****AFRICA****EASTERN AFRICA**

Burundi  
Comoros  
Djibouti  
Ethiopia  
Kenya  
Madagascar  
Malawi  
Mauritius  
Mozambique  
Rwanda  
Seychelles  
Somalia  
Uganda  
United Rep. of Tanzania  
Zambia  
Zimbabwe

**MIDDLE AFRICA**

Angola  
Cameroon  
Central African Republic  
Chad  
Congo  
Equatorial Guinea  
Gabon  
Sao Tome and Principe  
Zaire

**NORTHERN AFRICA**

Algeria  
Egypt  
Libyan Arab Jamahiriya  
Morocco  
Sudan  
Tunisia

**SOUTHERN AFRICA**

Botswana  
Lesotho  
Namibia  
South Africa  
Swaziland

**WESTERN AFRICA**

Benin  
Burkina Faso  
Cape Verde  
Cote d'Ivoire  
Gambia  
Ghana  
Guinea  
Guinea-Bissau  
Liberia  
Mali  
Mauritania  
Niger  
Nigeria  
Senegal  
Sierra Leone  
Togo

**LATIN AMERICA****CARIBBEAN**

Barbados  
Cuba  
Dominican Republic  
Guadeloupe  
Haiti  
Jamaica  
Martinique  
Puerto Rico  
Trinidad & Tobago

**CENTRAL AMERICA**

Costa Rica  
El Salvador  
Guatemala  
Honduras  
Mexico  
Nicaragua  
Panama

**SOUTH AMERICA**

Argentina  
Bolivia  
Brazil  
Chile  
Colombia  
Ecuador  
Guyana  
Paraguay  
Peru  
Suriname  
Uruguay  
Venezuela

**NORTHERN AMERICA**

Canada  
United States of America

**ASIA****EASTERN ASIA**

China  
Dem. Peo. Rep. of Korea  
Hong Kong  
Japan  
Mongolia  
Republic of Korea

**SOUTH-EASTERN ASIA**

Cambodia  
Indonesia  
Lao People's Dem. Rep.  
Malaysia  
Myanmar  
Philippines  
Singapore  
Thailand  
Viet Nam

**SOUTHERN ASIA**

Afghanistan  
Bangladesh  
Bhutan  
India  
Iran (Islamic Republic of)  
Nepal  
Pakistan  
Sri Lanka

**WESTERN ASIA**

Bahrain  
Cyprus  
Iraq  
Israel  
Jordan  
Kuwait  
Lebanon  
Oman  
Qatar  
Saudi Arabia  
Syrian Arab Republic  
Turkey  
United Arab Emirates  
Yemen

**EUROPE****EASTERN EUROPE**

Bulgaria  
Czech Republic  
Czechoslovakia  
Hungary  
Poland  
Romania  
Slovak Republic

**NORTHERN EUROPE**

Denmark  
Estonia  
Finland  
Iceland  
Ireland  
Latvia  
Lithuania  
Norway  
Sweden  
United Kingdom

**SOUTHERN EUROPE**

Albania  
Bosnia & Herzegovina  
Croatia  
Greece  
Italy  
Portugal  
Slovenia  
Spain  
Yugoslavia (former)

**WESTERN EUROPE**

Austria  
Belgium  
France  
Germany  
Netherlands  
Switzerland

**OCEANIA**

Australia  
Fiji  
New Zealand  
Papua New Guinea

**FORMER USSR**

Armenia  
Azerbaijan  
Belarus  
Georgia  
Kazakhstan  
Kyrgyzstan  
Moldovia, Rep. of  
Russian Federation  
Tajikistan  
Turkmenistan  
Ukraine  
USSR (former)  
Uzbekistan

## 9.2 List of countries, alphabetically

Afghanistan	68	Guinea-Bissau	33	Romania	78
Albania	78	Guyana	51	Russian Federation	86
Algeria	29	Haiti	42	Rwanda	28
Angola	35	Honduras	39	Sao Tome and Principe	36
Argentina	43	Hong Kong	64	Saudi Arabia	67
Armenia	86	Hungary	77	Senegal	34
Australia	84	Iceland	76	Seychelles	28
Austria	80	India	70	Sierra Leone	35
Azerbaijan	86	Indonesia	60	Singapore	62
Bahrain	65	Iran, Islamic Republic of	73	Slovak Republic	78
Bangladesh	68	Iraq	66	Slovenia	79
Barbados	41	Ireland	76	Somalia	28
Belarus	86	Israel	66	South Africa	36
Belgium	80	Italy	79	Spain	79
Benin	32	Jamaica	42	Sri Lanka	73
Bhutan	70	Japan	64	Sudan	31
Bolivia	44	Jordan	66	Suriname	53
Bosnia & Herzegovina	78	Kazakhstan	86	Swaziland	36
Botswana	36	Kenya	26	Sweden	76
Brazil	44	Korea Dem. Peo. Rep. of	64	Switzerland	80
Bulgaria	77	Korea Rep. of	64	Syrian Arab Republic	67
Burkina Faso	32	Kuwait	66	Tajikistan	86
Burundi	26	Kyrgyzstan	86	Thailand	62
Cambodia	60	Lao People's Dem. Rep.	60	Togo	35
Cameroon	35	Latvia	76	Trinidad & Tobago	43
Canada	56	Lebanon	66	Tunisia	31
Cape Verde	32	Lesotho	36	Turkey	67
Central African Republic	35	Liberia	33	Turkmenistan	86
Chad	35	Libyan Arab Jamahiriya	31	Uganda	28
Chile	46	Lithuania	76	Ukraine	86
China	63	Madagascar	27	United States of America	56
Colombia	49	Malawi	27	United Arab Emirates	68
Comoros	26	Malaysia	60	United Rep. of Tanzania	28
Congo	35	Mali	33	United Kingdom	76
Costa Rica	38	Martinique	43	Uruguay	53
Cote d'Ivoire	32	Mauritania	33	USSR (former)	86
Croatia	78	Mauritius	27	Uzbekistan	87
Cuba	41	Mexico	40	Venezuela	53
Cyprus	66	Moldovia, Rep. of	86	Viet Nam	63
Czech Republic	77	Mongolia	64	Yemen	68
Czechoslovakia (former)	77	Morocco	31	Yugoslavia (former)	80
Denmark	76	Mozambique	28	Zaire	36
Djibouti	26	Myanmar	61	Zambia	29
Dominican Republic	42	Namibia	36	Zimbabwe	29
Ecuador	51	Nepal	73		
Egypt	30	Netherlands	80		
El Salvador	38	New Zealand	84		
Equatorial Guinea	35	Nicaragua	41		
Estonia	76	Niger	33		
Ethiopia	26	Nigeria	33		
Fiji	84	Norway	76		
Finland	76	Oman	66		
France	80	Pakistan	73		
Gabon	35	Panama	41		
Gambia	32	Papua New Guinea	84		
Georgia	86	Paraguay	51		
Germany	80	Peru	52		
Ghana	32	Philippines	62		
Greece	79	Poland	78		
Guadeloupe	42	Portugal	79		
Guatemala	39	Puerto Rico	43		
Guinea	33	Qatar	67		

### 9.3 Africa

# UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Live Births	Women RepAge
						Abor tion	GYN OBS										
<b>EASTERN AFRICA</b>																	
<b>BURUNDI</b>																	
<b>COMOROS</b>																	
<b>DJIBOUTI</b>																	
<b>ETHIOPIA</b>																	
National	1989	E			IND				20-33					40-70 IND/1000W	5160		
National	1986			ind.abos	SE							14	54		4620		
National	1979	H		maternal deaths									30	11 regional hospitals	4827		
Addis Ababa	1990	HS	89	abo.adm.	IND	48							4.7	5 major hospitals; Pilot study	5706		
Addis Ababa	1990	HS	89	abo.adm.	ABO								2.2	5 major hospitals; Pilot study	5706		
Addis Ababa	1989	CS		maternal deaths	ABO										5862		
Addis Ababa	1980-85	H	216	maternal deaths	ABO							214	22.2		5493		
Addis Ababa	1984	H		maternal deaths	ILL							241	25		4827		
Addis Ababa	1981-83	CS	45	maternal deaths	ABO							164	29*	*incl. non-obstetric deaths	5282		
Addis Ababa	1981-83	H	100	maternal deaths	ABO							241	26	2 major referral hospitals	5284		
Addis Ababa	1981-83	CS	9315*	RS, W, pregnant	ABO			6.2	5.6			142	28.9	*9'954 pregn/two years	4748		
Addis Ababa	1981-83	CS	100	maternal deaths	ILL							231	25		4684		
Addis Ababa	1981-83	CS	9316*	RS, W, pregnant	IND							131	26.7	*9'957 pregnancies; 12/13 abo.deaths from ind.abos	4839		
Addis Ababa	1981-83	H	197	maternal deaths	ABO							114	23.9	All 5 hospitals and 3 clinics	5284		
Addis Ababa	1967-68	H	205	abos	ABO		30.7G								5041		
Gondar region	1988	H	789	Parturients	ABO					2.6					5893		
Gondar region	1982	CS	725	RS, W repr. age	ABO			11.8	10.6					Lifetime reproductive history	5747		
Gondar	1989	H		abo.adm.	ILL	50*								*about; Gondar Teaching H.	5160		
Nekempte, Wollega province	1973	CS	1570	WM, repr. age	IND					34.5				RRT; rural area; 0.1% IND by direct questioning	5868		
Unknown	1989	H	1678	abo.adm.	PIND	50		11.4						Tikur Anbessa & St.Paul's H.s	5160		
Unknown	1989	H	1678	abo.adm.	ABO			22.7						Tikur Anbessa & St.Paul's H.s	5160		
Yirgalem	1991	H	185	abo.adm.	IND	34.6	14.4G						3.1	Sidamo Regional Hospital	5800		
Yirgalem	1991	H	185	abo.adm.	IND,SP		41.8G						1.6	Sidamo Regional Hospital	5800		
<b>KENYA</b>																	
National	1979	STA		pregnancies	ABO,SE				6						5295		
Central province	1988-89	H	174	abo.adm.	ABO			9.6D						Nyahururu District Hospital	5612		
Coast Province	1988-89	HS	108	abo.adm.	ABO		74.5G	14.8D						Malindi District Hospital	5612		
Eastern province	1988-89	H	117	abo.adm.	ABO		36.9G	11.0D						Kitui District Hospital and Chogoria PCEA	5612		
Kisii district	1985	H	400	abo.adm.	ABO			19 D						Ombo hospital	5863		
Machakos district	1977	CS	357	pregnancies	ABO				1.4					Akamba people	5680		
Nairobi	1990	E		abo.adm.	ILL		60*							*acute gynaecological ward	5739		
Nairobi	1978-87	H	156	maternal deaths	ABO							77	24.4	Kenyatta National Hospital	5757		
Nairobi	1986-87	H	37	maternal deaths	SE								67.6	Kenyatta National Hospital	5702		

## UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Abor tion	GYN OBS	Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
Nairobi	1974-83	H	37021	abo. adm.	ABO											4730	
Nairobi	1981	H	1832	abo. adm.	ABO		59.4									4562	
Nairobi	1981	HS	610	RS, 1/3 abo. adm.	PIND	62.3										4562	
Nairobi	1981	HS	610	RS, 1/3 abo. adm.	IND**	35.6				1.4*						4562	
Nairobi	1978	H	1424	abo. adm.	SE	15.7										4561	
Nairobi	1972-77	H	99	maternal deaths	SE								22.2			4644	
Nairobi	1976	H	3700	abos	ABO						0.3					5220	
Nairobi	1976	H	290	10% RS abo. adm.	ILL	7.6										5220	
Nairobi	1975	H	3048	abo. adm.	SE	20.0					1.5					5586	
Nairobi	1974	H	2070	abo. adm.	SE	19.6					1.5					5586	
Nairobi	1971	H	1838	abo. adm.	SE	16.6					1.3					5586	
Nyanza Province	1988-89	H	143	abo. adm.	ABO		13.4D	5.0D								5612	
Rift Valley Province	1988-89	H	63	abo. adm.	ABO		42.3G	22.3D								5612	
Thika subdistrict	1981-88	H	164	maternal deaths	HAE, SE							23		12.2		5731	
Western Province	1988-89	H	179	abo. adm.	ABO		35.0G	11.5D								5612	
<b>MADAGASCAR</b>																	
<b>MALAWI</b>																	
12 hospitals	1989	H	214	maternal deaths	ABO							111		18.2		5880	
Blantyre	1989-90	H	151	maternal deaths	SE							88		16.6		5659	
Central region	1977	H	118	maternal deaths	ABO									3.4		5428	
Lilongwe	1990	H	600	abo. adm.	SE	32.7	14.7G				1.5					5713	
Lilongwe	1990	H	74	maternal deaths	ABO								21.6			5658	
Lilongwe	1990	H	600	abo. adm.	ABO		45 G				0.5					5713	
Thyolo district	1992	CS*	150	maternal deaths	ABO							74		18		5657	
<b>MAURITIUS</b>																	
National	1993	E	20'000	abos	IND											5887	
National	1991	CS	3508	WM, 15-44	ABO					14.7						5896	
National	1989	STA	4	maternal deaths									5	25		5639	
National	1985	H	3500*	ill. abo. adm.	ILL			15*			0.4					4733	
National	1981	H*	4037	ind. abos	IND						0.4					4631	
National	1977-81	STA		maternal deaths	ABO									50-60		4827	
National	1981	H	3097	ill. abo. adm.	ILL			13.1			0.3					5614	
National	1981	H	3097	abo. adm.	ABO			13.1			0.3					4678	
National	1977-81	H	14298	abo. adm.	ABO			11.8			0.5					4678	
National	1977	H	2841	ill. abo. adm.	ILL			12.5			0.8					5614	
National	1973-77	STA		abo. deaths	SP, ILL								7			5203	
National	1977	H*	3878	ind. abos	IND						1.0					4631	
National	1976	H	2515	abo. adm.	ABO			11.3								4678	
National	1976	H	2515	abos	IND	90*										5220	
National	1973	H	2013	abos	IND	90*										5220	
National	1973	H*	2454	ind. abos	IND						1.2					4631	
National	1972	H	751	abo. adm.	ABO						1.5					4665	
National	1968-72	STA		abo. deaths	SP, ILL								6			5203	

## UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	per 100,000		% of All Matern. Deaths				
						Admissions		Live Births	Pregnancies		% of Women Ever/A Abort.	Case Fatality (%)				Live Births	Women RepAge
						Abor tion	GYN OBS										
National	1971	H	1738	abo.adm.	ABO			8.3							4678		
National	1970	s		maternal deaths	ILL								50*	*over	4733		
National	1966	H	2132	abo.adm.	ABO			8.0							4678		
National	1961	H	1117	abo.adm.	ABO			4.3							4678		
Hospital	1970-72	H	2372	abo.adm.	IND,SP					0.8				Civil Hospital	4641		
Hospital	1970-72	H	2289	abo.adm.	IND,SP					1.3				Victoria Hospital	4641		
Rural	1970-72	H	1516	abo.adm.	IND,SP					1.3				7 rural hospitals	4641		
<b>MOZAMBIQUE</b>																	
Maputo	1990	H	27	maternal deaths	ABO									22.2	Maputo Central Hospital	5622	
Maputo	1984	H	1550	abo.adm.	ABO			25.0D		0.1	32 D		8	H. Central do Maputo	5817		
<b>RWANDA</b>																	
<b>SEYCHELLES</b>																	
<b>SOMALIA</b>																	
<b>U. REP. TANZANIA</b>																	
National	1983-84	H	294*	maternal deaths	SE,HAE							45		16.5	*72% of all matern.deaths; allhealth institutions around 4	4683	
Dar es-Salaam	1990-91	H	965	abo.adm.	IND	47.2										5806	
Dar es-Salaam	1983-84	H	85	maternal deaths	SE,HAE							88		12.9	Muhimbili Medical Centre	4689	
Dar es-Salaam	1979-80	H		maternal deaths	SE,HAE									24.9	Muhimbili Medical Centre	4689	
Dar es-Salaam	1974-77	H	224	maternal deaths	ABO			11.0D		0.3	34.D			16.1		4652	
Dar es-Salaam	1974-77	H		maternal deaths	SE,HAE									12.9	Muhimbili Medical Centre	4689	
Kilimanjaro	1971-77	H	2168	abo.adm.	ABO			8.9D		0.3	25D			7.5	K. Christian Medical Centre	4568	
Kilimanjaro	1971-77	H	2168	abo.adm.	SE						16D			5.0	K. Christian Medical Centre	4568	
Lugarawa+Moozi	1976-83	H	40	maternal deaths	ABO						54			10		5822	
Mgeta subdiv., Morogoro distr	1990	CS	310	197 females+ 113 males	ABO				16.5						Rural	5777	
Moshi	1974-77	H	1456	abo.adm.	ABO			7.4 D			0			0	CMC hospital; yearly data	5814	
Muhimbili	1979	H		abo.adm.	ABO		57.8									4651	
Muhimbili	1974	H		abo.adm.	ABO		20.3									4651	
Mwanza	1981-82	HS		del.adm.	SP				15							4686	
Mwanza	1974-77	H	140	abo.adm.	ABO			1.5 D		1.4	21			5.6	Bugando H.; yearly data	5814	
Rural area	1992	CS			ABO				16							5873	
Southern Highlands	1983	VAR	115	maternal deaths	IND*									8.7	*known cases	4682	
Southern Highlands	1983	VAR	115	maternal deaths	SE									17.4		4682	
<b>UGANDA</b>																	
National	1966-67	H	420	maternal deaths	ABO							14*		3.6	Hospital/maternity centres; *E 106/560 hospital births	4600	
Kampala	1980-86	H	32728	abo.adm.	ABO			18.7D		0.4	67 D			20.2	5 hospitals	5728	
Kampala	1986	H	5522	abo.adm.	ABO			25.7		0.4	93			19.2	5 hospitals	5865	
Kampala	1980	H	4680	abo.adm.	ABO			20.7		0.3	53			20.0	5 hospitals	5865	
Kampala	1976	H	300	10% RS abo.adm.	ILL	8.0									Mulago Hospital	5220	

## UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				% of Women Ever/A Abort.	Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths
						Admissions		Live Births	Preg- nanc ies				Live Births	Women RepAge			
						Abort ion	GYN OBS										
Kampala	1973-74	HS	1377	abo.adm weekday	ABO			57E*	32E		1.3	0.2				"E high, denominator "living children"	4933
Kampala	1973-74	HS	1377	abo.adm weekday	IND	11.9											4933
Kampala	1972	H	1884	abo.adm.	ABO			9.2	0.3				24 D		16.1	Mulago hospital	5865
Kampala	1970-72	H	5126	abo.adm.	IND,SP							0.2				Mulago Hospital	4641
Kampala	1969	H	2120	abos	ABO			14.5D				0.4	62D				4933
Kampala	1968-69	H	69	maternal deaths	ABO										11.6		4568
Kampala	1968	H	1830	abos	ABO			13.7D				0.1	15D				4933
Kampala	1967	H	1518	abos	ABO			13.1D				0					4933
Kampala	1962-65	H	4200	abos	ABO			13.4									5041
Urban and rural areas	1988-89	CS	1444	W, 15-24 ever pregnant	ABO					15						10% in rural areas and 23% in Kampala	5786
<b>ZAMBIA</b>																	
6 hospitals	1983-88	H	145	maternal deaths	IND,SP								4		3.4	Lusaka+Livingstone+Chome+Kaoma+Senanga+Lewanika	5838
Lusaka	1982-83	H	60	maternal deaths	IND								20		16.7		4825
Lusaka	1977-80	H	12096	abo.adm.	SE	2.8						4.5					5215
Lusaka	1977-80	H	12449	abo.adm., ex. L	ABO		55.7G									+6.7% therapeutic abos	4784
Lusaka	1977-80	H	12449	abo.adm., ex. L	ILL	2.5	1.5G					4.5					4784
Lusaka	1977-78	H		maternal deaths	ILL										18.3		4784
Lusaka	1974-76	H	80	maternal deaths	ILL										3.7		5437
Lusaka	1974-76	H	80	maternal deaths	ABO										7.5		5437
Lusaka	1976	H	300	10% RS abo.adm.	ILL	33.7										University Teaching Hospital	5220
Lusaka	1974-75	H	54	maternal deaths	ABO								6		3.7		5433
<b>ZIMBABWE</b>																	
Harare	1991	HS	307	RS, abo.adm.	SE	25.6										Harare Central Hospital	5745
Harare	1991	HS	307	RS, abo.adm.	SE	25.6										Harare Central Hospital	5745
Harare	1990	HS		maternal deaths	ABO										17	Harare Maternity Hospital	5745
Harare	1987	H	39	maternal deaths	ABO								22		17.9	Harare Hospital	5848
Harare	1985	H	99	abo.adm.	PIND	23.2											5485
Harare	1983	H	51	maternal deaths	SE								20		17.6		5582
Harare	1983	H	51	maternal deaths	IND										19.6		4740
Harare	1976	H	56	maternal deaths	SE								106		32.1		5522
Harare, greater	1989-90	VAR	66	maternal deaths	ABO								20		23.0		5664
Harare, greater	1976	H	56	maternal deaths	SE								106		32.1	Greater Harare Obstetric Unit	4585
Harare, greater	1976	H	56	maternal deaths	ILL								41		12.5	Greater Harare Obstetric Unit	4585
Masvingo	1990	CS		maternal deaths	ABO										10		5745
Masvingo province	1989-90	VAR	109	maternal deaths	ABO								25		15.2	Rural	5664
Salisbury	1972-73	H	56	maternal deaths	ABO			7.5D				0.7	56D		30.4	Black W only	4643
Salisbury	1972-73	H	56	maternal deaths	SE								36D		19.6	Black W only	4643
<b>NORTHERN AFRICA</b>																	
<b>ALGERIA</b>																	

# UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Abor tion	GYN OBS	Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
EGYPT	1986			ind.abos	IND								5*	*4.1-6.1%	4620		
National	1982	CS	12970	W, 16+, ever pregnant	IND				8.5						5304		
National	1982	CS	12970	W, 16+, ever pregnant	IND,SP				10.1	1.4					5304		
National	1979	CS		RS	ABO				41						4734		
National	1979	CS		RS	IND				10						4734		
National	1973-77	STA		abo. deaths	SP,ILL							0.7		Data for three years of period	5203		
National	1973	STA	71	abo. deaths	ABO*								6	*incl. 2 legal abo deaths	5354		
National	1973	STA	69	non-L abo.death	ABO								6.2		5244		
National	1973	STA	1158	maternal deaths	ABO								6.1		4616		
National	1968-72	STA		abo. deaths	SP,ILL							1.1		Data for three years of period	5203		
Alexandria	1978	CS	995	RS,W postpartum	ABO				16.5						5386		
Alexandria	1974-77	H		abo.adm.	IND	5.6									5244		
Alexandria	1974-77	HS	5171	RS, abo.adm.	ILL*	2.9								*admitted	4734		
Alexandria	1974-77	HS	5031*	RS, previous abortees	ILL									*Aprr. 19'800 pregnancies	4734		
Alexandria	1974-77	HS	5171*	RS, abo.adm.	ABO			28.9	22.1	8.1	1.3			*13'584 previous pregnancies (incl.5 therapeutic abos)	4734		
Alexandria	1974-77	HS	5171*	RS, abo.adm.	ILL			1.0	0.8					*13'584 previous pregnancies (incl.5 therapeutic abos)	4734		
Alexandria	1974-77	H		abo.adm.	ABO							0.1			5244		
Alexandria	1974-77	H		abo.adm.	ILL							3.3		18'732 pregn. outcomes (excl. ther.abo), incl. present abo o	5244		
Alexandria	1972	PP		pat.s, repr.age	IND				25.7						4734		
Alexandria	1972	PP		pat.s repr.age	ABO				38.5						4734		
Alexandria	1971	HS		pregnancies	ABO				28.4					Shatby H.; retrospective study	4734		
Alexandria	1962-71	H	29246	abo.adm.	ABO		25.8H	53.7D						Shatby Hospital	4734		
Alexandria	1965	H		abo.adm.	ILL,SP			58.8						Shatby Hospital	4734		
Alexandria	1965	H	2569	abo.adm.	ABO		36.7	57.9D						University Hospital	4635		
Cairo	1987	H	43	maternal deaths	ABO							78	11.6	Al Galaa Maternity Hospital	5853		
Cairo	1980-85	H	70	maternal deaths	ABO							28	5.7	Shobra General Hospital	5782		
Cairo	1980-84	H	3	abo. deaths	ABO								3.4		5244		
Cairo	1979-83	H	95	maternal deaths	ABO							11	2.1	Helwan General Hospital	5782		
Cairo	1979-83	H		abo.adm.	SE	3.9									5244		
Cairo	1976-81	H	107	maternal deaths	ABO							24	5.6	Ain Shams University Hospital	5782		
Cairo	1975-76	H	92	maternal deaths	ABO							95 D	9.8	Al-Gala Maternity Hospital andAl-Hussein University Hospital	5795		
Cairo	1973-74	H	388	abo.adm.	IND, SP								0.3	EI Galaa Hospital	5606		
Cairo	1974	H	388	abo.adm.	IND	37.6									5580		
Cairo	1973-74	H	388	abo.adm.	IND,SP								0.3	EI Galaa Hospital	4641		
Cairo	1972	H		gyn+obs adm.	IND		35.5							Cairo University Hospital	4734		
Cairo	1971	PP	2600	priv. gyn.pat.s	ABO				38.5						5556		
Cairo	1971	PP	2600	priv. gyn.pat.s	IND				21.2						5556		
Cairo	1969	HS	300*	RS, del.adm.	ABO			14.1	12.4					Retrosp.study; 560 ABO/1000W; *1356 previous pregnancies	4635		
Cairo	1969	HS	500*	RS, abo.adm.	IND			2.5	2.0					Retrosp.study; *2104 previous pregnancies; 84 IND/1000W	4635		
Cairo	1969	HS	500*	RS, abo.adm.	ABO			28.9	22.4					Retrosp.study; *2104 previous pregnancies; 944 ABO/1000W	4635		
Cairo	1969	HS	610*	RS, FPL pat.s	ABO			20.8	16.8					Retrosp.study; 1015 ABO/1000W *3695 pregnancies	4635		
Cairo	1969	HS	610*	RS, FPL pat.s	IND			6.9	5.5					Retrosp.study; 334 IND/1000W *3695 pregnancies	4635		
Cairo	1969	PP	500*	RS priv.pat.s, multiparous	ABO			25.6	20.4					Retrosp.study; 508 ABO/1000W; *1247 pregnancies	4635		
Cairo	1969	H	1620	abo.adm.	IND,SP							0.1		Kasr El Aini hospital	5606		



EGYPT cont.

## UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	per 100,000		% of All Matern. Deaths				
						Admissions		Live Births	Pregnancies		% of Women Ever/A Abort.	Case Fatality (%)				Live Births	Women RepAge
						Abortion	GYN OBS										
Cairo	1969	H	1620	abo.adm.	ABO		36.5*	57.6D				0.1			% of obs.adm; Kasr-El-Aini H.	4635	
Cairo	1969	H	1620	abo.adm.	SE	10.1	3.7					0.1				4635	
Cairo	1969	HS	300*	RS, del.adm.	IND			3.5	3.1						Retrosp.study; 140 IND/1000W *1356 previous pregnancies	4635	
Cairo	1969	PP	500*	RS priv.pat.s, multiparous	IND			8.1	6.4						Retrosp.study; 160 IND/1000W; *1247 pregnancies	4635	
Cairo	1967	H	1840	abo.adm.	ABO		33.2	49.6D							Ain Shams Hospital	4635	
Cairo, Mansoura, Banha	1964-73		1158	maternal deaths	ABO											6.1	5353
Dakahlia Governorate	1981-85	CS	98	maternal deaths	ABO							27				6.1	5782
Giza	1985-86	CS	156	maternal deaths	IND,SP											4.5	5835
Hospital	1972	H	800	abo+del. adm.	IND					35.5							4665
Menoufia	1981-83	CS	437	maternal deaths	SE,HAE											3.9	5349
Menoufia	1981-83	CS	437	maternal deaths	ABO							8			*incl. non-obstetric deaths	4*	5282
Menoufia	1981-83	CS	437	maternal deaths	SE,HAE							25				3.9	5818
Menoufia Governorate	1981-83	STA	385	maternal deaths	IND							3	0.7			1.6	5561
Menoufia Governorate	1981-83	STA	385	maternal deaths	ABO							10	3			5.5	5561
Shobra	1980-85	H	4	abo. deaths	ABO											5.7	5244
Tanta	1978-82	H	39	maternal deaths	ABO							24				7.7	5782
Tanta	1971-73	H		septic abos	SE	13.6											5244
Tanta	1973	H	913	abo.adm.	IND, SP											0.9	5606
Tanta	1971-73	H		abo.adm.	ABO											0.9	5354
Upper Egypt	1984-85	HS	73	maternal deaths	ABO							12				4.1	4616
Upper Egypt	1981-85		24	abo. deaths	ABO											5.2	5244
Upper Egypt, 3 govern.*	1981-83	HS	386	maternal deaths	ABO							106				5.4	5353
Upper Egypt, Assiut	1981-83	H	105	maternal deaths	ABO							194				12.3	5353
Upper Egypt, Assiut Governorate	1981-83	H	81	maternal deaths	ABO							146				13.5	5661
Upper Egypt, Kena	1981-83	H	83	maternal deaths	ABO							80				4.8	5353
Upper Egypt, Suhag	1981-83	H	198	maternal deaths	ABO							49				2.0	5353
Village, Al Beheira	1969-70	CS	132*	WM, pregnant	ABO			23.8	18.9	7.4A							5389
Village, Alexandria area	1970	CS		WM, 15-45	ABO				16.4								4734
<b>LIBYAN A. J.</b>																	
Banghazi	1982-85	H	246	pregnancies	ABO			19.7	15.4								5764
<b>MOROCCO</b>																	
National	1962	STA	20	abo. deaths	ABO							4					5130
Unknown	1984	CS	75	W, un-married	IND					23							5698
Unknown	1984	CS	125	WM	IND					39							5698
<b>SUDAN</b>																	
Gezira province	1987	CS	52	maternal deaths	ABO											3.9	5793
Khartoum	1984-85	H	110	maternal deaths	ABO											7.3	5297
Khartoum	1977	HS	2788	abo.adm.	SE	0.4											4867
Khartoum	1974	HS	1224	abo.adm.	SE	0.4											4830
<b>TUNISIA</b>																	
National	1969	H	12621	L+ill.abos	ILL	77.3											5220
National	1968	H	12590	L+ill.abos	ILL	82.2											5220
Monastir	1988-89	H	3859	parturients	ABO					39.2							5673



## UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Abor tion	GYN OBS	Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
<b>GUINEA</b>																	
Conakry	1989-90	CS	11	maternal deaths	ILL									54.5		5666	
Conakry	1989-90	H	123	maternal deaths	ILL									15.4	Hospitals	5666	
Conakry	1989-90	VAR	124	maternal deaths	ABO									20.2	Only Conakry residents	5636	
Donka, Conakry	1987	H	216	abo.adm.	ABO		3.0	4.6			5.1	234		12.4	University Hospital of Donka	5737	
<b>GUINEA-BISSAU</b>																	
National	1989-90	VAR	145	maternal deaths	ABO							51		5.6	RAMOS	5843	
<b>LIBERIA</b>																	
Monrovia	1984	CS	768	RS, W14-21,un-M	ABO				12.4							5422	
<b>MALI</b>																	
National	1981-82	H	1031	abo.adm.	ILL	10.9						1.8			14 hospitals nationwide	4609	
National	1981-82	H	1031	abo.adm.	PIND	24.9									14 hospitals nationwide	4609	
Bamako	1984	H		obs.adm.	IND		0.5*							4	*% of obs.adm.	4609	
Bamako	1979-81	HS		del.adm.	SP				9							4686	
<b>MAURITANIA</b>																	
<b>NIGER</b>																	
<b>NIGERIA</b>																	
National	1992	E	1000000	ill.abos	ILL			19.3						50		5878	
National	1991	E	50'000	maternal deaths	IND									40		5888	
Anambra state	1981-85	H	239	maternal deaths	SE							10		2.1	Ill.abo. deaths underreported 10 hospitals	5730	
Anua, Uyo	1991	H	50	maternal deaths										32.0	St. Luke's Hospital	5883	
Benin	1973-85	CS	165	maternal deaths	ABO							124		22		5282	
Benin	1973-85	H	3592	abo.adm.	IND							116		20.6		5255	
Benin	1973-85	H	3592	abo.adm.	ABO		26.6G	12.2D			1.0	126		22.4		5255	
Benin	1981-82	HS		del.adm.	IND				25							4686	
Benin	1981-82	HS		del.adm.	IND,SP				44							4686	
Benin	1973-81	H	1972	abo.adm.	IND	40.4						0.4				5475	
Benin	1974-79	H	1418	abo.adm.	ABO		28.4G	10.5D								4659	
Benin	1974-79	H	1418	abo.adm.	IND	40.5	11.5G	4.3D				1.1	119D	26.7		4659	
Benin	1974-75	H	140	abo.adm.	ABO		25.2G									4658	
Benin	1974-75	H	140	abo.adm.	ILL	42	10.6G			1.6	1.7				57% of abo.adm PILL	4658	
Benin City	1973-85	H	165	maternal deaths	ABO									22.4	Univ. of Benin Teaching H.	5611	
Benin City	1970-71	H	5000	RS, abo.adm.	SE,IND							57		12.1	General Hospital	4596	
Calabar	1985-88	H	1568	abo.adm.	ILL	9.4	3.8	1.2			9.1	132D		20.0	Univ. of Calabar Teaching H.	5727	
Calabar	1985-88	H	1568	abo.adm.	IND,SP		40.2	12.9			1.0	132D		20.0	Univ. of Calabar Teaching H.	5727	
Enugu	1982-86	H	438	abo.adm.	ILL	19.2		0.4 D			17.9	71			Univ. of Nigeria Teaching H.	5744	
Enugu	1982-86	H	438	abo.adm.	IND,SP			2.1 D			3.4	71 D			Univ. of Nigeria Teaching H.	5744	
Ibadan	1980-89	H	4448	abo.adm.	PILL	39					3.4			36.6	University College Hospital	5740	
Ibadan	1980-89	H	4448	abo.adm.	ABO						1.3			36.6	University College Hospital	5740	

## UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor tion	GYN OBS	Live Births			Preg- nancies	% of Women Ever/A Abort.				Live Births	Women RepAge
Ibadan	1981-87	H	1129	abo.adm.	ABO		76.7*							*%of emergency gyn. admissions	5649		
Ibadan	1981-87	H	1129	abo.adm.	SE	26.7								University College Hospital	5649		
Ibadan	1981-85	H	709	abo.adm.	SE	20.2					8.4			University College Hospital	5755		
Ibadan	1981-85	H	709	abo.adm.	ABO						1.4			University College Hospital	5755		
Ibadan	1982	CS	841	RS, W14-25,un-M	IND				21.6						5418		
Ibadan	1981-82	CS	841	W, 14-25, un-M	IND			41							5592		
Ibadan	1976-78	H	1724	abo.adm.	PPIND	20.4									4762		
Ibadan	1976-78	H	1724	abo.adm.	IND	9.9					4.6				4762		
Ibadan	1962-71	H	183	maternal deaths	ABO							54		6.6	4657		
Ibadan	1962-71	H	183	maternal deaths	ILL							27		3.3	4657		
Ibadan	1965-67	H	1822	abo.adm.	ABO		49.8G							Increasing from 43% to 57%	5041		
Ile-Ife	1988-89	HS	37	maternal deaths	ILL		12 G							35 Obafemi Awolowo University H. Prospective study	5691		
Ile-Ife	1977-88	H	232	maternal deaths	ILL							61		11.2 Obafemi Awolowo University H.	5692		
Ile-Ife	1977-88	H	1372	abo.adm.	IND,SP			3.2			2.1	68		12.5	5692		
Ilesa	1977-88	H	52	maternal deaths	ILL							85		32.7 Wesley Guild Hospital	5701		
Ilorin	1987-89	HS	1709	abo.adm.	IND	15.4	9.3 G	1.5						Univ. of Ilorin Teaching H.	5748		
Ilorin	1987-89	HS	1709	abo.adm.	ABO		60.3G	9.5						Univ. of Ilorin Teaching H.	5748		
Ilorin	1972-86	H	12736	abo.adm.	IND,SP			7.3			0.4	31	1		5359		
Ilorin	1972-86	H	53	ill.abo. deaths	ILL	6.1		0.4			6.8	31	1		5359		
Ilorin	1983-84	H	852	abo.adm.	IND	12					5.9				4755		
Kainji Lake area	1989	CS	4940	pregnancies*	ABO			9.1	8.3					*among 1179 W; 349 abo/1000W	5735		
Katsina, Kaduna state	1977	H	373	W, pregnant	ABO					48.8					5766		
Lagos	1991	CS	950	RS, secondary school girls	ILL				6.8						5693		
Lagos	1972	H	1990	abo.adm.	ABO		10.3D								4665		
Lagos	1966-72	H	14150	abo.adm.	IND,SP			11.2			0.4	50		6.1 Lagos Island Maternity H.	4565		
Lagos	1972	H	229	abo.adm.	ABO						1.3				4665		
Lagos	1966-72	H	1238	abo.adm.	IND,SP			12.3			1.5	178		51.4 Admission serious cases; University Teaching Hospital	4565		
Lagos	1970	H	120	maternal deaths	ABO								5.0		5572		
Lagos	1968-69	H	74	RS, abo.adm.	ILL	46								Lagos University Teaching H.	4565		
Lagos	1967	H	134	abo.adm.	SE	28.4	4 G								5041		
Lagos	1963-67	H		abo.adm.	ABO		17.5*				11			*15-20% of gyn.adm.; mostly ill.abos	4658		
Lagos	1962-67	H	11300	abos	ABO			10.3							5041		
Lagos	1967	H	134	abo.adm.	ABO		14 G	13.5							5041		
Lagos	1964-67	H	620	abo.adm.	ABO		16.9G								5041		
Port Harcourt	1983-86	H	103	maternal deaths	ABO							113		11.7 Port Harcourt Teaching H.	5675		
Shomolu, Lagos	1982	CS	369	RS,W repr.age, 1+children	ILL				5.6						4826		
Western Nigeria	1973	H	119	maternal deaths	ABO							16*		3.4 *Hosp. deaths but total births in W. Nigeria	5534		
Western Nigeria	1972	H	93	maternal deaths	ABO							8*		2.2 *Hosp. deaths but total births in W. Nigeria	5534		
Zaria	1985	H	108	W, abo.clinic	IND					2.0*				*incl. present abortion Private clinic	5711		
<b>SENEGAL</b>																	
National	1988-89	CS	290	W, pregnant	SP				32						5837		
National	1988	H	2154	abo.adm.	ABO			5.3			0.7	25		8.5 National Health Centres	5684		
Dakar	1988-89	HS	2000	abo.adm.	SP			15.3D						University Hospital	4561		
															5706		

SIERRA LEONE cont.

## UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor tion	GYN OBS										
<b>SIERRA LEONE</b>																	
Freetown	1970-72	H	671	abo.adm.	ABO			3.8				74 D		10	Connaught Hospital	5816	
Freetown	1970-72	H	670	abo.adm.	IND,SP						1.9			10.7	Maternity & Connaught Hosp.s	4641	
West	1972	H	244	abo.adm.	ABO						2.5					4665	
<b>TOGO</b>																	
National	1987	STA	2193	abo.adm.	IND,SP			3.0 D							Public health facilities	5685	
<b>MIDDLE AFRICA</b>																	
<b>ANGOLA</b>																	
Luanda	1987	H	204	maternal deaths	ABO							69		7.4	Maternidade Lucrecia Paim	5648	
<b>CAMEROON</b>																	
Yaounde	1985	H	442	RS, abo.adm.	IND	14.7										5566	
Yaounde	1985	H	604	emergencies/ month	ABO		39.8									5566	
Yaounde	1973-76	H		maternal deaths	ABO							54		27	Retrospective study	5638	
Yaounde	1976	H	100	10% RS abo.adm.	ILL	29.0									Central Hospital	5220	
Yaounde	1974	H	805	abo.adm.	IND	10.7		0.9 D	0.8							5129	
Yaounde	1974	H	805	abo.adm.	SP,IND			8.5 D	7.7							5129	
<b>CENTRAL AFRICAN REP.</b>																	
<b>CHAD</b>																	
N'Djamena	1988	CS	1222	W, 12-49	ILL					3						5734	
N'Djamena	1988	H	65	maternal deaths	SE							58		6.1	Central Maternity hospital	5867	
N'Djamena	1986	H	48	maternal deaths	ABO							52		6.3	Maternite de N'Djamena	5828	
<b>CONGO</b>																	
National	1975	STA	6365*	abos	IND							2.8			*1413 ind.abos	5230	
National	1975	STA	6365	abos	SP,IND							0.7				5230	
Brazzaville	1981-83	H	3022	sp+ill abo.adm	ILL	24.8	25G				1.6	4.4				4789	
Brazzaville	1977	H	774	abo.adm.	SP,IND			15.6D								5230	
Brazzaville	1977	H	774	abo.adm.	IND	44.5		7.0D								5230	
Pointe-Noire	1978	H	730	abo.adm.	SP,IND			7.9D								5230	
Pointe-Noire	1978	H	730	abo.adm.	IND	55.1		4.4D								5230	
<b>EQUATORIAL GUINEA</b>																	
<b>GABON</b>																	
Libreville	1984-87	H	48	maternal deaths	ABO							25		16.6		5544	
Libreville	1984-86	H	2508	abo.adm.	IND			10.8				0.2	26	17.6	Centre Hospitaliere de L.	5825	
Libreville	1985	H		maternal deaths	ABO		41							10		5014	

# UNSAFE ABORTION IN AFRICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Live Births	Women RepAge
						Abor- tion	GYN OBS										
<b>SAO TOME &amp; PRINCIPE</b>																	
<b>ZAIRE</b>																	
National	1982-84	HS	404	RS, abo.adm.	IND	26										4747	
National	1982-84	H	2465	abo.adm.	IND	25.1						2.1				4747	
Kinshasa	1978-79	H	1078*	non-L abo.adm.	ABO							1.2				4731	
Kinshasa	1978-79	H	1078	ill+sp abo.adm.	ILL	22.4						5.4				5567	
Kinshasa	1976	H	270	10% RS abo.adm.	ILL	15.9										5220	
Kinshasa	1972	H	3182	abo.adm.	ABO		53.2G	7.2D				0.3	25D			4665	
Kinshasa	1972	H	3182	abo.adm.	SE	40										4665	
Kinshasa+Matadi+Buhavu	1982-84	H	2465	abo.adm.	IND,SP							0.5				5618	
Kinshasa+Matadi+Buhavu	1982-84	H	617	abo.adm.	ILL	25.1						2.1				5618	
<b>SOUTHERN AFRICA</b>																	
<b>BOTSWANA</b>																	
National	1982-86	H	104	maternal deaths	ABO								7		10.6	14 hospitals+7 health centres+10 clinics+8 healthposts	5656
<b>LESOTHO</b>																	
Maseru	1992	H	21	maternal deaths	ILL								39		9.5	Queen Elizabeth II Hospital	5884
<b>NAMIBIA</b>																	
<b>SOUTH AFRICA</b>																	
National	1988-89	STA	35038	abo.adm.	ABO			3.8*									5866
National	1987	STA	35882	incomplete abos	ABO												5743
National	1980-82	H	737	maternal deaths	SE,HAE								4		4.9	267 hospitals; 737/812 deaths	5821
National	1972-75	E	112000	ill.abos	ILL			13				0.1				E based on abo deaths in 255 Hs and E of 1/1000 mortality	5116
Bloemfontein	1980-85	H	81	maternal deaths	ABO								49D		17.2	Pelonomi Hospital	5562
Cape Province	1973-75	H	5069	abo.adm.	ABO							0.1	14D		35		4711
Cape Town	1960-65	H	136	maternal deaths	ILL*										7.4	*Admitted ILL	5528
Cape Town	1960-65	H	9692	abo.adm.	ABO,SE		29.7H					0.3			20.6		5528
Durban	1983-84	H	2450	abo.adm.	ABO							0.5				King Edward VIII Hospital	5688
Durban	1975-82	H	258	maternal deaths	ILL										18.6		4668
Edendale	1973-75	H	4154	abo.adm.	ABO,ILL		13.6	16.0D					58D		12.7	Edendale Medical Hospital	4575
Edendale	1973-75	H	4154	abo.adm.	SE								38D		8.5	Edendale Medical Hospital	4575
Pietermaritzburg	1964-79	H	13	maternal deaths	ABO								16		30.8		4712
<b>SWAZILAND</b>																	

#### **9.4 Latin America**

# UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort. ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Admissions		Live Births	Preg- nancies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor- tion	GYN OBS										
<b>CENTRAL AMERICA</b>																	
<b>COSTA RICA</b>																	
National	1988	STA		maternal deaths	ABO								1		6.7	5851	
National	1988	STA	15	maternal deaths	ABO										7	5707	
National	1986	CS	1914	RS, WM repr. age	IND,SP				23.0							Retrospective study	
National	1986	CS	1427	RS, W repr. age	IND,SP				15.8	1.4						Retrospective study	
National	1986	CS	3277	RS, W repr. age	IND,SP				15.8	1.4						Retrospective study	
National	1986	CS	816	RS, W repr. age	IND,SP				14.8	1.3						Retrospective study	
National	1985	STA	29	maternal deaths	ABO								6		17.2	5619	
National	1984	STA	3	abo. deaths	ABO								4			4790	
National	1983	STA	1	abo. deaths	ABO								1			4751	
National	1979	STA		abo. deaths	ABO								6			5022	
National	1973-77	STA		abo. deaths	SP,ILL									1.5		Data for four years of period	
National	1975	STA	41	maternal deaths	ABO								12		17.0	5619	
National	1972	H		abo. adm.	ABO		14.4D									Social Security Hospitals	
National	1968-72	STA		abo. deaths	SP,ILL									1.9		5203	
National	1972	STA		maternal deaths	ABO								13		13.1	4685	
National	1962-64			pregnancies	IND			11.1								4665	
National	1964	STA	42964	abo. adm.	ABO		12*								14	*% of obstetric admissions	
National	1964	CS	2132	W, 20-50	ABO				11.9							5590	
San Jose	1964	CS		RS, WM repr. age	ABO			19.1	16.1							5151	
San Jose	1964	CS		RS, WM repr. age	IND					34						5151	
San Jose	1963	CS		W, 20-49	ABO						12.0					5094	
San Jose, metropolitan	1986	CS	1034	RS, W repr. age	IND,SP					16.6	1.5					Retrospective study	
<b>EL SALVADOR</b>																	
National	1988	CS	1224	RS, W repr. age	IND,SP					15.6	1.4					Retrospective study, 42% hospitalized	
National	1988	CS	782	RS, W repr. age	IND,SP					13.1	1.3					Retrospective study, 46% hospitalized	
National	1988	CS	2664	RS, W repr. age	IND,SP					14.5	1.3					Retrospective study, 44% hospitalized	
National	1983-87	H	315	maternal deaths	ABO										7.6	5841	
National	1984	STA	99	maternal deaths	ABO								5		7.1	4751	
National	1984	STA		maternal deaths	ABO								4		7.9	5851	
National	1984	STA	99	maternal deaths	ABO										7	5707	
National	1978	CS	2322	W, 15-49	SP,IND			6.1	13.3*							*W 15-44	
National	1978	CS	1476	WM, 15-44	SP,IND					19.9						4641	
National	1977	STA		abo. deaths	ABO								7			5022	
National	1975	CS	1745	W, ever married	ABO					20						5126	
National	1975	CS	631	WM, 15-44	SP,IND					24.6						4641	
National	1975	CS	2125	W, 15-44	SP,IND					14.8						4641	
National	1973-74	STA		maternal deaths	ABO								10		11	5126	
National	1969-73	H	42353	abo. adm.	IND,SP		4.8 H									Hospitals and Health Centres	
National	1972	H		abo. adm.	ABO			10.4D								Social Security Hospitals	
National	1968-72	STA		abo. deaths	SP,ILL									2.3		5203	
National	1972	STA		maternal deaths	ABO								12		10.2	4685	
National	1958-63			pregnancies	IND			17.0								4665	



## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Abor- tion	GYN OBS	Live Births			% of Women Ever/A Abort.	Live Births				Women RepAge
San Salvador	1972-79	H	1465	abo.adm.	IND	40.0										
San Salvador	1972-79	H	1585	abo.adm.	IND	2.5									4864	
San Salvador	1974	H	3485	abo.adm/W repr.age*	ABO				1.6A					"in area	4864	
San Salvador	1974	HS	206	10% RS,abo.adm.	PILL	32.5									5482	
San Salvador	1974	H	2838	abo.adm.	IND	18.1									5482	
San Salvador	1961	E		ill.abos	ILL			100 D							5482	
San Salvador, metropolitan	1988	CS	658	RS, W repr.age	IND,SP				13.7	1.2				Retrosp.study;47% hospitalized	5166	
Sonsonate	1974	H	463	abo.adm/W repr.age*	ABO				0.8A					"in area	5725	
Sonsonate	1974	HS	49	10% RS,abo.adm.	PILL	24.5									5482	
<b>GUATEMALA</b>																
National	1992	E		abos				4-18							5775	
National	1987	STA		maternal deaths	ABO								11.5		5804	
National	1984	STA		maternal deaths	ABO							12	17.0		5851	
National	1984	STA	236	maternal deaths	ABO								17		5707	
National	1981	STA	326	maternal deaths	ABO							9	8.6		4751	
National	1978	STA		abo. deaths	ABO							11			5022	
National	1978	CS	2684	W, 15-49	SP,IND			5.4	10.6*					"W 15-44	4641	
National	1978	CS	2684	WM, 15-44	SP,IND				20.4						4641	
National	1968-72	STA		abo. deaths	SP,ILL							2.6		Data for three years of period	5203	
National	1971	H		abo.adm.	ABO			14.3D						Social Security Hospitals	4648	
National	1971	STA		maternal deaths	ABO							13	7.9		4685	
National	1964			pregnancies	ILL			7-7.5							4665	
Guatemala City	1972-79	H	3207	abo.adm.	IND	8.8									4864	
Guatemala City	1962-64	STA	67	maternal deaths	ABO							75	47.2		5148	
<b>HONDURAS</b>																
National	1989-90	VAR	381	maternal deaths	ABO							19	3	8.7	RAMOS	
National	1989-90	CS	256	maternal deaths	ABO							17	6.6		5840	
National	1987	CS	3870	RS, WM repr.age					25.0					Retrospective study	5732	
National	1987	CS	6095	RS, WM repr.age	ABO				24.2					Retrospective study	5732	
National	1987	CS	822	RS, WM repr.age	ABO				29.5					Retrospective study	5732	
National	1983	STA	7	abo. deaths	ABO							4			4790	
National	1983	STA		maternal deaths	ABO								8.9		5804	
National	1983	STA	79	maternal deaths	ABO								9		5707	
National	1982	STA	149	maternal deaths	ABO							6	6.0		4751	
National	1978	STA		abo. deaths	ABO							3			5022	
National	1973-77	STA		abo. deaths	SP,ILL								0.3	Data for four years	5203	
National	1968-72	STA		abo. deaths	SP,ILL								1.3		5203	
National	1972	STA		maternal deaths	ABO							4	2.0		4685	
National	1971	H		abo.adm.	ABO			22.2D						Social Security Hospitals	4648	
National	1962-63			pregnancies	IND				17.5						4665	
Hospital	1962-63	H	602	abo.adm.	ABO					1.1				"% of obstetric admission	5590	
San Pedro Sula	1972-79	H	823	abo.adm.	IND	3.2									4864	
Tegucigalpa	1972-79	H	1114	abo.adm.	IND	10.6									4864	
Tegucigalpa+San Pedro Sulas	1987	CS	1403	RS, WM repr.age	ABO				22.3					Retrospective study	5732	

# UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort. ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Abor- tion	GYN OBS	Live Births	Preg- nanc- ies			% of Women Ever/A Abort.	Live Births				Women RepAge
<b>MEXICO</b>																	
National	1991	E		pregnancies	IND				10							5773	
National	1990	H		W, repr.age	ABO					0.9 A						5773	
National	1990	E		ind.abos	IND			21						E based on abo.adm.		5877	
National	1989	H	30185	abo.adm.	ABO		12.6							Secretaria de Salud		5674	
National	1989	HS		obs.adm.	ABO			8.6								5851	
National	1987-89	H		maternal deaths	ABO							28		6.4 IMSS Social Security System		5756	
National	1988	H	79132	abo.adm.	ABO			9.4 D						5/7 major public H. systems		5754	
National	1987	EA	800000	ind.abos	IND											4779	
National	1986	H	95156	abo.adm.	ABO			9.0								5645	
National	1986	STA	1681	maternal deaths	ABO										9	5707	
National	1984-86	H		maternal deaths	ABO							55		9.7 IMSS Social Security System		5756	
National	1986	STA		maternal deaths	ABO							7			8.9	5851	
National	1986	STA	1503	maternal deaths	ABO							5.8			8.8	5645	
National	1986	H	95156	abo.adm.	ABO			9.1 D			0.2			8.8 6/7 major public H. systems		5754	
National	1984	E	140000	ill.abo. deaths	ILL											5442	
National	1982	STA	2166	maternal deaths	ABO							7		8.2		4751	
National	1982	H		W repr.age	ABO					1.2 A				Social Security hospitals		5773	
National	1980	E	100000	ill.abo. deaths	ILL									*More than 100'000		4662	
National	1977			pregnancies	IND				13.9							4665	
National	1976	STA		abo. deaths	ABO							7				5022	
National	1968-72	STA		abo. deaths	SP,ILL								1.6			5203	
National	1972	H		abo.adm.	ABO			13.5 D						Social Security Hospitals		4648	
National	1972	STA		maternal deaths	ABO							8		6.2		4685	
National	1971	EA	700000	ind.abos	IND					7A				E based on HS		5139	
Merida	1979-80	HS	170	abo.adm.	ABO			100			1.6			At least 60% IND		5480	
Merida	1979-80	HS	170	abo.adm.	IND	7*								*In follow-up of 118/158 sp. abos 77% admitted IND		5480	
Mexico City	1980	CS	1753	RS, W repr.age	IND,SP					34.9						5645	
Mexico City	1972-79	H	340	abo.adm.	IND	3.8										4864	
Mexico City	1971-74	H	129	obs. deaths	SE									23*	*% of obstetric deaths	5532	
Mexico City	1967-71	HS	3714*	aborteas, ccp acceptors	IND				34.9		3.1			*32'657 pregn. s; retrospect.study;IMSS hospitals		5139	
Mexico City	1967-71	EA		ind.abos	IND					12A*				*7-17.5%; E based on HS		5139	
Mexico City	1967-71	HS	61964	abo.adm.	PIND	80	11			3.5A*				*% of W 15-44 in hospital areaIMSS Hospitals		5139	
Mexico City	1967-71	HS	61964	abo.adm.	ABO		14			4.4A*				*% of W 15-44 in hospital areaIMSS Hospitals		5139	
Mexico City	1970	H		abo.adm.	PIND	64.5										5413	
Mexico City	1967-68	CS	1753	RS, W 16-49	IND,SP					26.7						5139	
Mexico City	1967-68	CS	1343	RS, W16-49, ever pregnant	IND,SP					34.8						5139	
Mexico City	1965	H		abo.adm.	SP,ILL		25									5413	
Mexico City	1964	CS		RS, WM repr.age	ABO			18.4	15.5							5151	
Mexico City	1962-64	STA	80	maternal deaths	ABO							34		19.9		5148	
Mexico City	1964	CS		RS, WM repr.age	IND					35						5151	
Mexico City	1964	HS	1000	RS, FPL pats	ILL				13.0	30.7	2.6					5166	
Mexico City	1961	H		abo.adm.	IND			20 D						Hospital Juarez		5166	
Mexico City	1961	H		abo.adm.	ABO			17 D						Hospital de la Mujer		5166	
Mexico City	1961	H		abo.adm.	SP,ILL		12									5413	

MEXICO cont.

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor- tion	GYN OBS	Live Births			Preg- nanc ies	% of Women Ever/A Abort.				Live Births	Women RepAge
Mexico City Mexico City+Foraneos	1989	VAR H	433 9448	abo.adm.	ABO		11.3					11	15	10	ISSTE hospitals	5646 5674	
<b>NICARAGUA</b>																	
National	1979	STA		maternal deaths	ABO							13		9.5		4685	
National	1973-77	STA		abo. deaths	SP,ILL								1.2		Data for four years	5203	
National	1977	STA	4	abo. deaths	ABO							4				4751	
National	1972	H		abo.adm.	ABO			12.8D							Social Security Hospitals	4648	
Managua	1991	H	5500*	ill.abo.adm.	ILL										*average 15/day; Bertha Calderone Women's H.	5871	
Managua	1988	H		maternal deaths	ABO							76		37	Hospital Berthe Calderon	5769	
Managua	1968-69	H	2746	abo.adm.	ILL	1.8		0.2D	0.2						Hospital General	5157	
Managua	1968-69	H	2746	abo.adm.	ABO			13.9D	12.1						Hospital General	5157	
Matagalpa	1989-90	STA	60	maternal deaths	ABO							13		5.0		5845	
<b>PANAMA</b>																	
National	1988	STA		maternal deaths	ABO									11.0		5804	
National	1987	STA		maternal deaths	ABO							9		22.9		5851	
National	1987	STA	22	maternal deaths	ABO									23		5707	
National	1977			pregnancies	IND,SP				30							4665	
National	1976	CS	3701	WM, 20-44	SP,IND				7.1							4641	
National	1974	STA		abo. deaths	ABO							2		2.1		5022	
National	1968-72	STA		abo. deaths	SP,ILL											5203	
National	1972	STA		maternal deaths	ABO							9		8.1		4685	
Panama City	1972-79	H	1248	abo.adm.	IND	53.4										4864	
Panama City	1968	CS	1500	W, 15-44	SP,IND			25.0	19.2	2.7A					1-year data, study 1969	5447	
Panama City	1967	CS		W, 35-44	ABO				43.8	2.3A					1-year data	4870	
Panama City	1967	CS		W, 20-34	ABO				16.3	3.3A					1-year data	4870	
Panama City	1963-67	CS	1500	W, 15-44	SP,IND			20.3	16.5						Period data;retrosp.study 1969	5447	
Panama City	1963-66	CS		W, 20-34	ABO				16.3	3.7A					Period data	4870	
Panama City	1963-66	CS		W, 35-44	ABO				26.0	1.1A					Period data	4870	
Panama City	1964	CS		RS, WM repr.age	ABO			14.8	21.1							5151	
Panama City	1959-63	CS	1500	W, 15-44	ABO				11.8						Period data, study year 1969	5093	
Panama City	1963	CS		W, 20-49	ABO				9.8							5094	
<b>CARIBBEAN</b>																	
<b>BARBADOS</b>																	
National	1973-77	STA		abo. deaths	SP,ILL								2			5203	
National	1968-72	STA		abo. deaths	SP,ILL								5			5203	
Hospitals	1971	H	800	abo.adm.	ABO			16D				0.1				4665	
<b>CUBA</b>																	
National	1988	STA		maternal deaths	ABO							9		21.8		5851	
National	1988	STA	73	maternal deaths	ABO									22		5707	
National	1984	STA		maternal deaths	ABO(L)							5		15.4		4615	
National	1980	STA	24898	non-L abos	ABO			18.2				0.1	10	0.6	18.0	5320	

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor- tion	GYN OBS										
National	1980	STA		maternal deaths	ABO(L)							15		29.1			
National	1978	STA		abo. deaths	ABO							3					
National	1973-77	STA		abo. deaths	SP,ILL								1.4		Data for three years of period	5203	
National	1975	STA	33510	non-L abos	ABO			17.4			0.1	11	1.1	15.9		5320	
National	1975	STA		maternal deaths	ABO(L)							12		17.4		4615	
National	1974	STA	33718	non-L abos	ABO			16.6			0.1	14	1.6	24.7		5320	
National	1968-72	STA		abo. deaths	SP,ILL								2.2		Data for three years of period	5203	
National	1970	STA		ind.abos	ILL							22				4620	
National	1970	STA		maternal deaths	ABO(L)							22		30.5		4615	
National	1960	STA		maternal deaths	ABO(L)							14		11.6		4615	
<b>DOMINICAN REPUBLIC</b>																	
National	1992	E		ind.abos	IND			39							E based on abo.adm.	5877	
National	1988	STA		maternal deaths	ABO									17		5804	
National	1984-85	H	24811	abo.adm.	ABO			10.7*							SESPAS hospitals; % of obs.adm	4975	
National	1985	E	62500*	abos	ABO				4A		0.5				*60000-65000, supported by several studies.	4975	
National	1985	H	106	maternal deaths	ABO									17	SESPAS hospitals	4975	
National	1985	STA	106	maternal deaths										17		5707	
National	1985	STA		maternal deaths	ABO							9		17.0		5851	
National	1984	STA	120	maternal deaths	ABO									21.7		4751	
National	1978	STA		abo. deaths	ABO							5				5022	
National	1973-77	STA		abo. deaths	SP,ILL								1.0		Data for three years	5203	
National	1968-72	STA		abo. deaths	SP,ILL								0.9			5203	
National	1971	STA		maternal deaths	ABO							4		4.0		4685	
Hospital	1982-85	H	10576	abo.adm.	ABO			11.8							MNSA hospitals	4975	
Santiago	1973	H	80	abo.adm./month	IND,SP			14D								5149	
Santo Domingo	1973	H	270	abo.adm./month	IND,SP			18D								5149	
Santo Domingo + Santiago	1973	HS	200*	RS,PIND abo.adm	IND,SP				33						*About 1000 pregnancies	5149	
<b>GUADELOUPE</b>																	
<b>HAITI</b>																	
National	1987-89	H	402	maternal deaths	ABO							41		11.9	15 private & public hospitals	5810	
National	1989	CS	697	RS, W ever pregnant	IND					4.5						5724	
National	1989	CS	291	RS, W ever pregnant	IND					6.7						5724	
National	1989	CS	1315	RS, W ever pregnant	IND					5.6	1.6					5724	
Port-au-Prince	1989	CS	327	RS, W ever pregnant	IND					9.5						5724	
<b>JAMAICA</b>																	
National	1986-87	VAR	62	maternal deaths	ABO							6		4.8		5847	
National	1984	STA		maternal deaths	ABO							74		65.8		5851	
National	1981-83	VAR	192	maternal deaths	IND							5		4.7		4880	
National	1981-83	STA	190	maternal deaths	ABO							6		5		5375	
National	1977-79	STA	85	maternal deaths	ABO							6		11.8		5375	
National	1968-72	STA		abo. deaths	SP,ILL								1.6		Data for three years	5203	
National	1964-68		82	maternal deaths	ABO									23.2		4665	

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor- tion	GYN OBS	Live Births			Preg- nanc- ies	% of Women Ever/A Abort.				Live Births	Women RepAge
National Kingston	1960-64	STA	593	maternal deaths	ABO										4714		
Kingston	1971	H	2586	abo.adm.	ABO		18.4D				0.2	13			4665		
Kingston	1971	H	5	abo. deaths	IND,SP								33.3	Victoria Jubilee Hospital	4641		
Kingston	1964-68	H	10829	abo.adm.	ABO		14.5				0.2	25			4714		
Kingston	1964-68	H	82	maternal deaths	ILL	33*						17		*Low E	4714		
<b>MARTINIQUE</b>																	
<b>PUERTO RICO</b>																	
National	1987	STA	11	maternal deaths	ABO											5707	
National	1978-79	VAR	62	maternal deaths	ABO							1		RAMOS		5819	
National	1973-77	STA		abo. deaths	SP,ILL								0.3	Data for three years of period		5203	
National	1968-72	STA		abo. deaths	SP,ILL								0.2			5203	
<b>TRINIDAD AND TOBAGO</b>																	
National	1987	STA		maternal deaths	ABO											5804	
National	1986	STA	18	maternal deaths	ABO											5707	
National	1986	STA		maternal deaths	ABO							55				5851	
National	1983	STA	8	abo. deaths	ABO							24				4790	
National	1981	STA	13	abo. deaths	ABO							41				4751	
National	1973-77	STA		abo. deaths	SP,ILL								4.9	Data for four years of period		5203	
National	1977	STA		abo. deaths	ABO							33				5022	
National	1968-72	STA		abo. deaths	SP,ILL								8.2	Data for three years of period		5203	
Port of Spain	1971	H	2803	abo.adm.	ABO		35D									4665	
Port of Spain	1964	H		abo.adm.	ABO			34.6								4665	
<b>SOUTH AMERICA</b>																	
<b>ARGENTINA</b>																	
National	1990	STA	353	maternal deaths	ABO								17			5796	
National	1990	EA	400000	abos	IND							0.4		90% are unsafe abos		5749	
National	1989	E	400'000	abos	IND		50									5857	
National	1989	UNK		maternal deaths	ABO											5834	
National	1988	E	400000	abos	IND							0.4				5240	
National	1987	EA		ind.abos	IND			25								4779	
National	1986	STA	369	maternal deaths	ABO											5707	
National	1986	STA		maternal deaths	ABO							20				5851	
National	1982	STA	464	maternal deaths	ABO							27				4790	
National	1981	STA	472	maternal deaths	ABO							25				4751	
National	1978	STA		abo. deaths	ABO							26				5022	
National	1970	STA		maternal deaths	ABO							43				4685	
National	1964			ill.abos	IND		100									5192	
National	1964			pregnancies	IND			25.3								4665	
Buenos Aires	1988	H	21	maternal deaths	ABO									42.9	Several hospitals	5624	
Buenos Aires	1975-84	H	36927	abo.adm.	ABO		12.0							40.2	Municipal hospitals	5625	

# UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		% of Women Ever/A Abort.			Live Births	Preg- nanc ies				Live Births	Women RepAge
						Abor- tion	GYN OBS										
Buenos Aires	1968	CS		W, 20-34	ABO			16.0	2.5A					1-year data, study 1969	4870		
Buenos Aires	1968	CS	1500	W, 15-44	SP,IND		24.1	18.8	1.9A					1-year data, study 1969	5447		
Buenos Aires	1968	CS	1363	W, 15-44	IND,SP		24.7	19.5						Retrospective study 1968-69	5092		
Buenos Aires	1968	CS		W, 35-44	ABO			31.6	1.6A					1-year data, study 1969	4870		
Buenos Aires	1964-67	CS	1500	W, 15-44	SP,IND		28.4	21.7						Period data, retrosp.study1969	5447		
Buenos Aires	1964-67	CS		W, 20-34	ABO			19.5						Period data, study 1969	4870		
Buenos Aires	1964-67	CS		W, 35-44	ABO			35.3						Period data, study 1969	4870		
Buenos Aires	1964	CS		RS, WM repr.age	ABO		33.3	24.6						Period data, study 1969	5151		
Buenos Aires	1964	HS	532	WM 25-49*	IND		37.6	25.3						*WM among 1721 patients	5590		
Buenos Aires	1964	HS	600	RS W 35-49	IND			25							5590		
Buenos Aires	1964	CS		RS, WM repr.age	IND				25						5151		
Buenos Aires	1959-63	CS	1500	W, 15-44	ABO			19.0						Period data, study year 1969	5093		
Buenos Aires, Matanza area	1990	VAR	21	maternal deaths	ABO						39		42.8		5796		
Buenos Aires, Matanza area	1990	H	500	abo.adm.	ABO		23.6							H. Paroissien de la Matanza	5796		
Buenos Aires, Matanza area	1984-88	H	1920	abo.adm.	ABO		18.9			0.4	79		47.1	H. Paroissien de la Matanza	5796		
Cordoba, greater	1987	VAR	41	maternal deaths	SE						31		17.1	RAMOS	5833		
La Plata	1962-64	STA	18	maternal deaths	ABO						31		23.3		5148		
<b>BOLIVIA</b>																	
National	1988	E	1530	maternal deaths	ABO							77	15.2	>20 ABO/1000W	5650		
National	1983-84	HS	4371	abo.adm.	IND	22.7					0.6			Underestimation	5239		
National	1983			maternal deaths	IND							130	27		5239		
National	1972	H		abo.adm.	ABO		20.2D							Social Security Hospitals	4648		
National	1969			pregnancies	IND			5*						*1.2-8.5% of pregnancies	4665		
5 health facilities	1990	H	948	abo.adm.	ABO		7.7 D			1.0*	1022			*n=783	5774		
<b>BRAZIL</b>																	
National	1991	EA	1.4*	abos	ABO		35-60							*1.4-2.4 million	5709		
National	1991	E		ind.abos	IND		44							E based on abo.adm.	5877		
National	1987	EA	3600000	ill.abos	ILL		95								5007		
National	1986	STA	1814	maternal deaths	ABO								13		5707		
National	1986	STA		maternal deaths	ABO						6		13.2		5851		
National	1985	E		ind.abos	IND		34.9								5671		
National	1985	H	285000	abo.adm.	IND,SP		7.1								5671		
National	1984	E	3864	maternal deaths	ABO						15		12.6	Underestimation	5827		
National	1983	STA	2116	maternal deaths	ABO								13.5		4751		
National	1981	E	3000000	ind.abos	IND		80								4675		
National	1980	CS		pregnancies	IND,SP			30							4742		
National	1980	STA	2551	maternal deaths	ILL								8.6		5570		
National	1980	E		ind.abos	IND		25.5								5671		
National	1980	H	201597	abo.adm.	IND,SP		5.3								5671		
National	1980	VAR		pregnancies	ILL,SP			30							5617		
National	1976	E	875000*	ind.abos	IND									*E 0.5-1.25 million; E based on abo.rate of 0.5-1.5/W and	4675		
National	1964			pregnancies	IND,SP			18.2							4665		
Bahia, rural	1980	CS		W, 15-44	ABO			8.2	21.8						4675		
Bahia, Salvador	1980	CS		W, 15-44	ABO			14.2	18.2						4675		

BRAZIL cont.

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	per 100,000		% of All Matern. Deaths				
						Abortion	GYN OBS	Live Births	Pregnancies		% of Women Ever/A Abort.	Case Fata- lity (%)				Live Births	Women RepAge
Bahia, urban excl. Salvador	1980	CS		W, 15-44	ABO				10.2	20.8					4675		
Belo Horizonte	1968	H	4000	abo.adm.	IND,SP		40 H							Large hospital	4641		
Campinas	1972-79	H	1836	abo.adm.	IND	6.9									4864		
Caxias do Sul	1973	CS		pregnancies	IND			5.2							4675		
Goiania	1975-83	H	34	maternal deaths	ILL							73		Maternidade de H. Geral de G.	5829		
Goiania, GO	1970-78	H	34	maternal deaths	ABO							10		Mat. Nossa Senhora de Lourdes	5830		
Pelotas	1982-84	HS	5931	W, pregnant	ABO					18.7					5768		
Pernambucco, Recife	1980	CS		W, 15-44	ABO				16.3	20.2					4675		
Pernambucco, rural	1980	CS		W, 15-44	ABO				9.3	21.8					4675		
Pernambucco, urban excl. Recife	1980	CS		W, 15-44	ABO				13.3	20.1					4675		
Pernambucco State	1980	CS	1254	WM, 15-44	IND,SP					33.1					4569		
Pernambucco State	1980	CS	1950	W, 15-44	IND,SP				11.7	20.7					4569		
Pernambucco State	1980	CS	1358	W, EM, 15-44	IND,SP					32.6					4569		
Piaui, excl. Teresina	1979	CS		W, 15-44	ABO				8.4	19.3					4675		
Piaui, Teresina	1979	CS		W, 15-44	ABO				9.4	13.1					4675		
Porto Alegre	1973	CS		pregnancies	IND				13.2						4675		
Porto Alegre	1970	CS	1211	RS gyn.pat.s, WM 15-49	IND				15.0	25.2	2.5			*Sao Jose area	5089		
Porto Alegre	1970	CS	1211	RS gyn.pat.s, WM 15-49	SP,IND				27.6					*Sao Jose area	5089		
Porto Alegre	1968	CS	197	families	IND,SP				22.5						4641		
Porto Alegre	1968	CS	197	families	IND				13.6						4641		
Ribeirao Preto	1962-64	STA	5	maternal deaths	ABO							11			5148		
Rio de Janeiro	1969	CS		W, low income	IND					22.5					4675		
Rio de Janeiro	1964	CS		RS, WM repr.age	ABO			16.7	14.1						5151		
Rio de Janeiro	1963	CS		WM, 20-50	IND					9.2					4675		
Rio de Janeiro	1963	CS	1585	W 20-25, 1+livebirth	IND					10					5590		
Rio de Janeiro, Favela Rocinha	1987	H		abo.adm.	IND							231		Municipal H. Miguel Couto	5726		
Rio de Janeiro, Favela Rocinha	1978-87	H	7633	abo.adm.				42.2				83			5792		
Rio de Janeiro, Favela Rocinha	1983-87	H	17	maternal deaths	IND							130			5792		
Rio de Janeiro, Favela Rocinha	1978-87	H	7633	abo.adm.	IND	40*						0.2		*obs.adm.; H. Miguel Couto	5726		
Rio de Janeiro, Favela Rocinha	1978-82	H	15	maternal deaths	IND							54			5792		
Rio de Janeiro, Favela Rocinha	1978	H		abo.adm.	IND							85		Municipal H. Miguel Couto	5726		
Rio de Janeiro, rural	1985	CS	557	WM 40-54	ABO					11.1				Low income group	5609		
Rio de Janeiro, state of	1986	CS	1133	WM 40-54	ABO					18.5	2.8			Low income group	5609		
Rio de Janeiro, urban	1985	CS	576	WM 40-54	ABO					25.7				Low income group	5609		
Rio Grande do Norte, rural	1980	CS		W, 15-44	ABO				8.4	18.0					4675		
Rio Grande do Norte, urban	1980	CS		W, 15-44	ABO				9.5	15.2					4675		
Rio Grande do Sul	1974-78	STA	633	maternal deaths	ABO									20	Only 2/127 identified sp.abos	4579	
Sao Leopoldo	1973	CS		pregnancies	IND				4.6						4675		
Sao Paulo	1978	CS		W, 15-44	ABO					14.8					4675		
Sao Paulo	1970	CS		W ever married	IND				6	9-11					4569		
Sao Paulo	1965-66	CS	2857	W, 15-49, M 1x	SP,IND			22.3	17.8						5056		
Sao Paulo	1965-66	CS	2857	W, 15-49, M 1x	IND			7.3	5.8	10.7	1.8				5056		
Sao Paulo	1965	CS		pregnancies	IND				6.2						4675		
Sao Paulo	1965	CS		pregnancies	ABO				18.0						4675		
Sao Paulo	1962-64	STA	36	maternal deaths	ABO							17			5148		
Sao Paulo municipality	1986	VAR		maternal deaths	ABO							11			5738		

# UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor- tion	GYN OBS										
Sao Paulo municipality	1986	VAR	56	maternal deaths	ILL							7		7.1		5826	
Sao Paulo municipality	1974-75			maternal deaths	ABO							39		25		5738	
Sao Paulo State	1978	CS	1880	WM, 15-44	SP,IND				21.9							4641	
Sao Paulo State	1978	CS	2803	W, 15-49	IND,SP			10.9	14.7*						* W, 15-44	4641	
Sao Paulo, metropolitan	1982	H		abo.adm.	ILL			55.6								5626	
Sao Paulo, metropolitan	1978	H		abo.adm.	ILL			27.8								5626	
Sao Paulo, rural	1978	CS		W, 15-44	ABO				16.8							4675	
Sao Paulo, State of	1980	STA	397	maternal deaths	ILL									13.4		5570	
Sao Paulo, state of, urban	1982	H	672	abo.adm.	ABO			56							Hospital Santo Andre	5168	
Sao Paulo, state of, urban	1978	H	302	abo.adm.	ABO			28							Hospital Santo Andre	5168	
Sao Paulo, state of, urban ex.SP	1978	CS		W, 15-44	ABO				14.1							4675	
<b>CHILE</b>																	
National	1990-91	STA		maternal deaths										13		5667	
National	1990	E		ind.abos	IND			55							E based on abo.adm.	5877	
National	1990	STA			IND								1			5750	
National	1990	STA		maternal deaths	ABO									9		5647	
National	1989	STA		maternal deaths	ABO									17		5804	
National	1987	STA	135	maternal deaths	ABO									17		5642	
National	1987	EA		W repr.age	IND			66	5.8A						E based on survey in Santiago	5608	
National	1987	E	175896	ind.abos	IND			66							58 IND/1000W	5633	
National	1987	H	31966	abo.adm.					1.1A*						*hospitalized	5608	
National	1987	E	195440	abos	IND,SP			74							64 ABO/1000W	5633	
National	1987	STA	135	maternal deaths	ABO										35		
National	1987	E	155000*	ill.abos	ILL			45-70							*120'000-190'000 ill; 265'774 births	5707	
National	1987	STA		maternal deaths	ABO									17	2	5758	
National	1987	STA		maternal deaths	ABO									16		5741	
National	1987	STA		maternal deaths	ABO									17		5851	
National	1986	STA	91	maternal deaths	ABO											4797	
National	1985	E		ind.abos	IND				15							5885	
National	1985	STA	32086	abo.adm./ nat. stat.	ABO			12.1E	1.1A		0.1	11	1	24.7		5366	
National	1983	STA	33418	abo.adm.	ABO				9.8*		0.1	15	1	38.5	% of obs.adm.	5799	
National	1982	STA	34340	abo.adm./W15-44	ABO				12.0*						% of obs.adm.	5238	
National	1982	STA		maternal deaths	ABO									17		5238	
National	1981	EA	50000	ill.abos	IND					2.5A						4601	
National	1980	STA	37217	abo.adm./W15-44	ABO				12.1*	1.4A					% of obs.adm.	5238	
National	1980	STA	185	maternal deaths	ABO							28		38.4		5642	
National	1980	STA	38199	abo.adm./ nat. stat.	ABO			15.1E		1.4A		0.2	28	3	38.3		
National	1975	STA		maternal deaths	ABO							48	5	36.6		5741	
National	1975	STA	42155	abo.adm./ nat. stat.	ABO			16.6E		1.8A		0.3	48	5	36.3		
National	1974	H	42160	abo.adm.	ILL			15*							% of obs.adm.	5366	
National	1974	E	132000	ill.abos	ILL			49								5105	
National	1973	STA	365	maternal deaths	ABO							43	5	32.6		5105	
National	1970	H	44771	abo.adm.	ABO			17.2*	18.3			0.3	55		% of obs.adm.	4670	
National	1970	STA	44771	abo.adm./W15-44	ABO			17.2*		2.1A		0.4		8	% of obs.adm.	4648	
National	1970	E	137628	abos	ABO					5.9A					E based on 36% hospitalization	5238	
National	1970	STA	439	maternal deaths	ABO								71			4670	

DK KJLCC SH 01 10 1997



CHILE cont.

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor- tion	GYN OBS	Live Births			Preg- nanc- ies	% of Women Ever/A Abort.				Live Births	Women RepAge
National	1970	STA	44771	abo.adm./ nat. stat.	ABO			17.2E		2.1A		0.4	66	8	39.1		5366
National	1965-69	STA	3432	maternal deaths	ABO								89		37.2		4791
National	1968	STA		maternal deaths	ABO								84		39.6		5388
National	1968	H	349	maternal deaths	ABO			68.4*				0.1*	87		65.9	*E 180'000 abortions	5581
National	1967	E	150000	abos	IND			33									4662
National	1967			abo.adm.	ABO			19.6*								*% of obs.adm.	5189
National	1967	H		hospital adm.	ABO			8.1H									5590
National	1964-66			pregnancies	IND			20*								*16.6-23.2%	4665
National	1966	E	139571	abos	ABO					6.5A						E based on 45% hospitalization	4670
National	1965	STA	62807*	abo.adm/W repr.age	ABO					3.0A						*incl. private hospitals	4670
National	1965	E		W repr.age	IND					4.7A						E based on hospital data	4859
National	1960-65			ill.abo. deaths	ILL								17				5190
National	1965	H	56130	abo.adm./ nat. stat.	ABO			20.7*	20.0							*% of obs.adm.	4648
National	1965	E	147622	abos	ABO											E based on abo.adm.	4648
National	1965	STA		maternal deaths	ABO								99	16	35.5		5741
National	1965	STA			IND									44			5750
National	1965	STA	56130	abo.adm./ nat. stat.	ABO			18.2E		2.9A			0.5	99	16	35.6	5366
National	1965			pregnancies	IND				29.6								5413
National	1964	STA	56391	abo.adm./W15-44	ABO			21.2*		3.0A			0.6	19		*% of obs.adm.	5238
National	1960-64	STA	4351	maternal deaths	ABO								109		37.2		4791
National	1964	STA		ind.abo.adm / W 15-49	IND					2.6A							4859
National	1964	H	56391*	abo.adm./ nat. stat.	ABO			18.4					0.6	118		*866 maternal deaths	4721
National	1961	E	117947	abos	ABO					6.2A						E based on 47% hospitalization	4670
National	1960	STA	833	maternal deaths	ABO								107	16	36.3		4670
National	1960	H	57368	abo.adm.	ABO			22.3									4862
National	1960	STA	48186	abo.adm./ nat. stat.	ABO			17.1E		3.0A			0.6	107	19	35.7	5366
Antofagasta	1963-64	CS	651	RS, W 20-45	ABO					45.8						1438 ABO/1000W	4862
Antofagasta	1963-64	CS	651	RS, W 20-45	IND					26.9						992 IND/1000W	4862
Arica	1972-79	H	1131	abo.adm.	IND	17.1											4864
Cautin, ethn. Mapuches	1969	CS	1200*	RS, W 15-44	IND,SP				5.1							*4'290 pregnancies	5415
Cautin, ethn. Mapuches	1969	CS	1200*	RS, W 15-44	IND				0.4	1	1.4					*4'290 pregnancies	5415
Concepcion	1975-79	H	66	maternal deaths	SE,HAE								126		45.5		5362
Concepcion	1970-74	H	85	maternal deaths	SE,HAE								68		25.9		5362
Concepcion	1965-69	H	91	maternal deaths	SE,HAE								87		37.4		5362
Concepcion	1960-64	H	114	maternal deaths	SE,HAE								126		40.4		5362
Concepcion	1963-64	CS	1235	RS, W 20-45	IND					14.9			2.0			304 IND/1000W	4862
Concepcion	1963-64	CS	1235	RS, W 20-45	ABO					31.4			2.2			681 ABO/1000W	4862
Rural areas	1962	H		abo.adm. sample	ABO			34.3D									5048
Santiago	1991	H	1375	abo.adm.	PPIND	48								8	20	Barros Luco-Trudeau Maternity	5803
Santiago	1990	HS	629	abo.adm.	PPIND	23		22 D								7 major hospitals	5706
Santiago	1990	HS	629	abo.adm.	ABO			9.5								7 major hospitals	5706
Santiago	1983	HS	1480	abo.adm.	ABO	10		15.8					0.1	19			5885
Santiago	1982	STA	14874	abo.adm/W 15-44	ABO					1.3A							5238
Santiago	1980	STA	15818	abo.adm/W 15-44	ABO					1.5A							5238
Santiago	1972-79	H	1701	abo.adm.	IND	36.1											4864
Santiago	1973-77	STA	410	maternal deaths	ABO									39	42.7		4650

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort Ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Abortion	GYN OBS	Live Births	Preg- nancies			% of Women Ever/A Abort.	Live Births				Women RepAge
Santiago	1973-77	H	228	maternal deaths	ABO							65		47.4	Several hospitals	4650	
Santiago	1976	STA	15329	abo.adm/W 15-44	ABO					1.7A						5238	
Santiago	1974	HS	597*	abo.adm.	SP,IND			38.3	27.3							5189	
Santiago	1974	H	3393	abo.adm.	ABO			29.1				0.1	26	25	*2001 previous pregnancies; Felix Buñes Hospital	4793	
Santiago	1974	HS	597*	abo.adm.	IND			18.6	13.3			0.2			*2001 previous pregnancies; Felix Buñes Hospital	5189	
Santiago	1972	H	1587	abo.adm.	ABO			20.4D							Felix Buñes Hospital	5189	
Santiago	1971	H		abo.adm.	ABO			27 D							Felix Buñes Hospital	5189	
Santiago	1969-70	CS	804	W, 25-39	IND,SP				48.2	10.9A					Prospective study	5159	
Santiago	1969-70	CS	804	WM, 25-39	IND,SP				48.2	56						4641	
Santiago	1969-70	CS	675	W, 25-39	IND,SP				34.3	7.1A						5159	
Santiago	1969-70	CS	804	W, 25-39	IND				33.6	7.6A					Prospective study	5159	
Santiago	1970	s EA		abos	ILL									50		4662	
Santiago	1969-70	CS	675	W, 25-39	IND				20.7	4.3A						5159	
Santiago	1970	STA	17991	abo.adm/W 15-44	ABO					2.5A						5238	
Santiago	1969-70	CS	675	WM, 25-29	IND,SP				34.3	52.3						4641	
Santiago	1965-68	CS	804	W, 25-39	IND				18.8						Period data for prosp. study group 1969-70; 55 IND/1000W	5159	
Santiago	1965-68	CS	804	W, 25-39	IND,SP				29.6						Period data for prosp. study group 1969-70; 87 IND,SP/1000W	5159	
Santiago	1965-68	CS	675	W, 25-39	IND				19.1						Period data, study 1969-70; 58 IND/1000W	5159	
Santiago	1965-68	CS	675	W, 25-39	IND,SP				31.6						Period data, study 1969-70; 96 IND,SP/1000W	5159	
Santiago	1967	STA	21685	abo.adm/W 15-44	ABO					3.6A						5238	
Santiago	1967	H		abo. deaths	ABO							0.5		50		5192	
Santiago	1966	CS	2388*	W, 20-44	IND				20.1	5.7A					*646 pregnancies	5159	
Santiago	1966	CS	2388*	W, 20-44	IND,SP				37.2	10.3A					*646 pregnancies	5159	
Santiago	1965	CS		W	IND					35.2						5151	
Santiago	1962-64	CS	49	abo. deaths	ABO									22		4802	
Santiago	1962-64	STA	92	maternal deaths	ABO							166		52.5		5148	
Santiago	1964	STA	24427	abo.adm/W 15-44	ABO					5.1A						5238	
Santiago	1964	H		abo.adm.	ABO			37 D							Felix Buñes Hospital	5189	
Santiago	1962	CS	1890*	W, 18-49	IND,SP				31.2	8.7A					*527 pregnancies	5159	
Santiago	1962	CS	1890*	W, 18-49	IND				15.6	4.7A					*527 pregnancies	5159	
Santiago	1962	H		abo.adm, sample	ABO			24.3D								5048	
Santiago	1962	CS	1890	RS, W<49	IND					26.2		2.8			Retrospective study; 738 IND/1000W	5048	
Santiago	1962	CS	1890	RS, W<49	SP,IND					46.3		2.5			Retrospective study; 1170 ABO/1000W	5048	
Santiago	1962	CS	580*	RS, W 20-45	IND					27		3.2			*Preliminary results of first 580 interviews	5166	
Santiago	1962	EA	50000	abos	IND										E based on preliminary study & hospital admissions	5166	
Santiago	1961	CS	1730*	W, 20-44	IND					15.5	4.5A				*504 pregnancies	5159	
Santiago	1961	CS	1890	RS, W<49	ABO			45.6							1 year data, study 1962	5048	
Santiago	1961	CS	1890	RS, W<49	IND			22.6		4.3A					1-year data; study 1962	5048	
Santiago	1961	CS	1730*	W, 20-44	IND,SP					32.0	8.9A				*504 pregnancies	5159	
Santiago	1960	STA		abo.adm/W repr.age	ABO					4.2A						4769	
Santiago	1962*	* CS	1890**	W, 18-49	IND				16.6						*10-year period data; **4577 pregnancies; 403 IND/1000W	5159	
Santiago	1962*	* CS	1890**	W, 18-49	IND,SP					28.6					*10-year period data; **4577 pregnancies; 693 IND,SP/1000W	5159	
Santiago	1962*	* CS	1890	RS, W<49	IND			23.3							*10-year period data	5048	
Santiago	1962*	* CS	1890	RS, W<49	ABO			40.1							*10-year period data	5048	
Santiago province	1966	E		W, repr.age	IND					5.3A					E based on hospital data	5220	
Santiago province	1963	E		W, repr.age	IND					4.6A					E based on hospital data	4859	

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Admissions		Preg- nancies			% of Women Ever/A Abort.	Live Births		Women RepAge		
						Abor- tion	GYN OBS									
Santiago, area*	1968	STA	3727	abo.adm/W repr.age	ABO											
Santiago, area*	1964	STA	5282	abo.adm/W repr.age	ABO											
Santiago, ethn.Mapuches	1963	CS	102*	W, 15-44	IND,SP			23.9								
Santiago, ethn.Mapuches	1963	CS	102*	W, 15-44	IND			10.7								
Santiago, ethn.Mapuches	1962			ind.abos	IND					7						
Santiago, metropolitan	1982	STA	14874	abo.adm.	ABO					1.3 A						
Santiago, Quinta Normal	1962-63	CS	580*	RS, W repr.age	IND,SP			53.6	34.5							
Santiago, Quinta Normal	1962-63	CS	580*	RS, W repr.age	IND			36.1	23.2					*2617 pregnancies;	1557 IND,SP/1000W	5348
Santiago, Quinta Normal	1962-63	CS	448	RS, W repr.age	IND									*2617 pregnancies;	1048 IND/1000W	5348
Santiago, San Gregorio	1966	CS	1324*	W, 15-44	IND					35.3						
Santiago, San Gregorio	1966	CS	1324*	W, 15-44	IND,SP					12.2	2.9A					
Santiago, San Gregorio	1966	CS	6666	W	IND			37.9		26.7	6.3A			*311 pregnancies		5159
Santiago, San Gregorio	1966	CS	6666	W	IND						1.3A			*311 pregnancies		5159
Santiago, San Gregorio	1964	CS	1293*	W, 15-44	IND					14.9	4.9A					
Santiago, San Gregorio	1964	CS	1293*	W, 15-44	IND,SP					31.0	10.1A			*423 pregnancies		5159
Santiago, San Gregorio	1964	CS	6163	W	IND			44.3			2.0A			*423 pregnancies		5159
Santiago, West distr.	1964	CS	15467	IUD acceptors	IND			31.9			43					
Santiago, West distr.	1964	CS	15467	IUD acceptors	SP,IND			45.3				2.8				
Santiago, West distr.	1963	H	3752	abo.adm.	ILL							0.5				
Santiago, zone V	1971	H		abo.adm.	ABO						27D					
Santiago, zone V	1964	H		abo.adm.	ABO						37D					
Talcahuano	1970-76	HS	305	10% RS abo.adm.	SE,HAE	41.3										
Talcahuano	1976	H	520	abo.adm.	ABO						14.0D					
Talcahuano	1970	H	567	abo.adm.	ABO						18.1D					
Urban, 3 cities*	1962-64	CS	3776	RS, W 20-45	IND											
Urban, 3 cities*	1962-64	CS	3776	RS, W 20-45	ABO					22.6	2.8					
Valdivia	1980	STA	363	abo.adm/W repr.age	ABO					41.3	2.6					
Valdivia	1972-79	H	604	abo.adm.	IND	25.3				1.5A						
Valdivia	1977-78	HS	604	RS, abo.adm.	IND	36.1										
Valdivia	1977-78	HS	604	RS, abo.adm.	ABO							0.9				
Valdivia	1970	STA	535	abo.adm/W repr.age	ABO							1.6	0.3			
Valdivia	1960	STA	583	abo.adm/W repr.age	ABO					2.7A	3.6A					
<b>COLOMBIA</b>																
National	1989	E		ind.abos	IND											
National	1988	E		abos	IND			35								
National	1987	EA	280000	ind.abos	IND					15						
National	1986	STA		maternal deaths	ABO											
National	1985	E		ind.abos	IND									18		10.3
National	1985	H	71375	abo.adm.	IND,SP					29.3						
National	1984	STA		maternal deaths	ABO					8.3						
National	1984	STA	642	maternal deaths	ABO											23.1
National	1984	STA		maternal deaths	ABO											23
National	1981	STA	969	maternal deaths	ABO											23
National	1980	EA	250000	ill.abos	ILL									22		17.2
National	1980	EA	250000	abos	ILL											
National	1972-79	H	5255	abo.adm.	IND	30.3										1500 ill.abo. deaths

BR R3C06 SH.01.10.146 WHO/FHE/MSM/93.13 Page 49



## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor tion	GYN OBS										
Bogota	1962-64	STA	62	maternal deaths	ABO							46		36.5		5148	
Bogota	1964	H	1709	obs.adm.	ABO		17.3*	22.2							*% of obs.adm.	4860	
Bogota	1964	STA		abos	ABO			11.5								4624	
Bogota	1964	CS		RS, WM repr.age	IND					30						5151	
Bogota	1958-62	CS	1500	W, 15-44	ABO				9.8						Period data, study year 1968	5093	
Bucaramanga	1968	H		abo.adm.	ABO			100D								4860	
Caldas	1966-68	H	8835	gyn+obs.adm.	ABO		13.9	18.7D			2.3	0.2				5188	
Caldas	1966-68	H	8835	gyn+obs.adm.	IND	15.5	2.2	2.9D								5188	
Cali	1968	H		abo.adm.	ABO			33D								4860	
Cali	1966-67	CS	1905	RS, W repr.age	IND				14.5							4860	
Cali	1962-64	STA	97	maternal deaths	ABO							80		36.7	684 IND/1000W	5148	
Candelaria	1966-67	CS	142	RS, W repr.age	IND				14.0							4860	
Hospitals	1974-75	H	2923	abo.adm.	IND,SP							0.5			768 IND/1000W; rural	4641	
Hospitals	1968-69	H	6292	abo.adm.	IND,SP							0.3			9 hospitals	4641	
Manizales	1966-67	CS	1397	RS, W repr.age	IND				16.0						11 hospitals	4860	
Manizales	1964-65	H	5143	obs.adm	ABO		18.9*								967 IND/1000W; urban	4860	
Medellin	1963-72	H	104	maternal deaths	SE,HAIE										*% of obs.adm.	4860	
Medellin, Antioquia	1987	STA		all pregnancies	IND,SP			16.1								4634	
Medellin, metropolitan	1988-89	CS	33	maternal deaths	ABO							13		18.2		5627	
Popayan	1966-67	CS	1001	RS, W repr.age	IND				11.6						570 IND/1000W; urban	5892	
Valle de Aburra, Antioquia	1987	STA		all pregnancies	IND,SP			18.9								4860	
Valle del Cauca	1986	STA	31	maternal deaths	ILL											5627	
Valle del Cauca	1986	STA	31	maternal deaths	ABO											4796	
Valle del Cauca	1982-84	STA	139	maternal deaths	SE											4796	
																5207	
<b>ECUADOR</b>																	
National	1988	STA		maternal deaths	ABO							8		7.3		5851	
National	1987	STA	355	maternal deaths	ABO									8		5707	
National	1984	STA	384	maternal deaths	ABO							17		8.9		4751	
National	1984	STA		maternal deaths	ABO							8		7.1		5804	
National	1978	STA		abo. deaths	ABO							13				5022	
National	1972	H		abo.adm.	ABO			16.2D								4648	
National	1968-72	STA		abo. deaths	SP,ILL								1.7		Social Security Hospitals	5203	
National	1971	STA		maternal deaths	ABO							9		4.4		4685	
National	1967			pregnancies	IND,SP				11.1							4665	
<b>GUYANA</b>																	
National	1984	STA		maternal deaths	ABO							62		30.8		5851	
National	1984	STA		maternal deaths	ABO									29.4		5804	
National	1984	STA	17	maternal deaths	ABO									29		5707	
National	1979	STA	4	abo. deaths	ABO							17				4751	
National	1977	STA		abo. deaths	ABO							26				5022	
National	1971	H	1962	abo.adm.	ABO			28D			0.4	114D				4665	
10 Health Centres	1986	HS	498	W, pregnant	IND,SP					21*					*30% among para 2+	5155	
<b>PARAGUAY</b>																	
National	1988-89	STA		maternal deaths	ABO							30		13.6		5804	

# UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor- tion	GYN OBS										
National	1987	CS	810	W15-44	IND,SP					17.5	1.3					5897	
National	1987	CS	1541	W15-44	IND,SP					19.2	1.4					5897	
National	1986	STA	140	maternal deaths	ABO								15		14	5707	
National	1986	STA		maternal deaths	ABO								34		13.5	5851	
National	1984	STA	155	maternal deaths	ABO								70		12.3	4751	
National	1978	STA		abo. deaths	ABO											5022	
National	1977	CS	1233	W 15-44, ever M	SP,IND					23						5128	
National	1973-77	STA		abo. deaths	SP,ILL								8.5		Data for four years of period	5203	
National	1977	CS	2048	W, 15-44	SP,IND				7.4	15.3						4641	
National	1968-72	STA		abo. deaths	SP,ILL								8.2			5203	
National	1971	STA		maternal deaths	ABO								84		20.2	4685	
National	1971	H		abo.adm.	ABO		18.2D								Social Security Hospitals	4648	
National	1961-65			pregnancies	IND					19.0						4665	
Asuncion	1987	CS	731	W15-44	IND,SP					23.4	1.5					5897	
Asuncion	1971	CS		W, 15-49	ABO					14.6						5094	
Asuncion	1970	CS	1500*	W, 15-44	SP,IND			28.9		22.3	3.3A				1-year data, study 1971; *about	5447	
Asuncion	1969	CS		W, 15-44	ABO					23.7	3.5A					5094	
Asuncion	1966-69	CS	1500*	W, 15-44	SP,IND			24.5		19.2					*About; period data; retrosp.study 1971	5447	
Asuncion	1961-65	CS	1500*	W, 15-44	ABO					11.5					Period data, study year 1971; *about	5093	
Asuncion	1965	CS		W, 15-44	ABO					11.0	1.5A					5094	
<b>PERU</b>																	
National	1989	E		ind.abos	IND			43							E based on abo.adm.	5877	
National	1985	H	168	maternal deaths	SP,IND										21.4	5358	
National	1985	H	168	maternal deaths	ILL										16.1	5358	
National	1983	STA		maternal deaths	ABO								10		11.2	5851	
National	1983	STA	538	maternal deaths	ABO										11	5707	
National	1982	STA	576	maternal deaths	ABO								11		12.5	4751	
National	1981	H	57800	abo.adm.	IND,SP				8.7							5671	
National	1981	E		ind.abos	IND					31.3						5671	
National	1978	H	4651	abo.adm 6months	IND	82.9	8.7	11.8								4662	
National	1978	H	4651	abo.adm 6months	ABO		10.5	14.3				0.3	43		25.9	4662	
National	1978	STA		abo. deaths	ABO								13			5022	
National	1977	H	9287	abo.adm.	ABO			10.2	13.7			0.2	28		20.7	4662	
National	1977	H	9287	abo.adm.	IND	84.7	8.6	11.6								4662	
National	1977	H	37148	abo.adm.	IND,SP				6.0							5671	
National	1977	E		ind.abos				17.7								5671	
National	1968-72	STA		abo. deaths	SP,ILL									2.2		5203	
National	1970			maternal deaths	ABO								17		7.7	4685	
National	1960			pregnancies	IND					5.5*						4665	
6 health facilities	1990	H	2305	abo.adm.	ABO			13.6D				0.3*	310			5774	
Arequipa	1980-84	H	6182	abo.adm.	SE	9.9	1.8					1.3				5720	
Arequipa	1980-84	H	6182	abo.adm.	ABO			18.1								5720	
Cerro de Pasco	1968	CS		W	ABO				5.3	20						4662	
Lima	1988-90	H	1742	abo.adm.	SE	9.7	8.3 G						1.2			5715	
Lima	1988-90	H	1742	abo.adm.	ABO			85.8G					0.1			5715	

PERU cont.

## UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			% of Women Ever/A Abort.	Av. No of Abo's per W Abort.	Case Fatality (%)	per 100,000				% of All Matern. Deaths
						Admissions	Live Births	Pregnancies				Live Births	Women RepAge			
Lima	1988	HS	1988	abo.adm.	IND,SP			10.9				0.7			Hospital Cayetano Heredia	5716
Lima	1975-84	H	4455	abo.adm.	ABO		45 G	13.2				0.8	102		Hospital Cayetano Heredia	5717
Lima	1975-84	H	4455	abo.adm.	SE	24.8	11	3.3				3.1	102	35.8	Hospital Cayetano Heredia	5718
Lima	1972-79	H	1844	abo.adm.	IND	3.5										4864
Lima	1969	CS		W, 20-34	ABO				21.4	4.8A					1-year data	4870
Lima	1969	CS		W, 35-44	ABO				25.0	1.6A					1-year data	4870
Lima	1969	CS	1500	W, 15-44	SP,IND			29.4	22.7	3.2A					1-year data, study 1970	5447
Lima	1965-68	CS		W, 35-44	ABO				19.1						Period data	4870
Lima	1965-68	CS		W, 20-34	ABO				10.8						Period data	4870
Lima	1965-68	CS	1500	W, 15-44	SP,IND			14.4	12.3						Period data,retrosp.study 1970	5447
Lima	1967	HS	939	W	ABO			17.8								4662
Lima	1967		500	W, 20-39	IND				5							5590
Lima	1961-65	CS	1500	W, 15-44	ABO				8.0						Period data, study year 1970	5093
Lima	1964	CS		W, 20-44	ABO			17.5		30						4662
Lima	1962-64	STA	84	maternal deaths	ABO							21		13.5		5148
Lima	1964	CS	500*	RS, W, 20-39	PIND					5					*1662 pregnancies	5462
Lima	1964	CS	500*	RS, W, 20-39	ABO					15					*1662 pregnancies	5462
Unknown	1978-82	H	3940	abo.adm.	SE	6.8						6			Hospital Loayza	5719
<b>SURINAME</b>																
National	1985	STA	7	maternal deaths	ABO									14		5707
National	1985	STA		maternal deaths	ABO								10	14.2		5851
<b>URUGUAY</b>																
National	1988	STA		maternal deaths	ABO								2	5.0		5851
National	1987	STA		maternal deaths	ABO									26.7		5804
National	1986	STA	14	maternal deaths	ABO									36		5707
National	1985	STA	23	maternal deaths	ABO									26.1		4790
National	1984	STA	5	abo. deaths	ABO								10			4751
National	1978	STA		abo. deaths	ABO								8			5022
National	1973-77	STA		abo. deaths	SP,ILL									1.4	Data for four years of period	5203
National	1968-72	STA		abo. deaths	SP,ILL									1.7		5203
National	1971	STA		maternal deaths	ABO								8	11.4		4685
National	1968			pregnancies	IND					32.6						4665
Montevideo	1964			ill.abos	ILL			300								5190
<b>VENEZUELA</b>																
National	1987	STA		maternal deaths	ABO								10	19.4		5851
National	1985	STA		maternal deaths	ABO									23.0		5804
National	1983	STA	303	maternal deaths	ABO								12	19.8		4751
National	1980-83	STA	291	maternal deaths	ABO									23		5707
National	1978	STA		abo. deaths	ABO								13			5022
National	1973-77	STA		abo. deaths	SP,ILL									2.4	Data for four years	5203
National	1968-72	STA		abo. deaths	SP,ILL									3.4		5203
National	1972	STA		maternal deaths	ABO								23	24.2		4685
National	1972	H		abo.adm.	ABO			16.9D							Social Security Hospitals	4648
National	1968			pregnancies	IND SP				19.6							4665

### UNSAFE ABORTION IN LATIN AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Live Births	Women RepAge
						Abor tion	GYN OBS										
10 health facilities	1990	H	6268	abo.adm.	ABO			16.3D				0.1*	53		*n=1892	5774	
Caracas	1973	H		abo. deaths	IND,SP									70	Concepcion Palacios Maternity	4641	
Caracas	1964-72	H	471715	obs.adm.	ABO	17.5*	22.0								*% of obs.adm.; Maternidad Concepcion Palacios	4564	
Caracas	1964-72	H	471715	obs.adm.	SE							0.2	38	37.2	Maternidad Concepcion Palacios	4564	
Caracas	1969-70	H	21840	abo.adm.	ABO		20.2					0.2		27.6		5413	
Caracas	1969-70	H	123	maternal deaths	SE									20.3		5413	
Caracas	1964-68	H	49652	abo.adm.	ABO		20.1					0.2		41.2		5413	
Caracas	1964	CS		RS, WM repr.age	ABO			19.7	16.3							5151	
Caracas	1962-64	STA	46	maternal deaths	ABO								45	46.4		5148	
Caracas	1964	H		abo.adm.	ABO			19.6	25							5469	
Caracas	1964	CS		RS, WM repr.age	IND					31						5151	
Caracas	1959-63	H	41816	abo.adm.	ABO			19.9				0.2		31.2		5413	
Caracas area	1965-69		236	maternal deaths	SE								32	40.2		5469	
Caracas area	1965-69		236	maternal deaths	ABO								36	44.8		5469	
Caracas area	1960-64		242	maternal deaths	ABO								39	38.7		5469	
Caracas area	1960-64		242	maternal deaths	SE								35	34.7		5469	
Hospitals	1976-78	H	899	abo.adm.	PPIND	53.5						0.02				4762	
Hospitals	1976-78	H	899	abo.adm.	IND	1.4										4762	
Maracaibo	1961-67	H	84	maternal deaths	SE								34	27.4		4781	
Maracaibo	1961-67	H	84	maternal deaths	SE,HAE								40	32.1		4781	



## 9.5 North America

# UNSAFE ABORTION IN NORTH AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		% of Women Ever/A Abort.			Live Births	Preg- nanc ies				Live Births	Women RepAge
						Abor- tion	GYN OBS										
<b>NORTHERN AMERICA</b>																	
<b>CANADA</b>																	
National	1984	STA	11	maternal deaths	ABO										5707		
National	1968-72	STA		abo. deaths	SP,ILL							0.2			5203		
National	1960-65			ill.abo. deaths	ILL							0.6			5190		
<b>USA</b>																	
National	1987	STA	251	maternal deaths	ABO										5707		
National	1985	STA	1	ill.abo. deaths	ILL										5241		
National	1983	STA	14	abo. deaths	ILL								7% ill.abos (1)		4956		
National	1980	STA	17	abo. deaths	ILL								6% ill.abos (1)		4956		
National	1980	STA	334	maternal deaths	ILL										5161		
National	1975-79	EA	11300*	ill.abos	ILL									*E range 5'000-23'000	4583		
National	1978	STA		ill.abos	ILL					0.05					4663		
National	1975-77	STA	8	ill.abo. deaths	ILL										4845		
National	1976	STA	3	ill.abo. deaths	ILL										5030		
National	1975	STA	48	abo. deaths	ILL								8% ill.abos (4)		4956		
National	1975	STA	5	ill.abo. deaths	ILL								+1 PILL		4752		
National	1968-72	STA		abo. deaths	SP,ILL							0.3			5203		
National	1972	E	130000	ill.abos	ILL						0.03			39 deaths and E ill.abos	5069		
National	1972	STA	90	abo. deaths	ILL								43% ill.abos (39)		4956		
National	1971	STA		abo. deaths	ABO							0.2			4654		
National	1971	STA	65	ill.abo. deaths	ILL										4752		
National	1970	STA	803	maternal deaths	ILL										5161		
National	1968-69	STA	111	ill.abo. deaths	ILL										4752		
National	1968	STA		abo. deaths	ABO							0.3			4654		
National	1968	E	5000	abo. deaths	ILL				20		0.4			E 1'200'000 ill.abos	5163		
National	1967	E	829000	ill.abos	ILL			23.5						E based on N.C. study	4960		
National	1965-67	STA		maternal deaths	ILL							5			4806		
National	1967	E	3-2mil	ill.abos	ILL				20-25		0.3				16.7		
National	1964	E	1000000	ill.abos	ILL				20		0.5				45		
National	1960-64	STA		maternal deaths	ILL							7			19.4		
National	1960	EA	1000000	ill.abos	ILL				30						5021		
Atlanta	1972	H	1272	L+ill abo.adm.	ILL	3.8			0.9						4921		
Atlanta	1971	H	585	L+ill abo.adm.	ILL	15.7			1.6						4921		
Atlanta	1970	H	204	L+ill abo.adm.	ILL	34.8			1.2						4921		
Atlanta	1969	H	96	L+ill abo.adm.	ILL	68.8			1.1						4921		
California	1967			maternal deaths	ABO										28.4		
California	1957-65	HS	1063*	maternal deaths	ILL										21.0		
California	1958-64	EA	100000	ill.abo. deaths	ILL			26.7	18.3						1063/1288 reported		
California	1957-62	STA	551	maternal deaths	ABO										19.6		
California	1957-62	STA	551	maternal deaths	IND										15.4		
Chattanooga	1964-65	H	738*	abo.adm.,non-L	SE	2.8		3.4D							*excl.7 therapeutic abos		
Chattanooga	1964-65	H	738*	abo.adm.,non-L	ABO			11.9D							*excl.7 therapeutic abos		
Chattanooga	1964-65	H	738*	abo.adm.,non-L	ILL	2.6		3.1D							*excl.7 therapeutic abos		

USA cont.

## UNSAFE ABORTION IN NORTH AMERICA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Preg- nanc ies			% c' Women Ever/A Abort.	Live Births				Live Births	Women RepAge
						Abor- tion	GYN OBS										
Detroit	1960 * *	H	662	septic abos	SE										5530		
Georgia	1963-72	H*		maternal deaths	ABO									*two year period	4593		
Georgia	1965-69	STA	177	maternal deaths	ILL									*urban charitable hospital	4806		
Georgia	1960-64	STA	270	maternal deaths	ILL										4806		
Los Angeles	1970	H	3774	L+se abo.adm.	SE	8.1		3.1							4925		
Los Angeles	1969	H	1146	L+se abo.adm.	SE	48.8		5.6							4925		
Los Angeles	1968	H	828	L+se abo.adm.	SE	84.6		7.1							4925		
Los Angeles	1967	H	645	L+se abo.adm.	SE	98.9		7.7							4925		
Los Angeles	1966	H	648	L+se abo.adm.	SE	99.6		7.2							4925		
Michigan	1960-64	STA	120	abo. deaths	ABO										5530		
New York City	1960-70	EA	50000	ill.abos	ILL										4812		
New York City	1965-67	CS	889	WM, 18-38	ILL				8.3*		0.05*			*E 25 deaths	4812		
New York City	1963			maternal deaths	ABO									*abo. attempts	4593		
New York City	1962	H		abo.adm.	SP,ILL										5413		
North Carolina, urban	1968	CS*	1251	W, 18-44	ILL										5037		
San Francisco	1962-64	STA	1	maternal deaths	ABO									*RRT	5148		
Texas	1977	H	180	abo.adm.	ILL	5					11				4900		
Texas	1969-73			maternal deaths	ABO										4593		

## 9.6 Asia

# UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor tion	GYN OBS										
<b>SOUTH EASTERN ASIA</b>																	
<b>CAMBODIA</b>																	
<b>INDONESIA</b>																	
National	1989	H	3651	abo.adm.	ABO			23.3	17.8							5654	
National	1989	EA	750'000	abos	IND(L)			16.7*								5860	
National	1975	EA	1152000	abos	ABO			20D				0.6			750'000-1 million, 16.7-22.2%	5273	
National	1973	EA		pregnancies	ABO				20						At least 1'152'000 abos/year; 6'900 abo. deaths	5273	
Bali	1989	H	54	abo.adm.	ABO			20.5	16.7							5654	
Bali	1980-82	CS	295	maternal deaths	SE,HAE									6.8		5349	
Bali	1980-82	CS	279	maternal deaths	ABO									9.7		5350	
Bali	1980-82	CS	295	maternal deaths	ABO								50	7*	*incl. non-obstetric deaths	5282	
Bandung (West Java)	1974	H		abo.adm.	ABO		20									5273	
Central Java	1989	H	821	abo.adm.	ABO			31.8	22.5							5654	
Central Java*	1986-87	CS	1960	W, pregnant	ABO				2.9						*3/17 districts	5831	
East Java	1989	H	615	abo.adm.	ABO			19.0	15.0							5654	
East Java	1972	H	5600	abo.adm.	ABO*		16*								*only 17 certain SP	5273	
East Kalimantan	1989	H	119	abo.adm.	ABO			32.1	23.7							5654	
East Nusatenggara	1989	H	70	abo.adm.	ABO			14.9	12.2							5654	
Jakarta	1989	H	1989	abo.adm.	ABO			19.6	15.7							5654	
Jakarta	1979	HS		abo.adm.	IND	32.7									RRT	5275	
Jakarta	1977	HS	893	abo.adm.	SE	17.1										4867	
Jakarta	1972-74	H	1069	abo.adm.	IND,SP							0.6			Dept. of Obs/Gyn, University H	4641	
Jakarta	1972	H		abo.adm.	ABO		20									5273	
Jakarta, metropolitan	1975	H		abos	ABO			39.6D							18 hospitals; E 25-60% PIND	5275	
Jakarta, metropolitan	1975	H		abos	ABO			6.7 D							22 maternity clinics	5275	
Jakarta, metropolitan	1972	H		abos	ABO			18.3D							18 hospitals; E 25-60% PIND	5275	
Jakarta, metropolitan	1972	H		abos	ABO			3.9 D							22 maternity clinics	5275	
North Sumatra	1989	H	144	abo.adm.	ABO			28.3	20.5							5654	
Riau	1989	H	83	abo.adm.	ABO			38.6	25.2							5654	
South Sumatra	1989	H	101	abo.adm.	101			14.5	12.3							5654	
Unknown	1972-75	H		abo.adm.	IND,SP				31.4						Retrospective study	Cipto Mangunkusumo Hospital	5699
West Java	1989	H	695	abo.adm.	ABO			29.4	21.0							5654	
West Sumatra	1989	H	81	abo.adm.	ABO			24.1	18.2							5654	
Yogyakarta	1989	H	119	abo.adm.	ABO			26.3	20.0							5654	
<b>LAO, P.D.R.</b>																	
<b>MALAYSIA</b>																	
National	1988	STA	205	maternal deaths	ABO								0.3		1.0	5842	
National	1976	CS		WM, 15-44	IND					2.5						5290	
National	1974	CS	9506*	RS, WM 15-44	IND,SP			10.3	9.2						*41'221 pregnancies;	399 IND,SP/1000W	5290
National	1974	CS	9506*	RS, WM 15-44	IND			4.3	3.9	10.7					*41'221 pregnancies;	167 IND/1000W	5290

## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Abor- tion	GYN OBS	Live Births	Preg- nanc- ies			% of Worr an Ever/A Abort.	Live Births				Women RepAge
National	1973	CS	9506	RS, WM 15-44	IND			19.0	14.7						5290		
National	1970	CS	9506	RS, WM 15-44	IND			6.3	5.4						5290		
National	1966-67	CS		WM, 15-44	IND					1					5290		
Hospital	1973-74	H	873	abo.adm.	SP,IND		74		22.3						5268		
Hospital	1973-74	H	873	abo.adm.	IND	17.5	13		3.9						5268		
Hospital	1967-73	H		maternal deaths	SE							100		23.1	5268		
Kuala Lumpur	1987	H	521	abo.adm.	ABO				8						5637		
Kuala Lumpur	1978-81	CS	51	maternal deaths	ABO							17		24	5282		
Kuala Lumpur	1976-78	H	2157	abo.adm.	IND	32.1					0.4				4762		
Kuala Lumpur	1976-78	H	2157	abo.adm.	PPIND	72.1									4762		
Kuala Lumpur	1976-77	H	3067	abo.adm.	PIND	31.3									4728		
Kuala Lumpur	1976-77	H	3067	abo.adm.	IND	7.8									4728		
Kuala Lumpur	1973-74	H	3921	pregnancies	IND				3.9						4665		
Kuala Lumpur	1968-74	H	1699	abo.adm.	ABO		11.4D		10.2		0.2	27D		30.8	4655		
Kuala Lumpur	1973-74	H	3921	pregnancies	IND,SP				22.3						4665		
Kuala Lumpur	1968-73	H	13	maternal deaths	SE							23		23.1	4665		
Kuala Lumpur	1968-69	H		abo.adm.	SE	0.4									5574		
Kuala Lumpur	1961-62	H	1000	abo.adm.	ABO			14.7D		1.6	0.7				4665		
Kuala Lumpur	1961-62	H	1000	abo.adm.	SE	23.9		3.5D			2.5				4852		
Kuching	1978-80	H	100	ill.abos	ILL			0.1							5453		
Peninsular	1972	H	1076	se.adm.	SE						14.1				4783		
Peninsular	1972	H	14741	abo.adm.	SE,SP							1.8		All hospitals	5290		
Peninsular	1972	H	14741	abo.adm.	IND	7.3						0.7		All hospitals	5290		
Peninsular	1972	H	14741	abo.adm.	SP,IND							0.1			5180		
Peninsular	1968-71	H	50009	abo.adm.	SP,IND			13.6D	11.9		0.2	24D			5180		
Peninsular	1968-71	H	50009	abo.adm.	IND	6.3		0.9D	0.7		1.6	13D			5180		
Peninsular	1964-67	H	36723	abo.adm.	SP,IND			10.7D	9.7		0.2	19D			5180		
Peninsular	1964-67	H	36723	abo.adm.	IND	8.4		0.9D	0.8		1.3	12D			5180		
Peninsular	1960-63	H	38348	abo.adm.	SP,IND						0.2				5180		
Peninsular	1960-63	H	38348	abo.adm.	IND	9.2					1.3				5180		
Sarawale	1978-80	H	100	ind.abo.adm	IND							2			5180		
West Malaysia	1975			pregnancies	IND				14						4903		
West Malaysia	1975			pregnancies	SP,IND				30						5268		
<b>MYANMAR</b>															5268		
National	1990	E		pregnancies	IND,SP				8.4					40	5632		
National	1986	CS		Household study	IND,SP			8.2							5632		
National	1986	CS		Household study	IND,SP			7.2							5632		
National	1986	CS		Household study	IND,SP			6.8							5632		
National	1980	CS		Household study	IND,SP			5.8							5632		
Rangoon	1983-87	H	3101	abo.adm.	IND			41.6D			0.2	81D		75	5546		
Rangoon	1978-82	H	44	maternal deaths	ABO						0.2	98D		50	5248		
Rangoon	1977	H	7185	abo.adm.	SE	17.5		5.9							5815		
Rangoon	1977	H	7185	abo.adm.	ABO			39.9			0.3	122		35.5	5815		
South Okkalapa	1978-82	H	44	maternal deaths	IND						0.2	98 D		50	5670		

## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Abor tion	GYN OBS	Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
<b>PHILIPPINES</b>																	
National	1987	STA		maternal deaths	ABO							10		9.9		5859	
National	1985-86	H		maternal deaths	IND									24	78 hospitals	4788	
National	1973-77	STA		abo. deaths	SP,ILL								1.3		Data for four years	5203	
National	1975	STA	1753	maternal deaths	ABO							10		7.1		5369	
National	1968-72	STA		abo. deaths	SP,ILL								1.3			5203	
Cabanatuan	1976	H	485	abo.adm.	ABO		20.5									5483	
Cabanatuan	1976	HS	395	RS, abo.adm.	IND	11.6										5483	
Cavite	1980	CS		pregnancies	IND			17								4788	
Cavite prov., 5 barrios, rural	1976	CS	676	all WM, 15-49	IND				17	1.3					12% hospitalized	5087	
Hospital	1984	H	12855	pregnancies	IND			27.2							Prospective study	4788	
Hospitals	1964-65		190	maternal deaths	SE									16		4788	
Laguna	1967-69	CS		pregnancies	IND			1.2								4788	
Laguna prov.	1967-69	CS		W repr.age, ever M	IND				30							5087	
Laguna province	1967-69	CS	4787	W repr.age, ever M	IND				13*						*during last 5 years	4641	
Luzon	1980	CS		pregnancies	IND			33.4								4788	
Manila	1990	H	4485	obs.adm.	ABO		12.1								Philippine General Hospital	5891	
Manila	1978	H		W30-34 pregnant	IND			11.6								4788	
Manila	1978	H		W20-29 pregnant	IND			26.9								4788	
Manila	1976	HS	1072	RS, abo.adm.	IND	27										5483	
Manila	1976	H	1523	abo.adm.	ABO		15.8									5483	
Manila	1969-70	H		pregnancies	IND			25.8								4788	
Rural Area	1979	CS		W	IND				17							4951	
Selected Areas	1979	CS	286	W17-50 aborting	ILL					1.6						4901	
Selected Areas	1979	PS	106	abo.providers	ILL										12 to 1'800 clients/year, average 156	4901	
Sta Rosa, Laguna	1963-67	CS	4787*	all W 15-45 ever M	ABO			8.5	12.9	1.2					Period data, study 1968-69; *8'473 pregnancies	5540	
Sta Rosa, Laguna	1963-67	CS	835*	20%RS, W ever M	ABO			8.5	28.5	1.5					Period data, study 1968-69; *4'090 pregnancies	5540	
Sta Rosa, Laguna	1963-67	CS	619*	W15-45, ever M aborting	ABO			80.8	43.7	1.2					Period data, study 1968-69; *1'647 pregnancies	5540	
<b>SINGAPORE</b>																	
National	1985-87	STA	10	maternal deaths	ABO									30		5836	
National	1973-77	STA		abo. deaths	SP,ILL								0.4			5203	
National	1968-72	STA		abo. deaths	SP,ILL								0.9		Data for four years	5203	
Singapore	1974-76	STA	26	maternal deaths	ILL							1		3.8		4777	
Singapore	1974-76	STA	5368	abo.adm ex. L	IND,SP		4.2D				0.2	7D		34.6	86.7% L adm.	4777	
Singapore	1971-73	STA	35	maternal deaths	ILL							5		22.9		4777	
Singapore	1971-73	STA	5927	abo.adm ex. L	IND,SP		4.1D				0.2	9D		37.1	67.2% L adm.	4777	
Singapore	1968-70	STA	51	maternal deaths	ILL							6		15.7		4777	
Singapore	1970	H	3097	abo.adm.	SE	4.5	0.4				2.2	8			Kandang Kerbau & Thomson Rd Hs	4590	
Singapore	1964-70	AA		maternal deaths	ABO,ILL									22	Majority illegal abortions	4590	
Singapore	1968-70	STA	9265	abo.adm ex. L	IND,SP		6.7D				0.2	11D		29.4	16.9% L adm.	4777	
Singapore	1964-69	H	20277	abo.adm.	SE	7.2	0.6				2.3	15			Kandang Kerbau Hospital	4590	
<b>THAILAND</b>																	
National	1983-84	HS	4950	abo.adm, ex. L*	ILL	74.7				1.6	0.7				*excl. 750 therapeutic abos	5541	
National	1978	EA	300000	ill. abos	ILL										Minimum E based on 81 prov in 51/643 distr	4843	

THAILAND cont.

## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort. ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Abor- tion	GYN OBS	Live Births	Preg- nanc- ies			% of Women Ever/A Abort.	Live Births				Women RepAge
National	1973-77	STA		abo. deaths	SP,ILL											5203	
National	1972-73	EA	215000*	W, 15-45	ILL			12.5		2.8						5272	
National	1968-72	STA		abo. deaths	SP,ILL											5203	
National	1970	E	850000*	WM, 15-45	ILL					17-19						5272	
Bangkok	1969-82	H	26	maternal deaths	ILL							15		38.5	Ramathibodi Hospital	5820	
Bangkok	1977-79	HS	897	abo.adm. ex. L*	PIND	44		6 D							*also 802 L abos	4868	
Bangkok	1968-79	H	23628	abo.adm. ex. L	ABO			10.1D								5542	
Bangkok	1977-79	HS	9300	parturients	IND,SP					18.2					Ramathibodi Hospital	5752	
Bangkok	1977-78	HS	897	abo.adm. ex. L*	IND	25		3 D						25	*also 802 L abos	4868	
Bangkok	1968-78	H	21538	abo.adm. ex. L	ILL	20.9		2.1D				0.8	16D			5542	
Bangkok	1969-77	HS	865	ill abo.adm.	ILL							0.6				4824	
Bangkok	1973-77	H	237	maternal deaths	ABO								24		Siriraj+Rajvithi+Chulalongkornhospitals; 90% records	4693	
Bangkok	1973-77	H	237	maternal deaths	ILL								20		Siriraj+Rajvithi+Chulalongkornhospitals; 90% records	4693	
Bangkok	1972-73	H	3530	abo.adm.	SE	11.8										5504	
Bangkok	1972-73	HS	1083	abo.adm.	SE	11.7										4879	
Bangkok	1972-73	HS	1083*	abo.adm.	SP, IND				12.8		1.3					4879	
Bangkok	1973	HS	1188	abo.adm.	ILL	15						0.6			*incl.1% legal abos	5272	
Bangkok	1969-70	HS	144	abo.adm.	ILL	16.7						0.7				5272	
Bangkok	1969-70	H	139*	abo.adm. ex. L	SE	17.2		3.0D				4.2	126D		*excl. 5 therapeutic abos	5454	
Bangkok	1969-70	H	139*	abo.adm. ex. L	IND	30.9		5.4D				2.3	126D		*excl. 5 therapeutic abos	5454	
Bangkok	1969-70	H	139*	abo.adm. ex. L	ABO			17.5D				0.7	126D		*excl. 5 therapeutic abos	5454	
Bangkok	1969	H	1299	abo.adm.	SE	20		1.8D								4665	
Bangkok	1969	H	1299	abo.adm.	ABO			9.0D								4665	
Bangkok	1963-64	HS	70	abo.adm.	ABO							5.7				5272	
Chayapoom prov., rural	1979	E	17228	traditional abo	IND			84								4653	
Rural	1978	PS	81	abo.providers	ILL			24.5								4641	
Rural areas	1986-90	HS	2821	abo.adm.	ILL	36.9									5 rural hospitals (N, NE, S)	5706	
<b>VIET NAM</b>																	
<b>EASTERN ASIA</b>																	
<b>CHINA</b>																	
North Taiwan	1970	CS	1000	WM, repr. age	IND					28.2					RRT	5021	
Taiwan	1976	CS	446	RS, WM 35-39	ABO					29						4773	
Taiwan	1976	CS	1782	RS, WM 20-39	ABO					20						4773	
Taiwan	1975	CS	1100	RS, W	ABO					28.2					RRT	4665	
Taiwan	1973	CS	5541	RS, WM 20-39	ABO					18						4773	
Taiwan	1973	CS	1433	RS, WM 35-39	ABO					23						4773	
Taiwan	1973	PS	331	abo.providers	ILL			60-74								4641	
Taiwan	1970	CS	2495	RS, WM 20-39	ABO					12						4773	
Taiwan	1970	CS	651	RS, WM 35-39	ABO					19						4773	
Taiwan	1970	CS		WM	ILL					14						5312	
Taiwan	1970	CS	2491	WM, repr. age	ABO					11.8						5448	
Taiwan	1970	CS		WM, repr. age	ABO					13.8						5021	
															Underestimation		



## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	per 100,000		% of All Matern. Deaths				
						Admissions		Live Births	Preg-nanc ies		% of Women Ever/A Abort.	Case Fata- lity (%)				Live Births	Women RepAge
						Abor- tion	GYN OBS										
Taiwan	1968			pregnancies	ABO				20						4665		
Taiwan	1967			pregnancies	ABO				12.3						4665		
Taiwan	1967	CS	4304	RS, WM 20-39	ABO					11					4773		
Taiwan	1967	CS	4989	RS, WM 20-44	IND					12.3					5073		
Taiwan	1966-67	CS	40000	W, 15-50	IND			8.9	7.7						5073		
Taiwan	1967	CS	4989	WM, 20-44	IND			12.9						Study 1967	5073		
Taiwan	1967	CS	4145	WM, repr.age	ABO					11.2					5448		
Taiwan	1967	CS	1081	RS, WM 35-39	ABO					18					4773		
Taiwan	1965	CS	5360	RS, WM 20-44	IND					9.5		1.6			5073		
Taiwan	1965	CS	815	RS, WM 35-39	ABO					13					4773		
Taiwan	1965	CS	3188	RS, WM 20-39	ABO					9					4773		
Taiwan	1965	CS		WM	ILL					10					5312		
Taiwan	1965	CS	3049	WM, repr.age	ABO					9.2					5448		
Taiwan	1964			pregnancies	ABO						9				4665		
Taiwan	1964	CS	14189	RS, WM 20-39	IND					9.8					5073		
Taiwan	1964	CS	4989	WM, 20-44	IND			9.1						Study 1967	5073		
Taiwan, rural	1966-67	CS		W, 15-50	IND			6.0							5073		
Taiwan, Taichung City	1962	CS	2243*	RS, WM 20-39	ABO					12.0				*9976 pregnancies	5527		
Taiwan, Taichung City	1962	CS	2443*	RS, WM 20-39	IND					4.5				*9976 pregnancies	5527		
Taiwan, Taipei	1991	H	150	WM, repr.age	ABO					25				Health clinics	5708		
Taiwan, Taoyuan	1971-72	CS	3259	W, 15-49	IND					15.5		2.1			5177		
Taiwan, urban*	1966-67	CS		W, 15-50	IND			13.4						*Large cities	5073		
<b>DEM. P. REP. KOREA</b>																	
<b>HONG KONG</b>																	
National	1973-77	STA		abo. deaths	SP,ILL									0.1	5203		
National	1968-72	STA		abo. deaths	SP,ILL									0.2	5203		
<b>JAPAN</b>																	
National	1968-72	STA		abo. deaths	SP,ILL									0.1	5203		
<b>MONGOLIA</b>																	
National	1989	STA	100000*	pregnancies	IND					16				* about	5723		
National	1989	STA	100000*	pregnancies	IND,SP					25				* about	5723		
National	1985	STA		abos	IND,SP					20					5771		
Ulan Bator	1988	STA		abos	IND,SP					31.6					5771		
Ulan Bator	1985	STA		abos	IND,SP					37.0					5771		
<b>REPUBLIC OF KOREA</b>																	
National	1978	E		WM, 15-44	ABO					48				E based on CS	5301		
National	1976	E		WM, 15-44	ABO					39				E based on CS	5301		
National	1974			W, 15-44	IND					30					5221		
National	1974	CS	4867	WM 1x	IND			14		31		1.9			5509		
National	1974	CS	1967*	WM, 15-49	IND					31		1.9		*23'800 pregnancies	5303		
National	1973	E		WM, 15-44	ABO					30				E based on CS	5301		

### UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor tion	GYN OBS	Live Births			Preg- nanc ies	% of Women Ever/A Abort.				Live Births	Women RepAge
National	1971	CS	4932	W, EM, 20-44	IND			16.6	13.1	27.9							
National	1971	CS	3757	W 15-54, ever M	IND					17.2					5023		
National	1971	CS	6285	W 15-54, ever M	IND					24.4					5023		
National	1971	CS		WM, <44	IND					24					5267		
National	1971	E		WM, 15-44	ABO					26					5301		
National	1970	E		W	ABO									E based on CS	5449		
National	1970	E	331985	ind.abos	IND									1621 ABO/1000W	5267		
National	1970	E*	331000	ind.abos	IND					4.5A					5023		
National	1970	CS		WM, repr.age	IND					26				*other E 344000	5021		
National	1968	CS		WM, 20-44	IND					16					5023		
National	1967	CS		WM, repr.age	IND					20					5021		
National	1966	CS		WM, 20-44	IND					13					5023		
National	1965	CS		WM, repr.age	IND					11					5021		
National	1964	CS		WM, <44	IND					7					5267		
National	1960	E	93000	ind.abos	IND					1.5A					5023		
Kang Wha island	1975-77	CS	1106*	WM, pregnant	IND			20.6	15.8						5476		
Kang Wha island	1975-77	CS	917	WM, pregnant	IND			36.7	25.6					*2576 pregn.s; retrosp. study	5476		
Kang Wha island	1975-77	CS	1106*	WM, pregnant	ABO**			30.8	23.6	32.6	1.7			Prosp.study(917/1106W followedthrough pregnancy)	5476		
Seoul	1980-82	HS	620	W, 13-24, pregn	IND					18.7	1.2			Retrosp.study; *2576 pregn.s; **incl. stillbirths	5035		
Seoul	1977-78	PS	533000*	ind.abos	IND			275		23.5A				*726 providers	5512		
Seoul	1971	CS	1112	W 15-54, ever M	IND					38.2					5023		
Seoul	1970			abos	ABO			75		7.5A					5512		
Seoul	1970	E	110000*	ind.abos	IND									*100'000-120'000	4665		
Seoul	1970			WM, 20-44	IND			77D							4665		
Seoul	1968-69		2228	WM, 20-44	IND					40					4665		
Seoul	1968			WM, 45	IND			70			3.2				4665		
Seoul	1964	H	1000	FPL pats	IND						45.3				5018		
Seoul	1963			WM, 45	IND			55			3.2				4665		
Seoul	1963	E	55000	ind.abos	IND			49						Based on 49% of live birth or 130 IND/1000W	5018		
Seoul	1962	H	2497	gyn+obs pats	IND					25.8					5018		
Seoul	1961			WM, 20-44	IND				17						4665		
Seoul	1960-61	H	591	W, 20-40	IND					34.9					5018		
Seoul	1960	s	58	maternal deaths	IND						0.04				4665		
Seoul, Sungdong Gu	1970	CS	2228	RS, WM, 20-44, employed	IND			33.8	24.0	43.2	2.4			Retrosp.study; 1031 IND/1000W	5017		
Seoul, Sungdong Gu	1969	CS	2228	RS, WM, 20-44, employed	IND			74.8	40.0	17.6A					5017		
Seoul, Sungdong Gu	1964	CS	3204	RS, WM, 20-44	IND			14.7	12.1	25.1	1.9			Retrosp.study; 468 ABO/1000W	5018		
Seoul, Sungdong Gu	1963	CS	3204	RS, WM, 20-44	IND			49.0	31.2	13.0A					5018		
Seoul, Sungdong Gu	1962	CS	3204	RS, WM, 20-44	IND			37.6	25.6	8.6A					5018		
Seoul, Sungdong Gu	1961	CS	3204	RS, WM, 20-44	IND			21.1	16.6	5.2A					5018		
<b>WESTERN ASIA</b>																	
<b>BAHRAIN</b>																	
National	1977-86	STA	37	maternal deaths	ABO								2	5.4	5832		

BR 13000 SA 01 10 F 34  
 WHO/FHE/MSM/93.1  
 Page 6

## UNSAFE ABORTION IN ASIA

## Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor- tion	GYN OBS										
<b>CYPRUS</b>																	
<b>IRAQ</b>																	
Baghdad	1964-70	H	5	abo. deaths	IND,SP									9.4	Karkh Maternity Hospital	4641	
Basrah area	1980	CS	4813	W, repr. age	ABO			2.6	12.6							5468	
<b>ISRAEL</b>																	
National	1980-83	E	6000	ill.abos	ILL			8.3	6.8						Jewish	5690	
National	1973-77	STA		abo. death's	SP,ILL							0.2			Data for three years	5203	
National	1968-72	STA		abo. death's	SP,ILL							0.2				5203	
National	1968	H		abo.adm.,Jewish	ABO			23.3								5266	
National	1968	H		abos non-Jewish	ABO			9.3								5266	
National	1964-66	H		abo.adm, non- Jewish	IND			7.8								5049	
National	1964-66	H	13751	abo.adm,Jewish	IND	6.8H		27.1								5049	
National	1964	H		Arab pats	IND				1.3						1-year data	5049	
National	1963	H		abos non-Jewish	ABO			8.5								5266	
National	1963	H		abo.adm.,Jewish	ABO			23.9								5266	
National	1960 *	E		ind.abos	IND				33						*early 1960's	5266	
Haifa - Nazareth	1965	CS		W	IND			8.8	22.6							5049	
Jerusalem	1974-76	H	16648	Parturients	ABO				10.8						93% of W.Jerusalem parturients	5765	
Tel-Aviv and Jaffa	1960	E		W, Jewish	IND				46.7						Based on H data 1959-60	5049	
<b>JORDAN</b>																	
National	1967	H		gyn+obs adm.	ABO		31.7									4734	
Jerusalem	1967	H	1000	W, FPL clinic	ABO				45.5							5589	
Jerusalem	1967	H	1000	W, FPL clinic	ILL*				7.7						*admitted	5589	
Jerusalem	1967	PP	1000	private pat.s	ILL*				7.8						*admitted	5589	
Jerusalem	1967	PP	1000	private pat.s	ABO				22.5							5589	
Jerusalem	1964	H		abo.adm.	IND	90	28.5									5589	
<b>KUWAIT</b>																	
National	1973-77	H	21018	abo.adm.	SP,IND			20.0D		2.6	0.01	2 D		5.3	Kuwait Maternity Hospital	4948	
National	1969-73	H	18300	abo.adm.	ABO		16.3	23.9			0.01	3		4.3		4666	
National	1972	H	8000	abo.adm.	SP,ILL			25								4734	
Private hospitals	1970	s H	1095	abo.adm.	ABO			18.9D								4948	
<b>LEBANON</b>																	
Beirut	1971-82	H	45	maternal deaths	ABO							11		8.9	American University of Beirut Medical Center	5507	
Beirut	1971-82	H	45	maternal deaths	SE							6		4.4		5507	
Beirut	1961-71	H	3190	abo.adm.	IND,SP						0.5				American University Hospital	4641	
Beirut	1961-71	H	3190	abo.adm.	IND,SP						0.5				American University Hospital	5606	
<b>OMAN</b>																	

# UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor- tion	GYN OBS	Live Births			Preg- nanc ies	% of Women Ever/A Abort.				Live Births	Women RepAge
<b>QATAR</b>																	
<b>SAUDI ARABIA</b>																	
Central region desert area	1978-79	CS	165	mothers	SP				2.9						5772		
Riyadh	1983-86	HS	4498	RS, pregnant W	IND,SP		30.2	20.1						4 hospitals	5763		
Riyadh	1983-86	HS	4498	RS, pregnant W	IND		6.9	4.6						4 hospitals	5763		
Riyadh	1978-80	H	29	maternal deaths	ABO						5		10.3	Maternity & Children Hospital	5506		
Tamnia, Sarawat Mt, Asir prov.	1978-79	CS	125	mothers	SP				8.3						5772		
Tihama, SW region	1978-79	CS	159	mothers	SP				3.0						5772		
<b>SYRIAN A. REP.</b>																	
<b>TURKEY</b>																	
National	1987	CS		abos	ABO(L)				31.8						5721		
National	1986			WM, <45	IND					20					5307		
National	1986	EA	450000	abos	ABO				20					E 80% self-induced	5615		
National	1984	CS		abos	IND,SP				22.7						5721		
National	1982-83	CS	7872115	W repr. age, ever M	ABO		25.6	20.1	4.6A						5234		
National	1982-83	CS	7872115	W repr. age, ever M	IND		15.4	12.1	2.8A						5234		
National	1982-83	CS	7872115	W repr. age, ever M	IND				19						5234		
National	1982-83				IND				12.1	2.8 A					5753		
National	1983	CS	5398	RS, W repr. age	IND					37					5751		
National	1982-83	CS	7872115	W repr. age, ever M	ABO					37					5234		
National	1982-83				ABO				20.1	4.6 A					5753		
National	1975-82	STA	735	maternal deaths	ABO,SE						0.2			0.7	5319		
National	1981	E	300000	ind. abos	IND										4840		
National	1977-78	CS		WM, repr. age	ABO				15.2						5234		
National	1977-78	CS		WM, repr. age	IND				8.9						5234		
National	1978			ind.abos	IND			17							5319		
National	1978			WM, repr. age	ABO					34					5234		
National	1978			W, repr. age	IND					16.8					5234		
National	1974-75	CS		WM, repr. age	IND				7.7						5234		
National	1974-75	CS		WM, repr. age	ABO				14.4						5234		
National	1975	CS	1044	RS, WM <45	IND					33.1					5216		
National	1975	CS	1521	WM, <44	ABO		17.2			33.1	2.1			RRT 700 ABO/1000W	4704		
National	1975	CS	1521	RS, WM <45	ABO					32.5					5216		
National	1975	CS	1521	WM, <44	IND		7.9	6.7	13.9		2.2			304 IND/1000W	4704		
National	1967-74	STA	2183	maternal deaths	ABO,SE							5		7.2	5319		
National	1973			ind.abos	IND			12							5319		
National	1973	CS	4581	W	ABO			17.3		33.1	1.8			600 ABO/1000W	4704		
National	1973	CS	4581	RS, WM -45	SP,IND			27.3		5.5A				1-year data	4732		
National	1973	CS	4581	RS, WM -45	IND			16.0		3.1A				1-year data	4732		
National	1973	E	116000	ind.abos	IND									E based on 1973 CS	4732		
National	1968	EA	500000	abos	ABO					10A					5130		

DR KJ COC SH. 01. 10. F 35  
 WHO/FHE/MSM/93.13  
 Page 67

## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort.	Case Fatality (%)	per 100,000		% of All Matern. Deaths			
						Abortion	GYN OBS	Live Births	Pregnancies			% of Women Ever/A Abort.	Live Births				Women RepAge
National	1968	E	270000	abos	SP,IND			24		6.2A					Weighted E based on 1968 study	4732	
National	1968	E	165000	ind.abos	IND			14							Weighted E based on 1968 study	4732	
National	1968	CS	3068	W	IND					10.2						4704	
National	1968	CS	3068	W	ABO			17.2		32.6	2.1				700 ABO/1000W	4704	
National	1968	CS	3284	WM, 15-44	SP,IND			26.2		6.5A					1-year data	4732	
National	1968	CS	3284	WM, 15-44	IND			11.8		2.9A					1-year data	4732	
National	1960-66	STA	3299	maternal deaths	ABO,SE							12		8.6		5319	
National	1963			WM, <45	IND					8						5307	
National	1963			ind.abos	IND			8								5319	
National	1963	CS	5100	W	IND					7.6						4704	
National	1970*			WM, repr.age	ABO					33					*Late 1960's and early 1970's	5234	
Adiyaman province	1986	CS	1120	parturients	ABO					13.5						5824	
Ankara	1968-88	H	87	maternal deaths	ABO							85		60.9	Hacettepe University Hospital	5844	
Ankara	1976-78	H	649	abo.adm.	PPIND	59.0										4762	
Ankara	1976-78	H	649	abo.adm.	IND	23.0						0.4				4762	
Ankara	1975	CS	396	WM, <46	ABO			38.0	27.0	43	2.3				1000 ABO/1000W	4704	
Ankara	1968	H	4940	abos	ABO					39.1						5130	
Ankara	1967	H	2937	abo.adm.	ABO			26.2								5130	
Ankara	1966-67	HS	1388	gyn+obs pats	ABO					29	1.9					4704	
Cubuk Rural Health Distr.	1977-78	CS	2272	RS, WM 15-44	IND					16.6					Retrospective study	4732	
Cubuk Rural Health Distr.	1977-78	CS	2272	RS, WM 15-44	IND,SP			17.4	14.7	36.6	1.9				Retrospective study	4732	
Cubuk Rural Health Distr.	1977-78	CS	2272	RS, WM 15-44	IND			15.9	12.3	2.9A					1-year data; prospective study	4732	
Cubuk Rural Health Distr.	1977-78	CS	2272	RS, WM 15-44	IND,SP			27.9	21.5	5.2A					1-year data; prospective study	4732	
Etimesgut district (R)	1971	CS	441	WM repr.age	IND,SP			60		64	2.7					4732	
Etimesgut district (R)	1967	CS	498	WM repr.age	IND			6								4732	
Istanbul	1970	HS	168	FPL pat.s	ABO						2.0				69% ind.abos	4732	
Istanbul	1963-68	H	776	abo.adm.	SE	7.7										4732	
K. Mara province	1986	CS	2864	parturients	ABO					19.1						5824	
Nine provinces	1985	CS	2070	RS, W repr.age	IND,SP			5.6	5.2	25.4	1.2					5686	
Sincan, Etimesgut	1972	CS	270	WM, 15-44	IND,SP			22.6		38	2.1					4732	
Sincan, Etimesgut (R)	1971	CS	271	WM	ABO			20.9	17.1	41					900 ABO/1000W	4704	
Yenikent-Etimesgut (R)	1971	CS	261	WM	ABO			19.8	16.3	47					900 ABO/1000W	4704	
Yildizeli district	1976-81	CS	450	WM, 15-44	IND,SP					14.7						5770	
Yilizeli district	1982	CS	450	WM, 15-44	ABO			11.2	9.7						Lifetime pregnancies; rural	5770	
<b>UNITED ARAB EMIRATES</b>																	
<b>YEMEN</b>																	
<b>SOUTHERN ASIA</b>																	
<b>AFGHANISTAN</b>																	

# UNSAFE ABORTION IN ASIA

## Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort. Ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Abor- tion	GYN OBS	Live Births	Preg- nanc- ies			% of Women Ever/A Abort.	Live Births				Women RepAge
<b>BANGLADESH</b>																	
National	1991			maternal deaths	SE									20.7			
National	1988	E	24000	maternal deaths	IND									33*	*up to 1/3		
National	1988	H	1301	abo.adm.	ABO		15.7							1.4	2 Medical College+2 District Hospitals+ 2 Upazila Health		
National	1982-83	E	163000	traditional abo	IND										E based on Jamalpur study; other E 204'000		
National	1979	E	9700	abo. deaths	ILL										91% deaths non-medical abos		
National	1978-79	HS	1590	abo. compl.	ABO									31.3	National health centres		
National	1978-79	HS	1933	maternal deaths	IND							1.9			Data from 795 centres		
National	1978	E	216000	ind.abo. deaths	IND										E based on study of 795 health centres		
National	1978	E	780000	ind.abos	IND									1	7'800 deaths from abortion complications; *Data from ABO1		
Bolora area	1985	CS	1134	W, EM	ABO			0.1		0.3							
Chittagong	1980	H	112	ind.abo.adm.	IND									5.4	C. Medical College		
Chittagong	1978-79	HS	580	maternal deaths	IND								1.9		Survey of health centres		
Chittagong	1979	H	214	ind.abo.adm.	IND									4.2	C. Medical College		
Chittagong	1978	H	1820	gyn+obs. adm.	IND	62.5	22.0							2.0			
Chittagong	1978	H	400	ind.abo.adm.	IND									2.0	C. Medical College		
Chittagong	1978	H	640	abo.adm.	IND,SP									1.3	Medical College Hospital		
Chittagong	1977	H	300	tubectomy pat.s	ABO					35.3				1.4			
Comilla distr.	1978-79		104	maternal deaths	IND										15.4		
Dacca	1989	H	395	ind.abo.adm.										1.8	Dhaka Medical College		
Dacca	1983-84	HS	300	MR clients	ABO			4.5		11.4				1.3			
Dacca	1980	H	612	ind.abo.adm.	IND									21.2	D. Medical College		
Dacca	1977-80	H	2014	abo.adm.	ILL	24.4								7.7	Undercount		
Dacca	1978-79	HS	476	maternal deaths	IND								1.6		Survey of health centres		
Dacca	1978-79	H	607	abo.adm.	IND	6											
Dacca	1977-78	H	1003	abo.adm.	IND, SP									1.5			
Dacca	1978	H	817	ind.abo.adm.	IND									47.1	D. Medical College		
Dacca	1977-78	H	1003	abo.adm.	IND	24.2								4.9	Underestimation		
Dacca	1978	HS	479	abo.adm.	IND	27.3								2.5			
Dacca	1977-78	H	243	ind.abo.adm.	IND									4.9	Dhaka Medical College		
Dacca	1977	H	479	abo.adm.	IND,SP									1.3	Medical College Hospital		
Dacca	1974	H		gyn+obs adm.	ABO		20.1										
Four Upazila study*	1985-86	CS	6652	W, pregnant	IND,SP			5.0	4.6								
Four Upazilas*	1985-86	CS	6652	WM, 10-49, pregn.	IND			1.5	1.4					4.3	*Gopalpur+Raipura+Godagari+ Singra		
Four Upazilas*	1985-86	CS	6652	WM, 10-49, pregn.	IND,SP			5.0	4.5					1.6	* Gopalpur+Raipure+Singra+ Godagari		
Hospitals	1986	HS	1262	abo.adm.	PPIND	68								2.1	8 hospitals		
Hospitals	1986	HS	1262	abo.adm.	ABO									1.4	8 hospitals		
Hospitals	1986-	HS	1262	abo.adm.	IND	45									8 hospitals		
Jamalpur district, rural	1982-83	CS	58	maternal deaths	SE									129			
Jamalpur district, rural	1982-83	CS	9906	pregnancies	IND			4.4	4.2					2.4			
Khuina district	1978-79	HS	489	maternal deaths	IND								2.3		Survey of health centres		
Matlab	1976-86	CS	409	maternal deaths	IND										15.4		
Matlab	1982-84	CS	573	ind.abos	IND			2.7									
Matlab	1982-84	CS	1881	abos	IND,SP			8.7									
Matlab Comparison area	1986-87	CS	35	maternal deaths	ABO									37	42.9		

# UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort. ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		% of Women Ever/A Abort.			Live Births	Preg- nanc ies				Live Births	Women RepAge
						Abor- tion	GYN OBS										
Matlab Intervention area	1986-87	CS	22	maternal deaths	ABO							14	27.3		5621		
Matlab Thana	1976-85	CS	387	maternal deaths	ABO							99	18*	*incl. non-obstetric deaths	5282		
Matlab Thana	1976-85	CS	387	maternal deaths	IND							84	15		4760		
Matlab Thana	1976-85	CS	387	maternal deaths	IND,SP										5344		
Matlab Thana	1982	STA	8468	pregnancies	IND			2.5	2.3		4.6	118			4673		
Matlab Thana	1982	STA	8468	pregnancies	IND,SP			7.5	6.8		1.7	131			4673		
Matlab Thana	1967-68	CS	41	maternal deaths	IND							56	9		5072		
Matlab Thana	1967-68	CS	33	maternal deaths	IND										4695		
Mirpur area	1985-86	CS	1656	W, ever M	ABO			6.2		17.1	1.3				5596		
Narayangong	1986-87	HS	215	MR clients	ABO			11.6		29.3	1.2				5598		
Rajshahi Distr.	1978-79	HS	388	maternal deaths	IND								1.9	31.4	Survey of health centres	4656	
Tangail distr.	1982-83	CS	48	maternal deaths	SE							94			4618		
Tangail distr. (R)	1982-83	CS	48	maternal deaths	IND							81			5298		
Urban	1978	H		abo.adm.	ABO		50								4645		
<b>BHUTAN</b>																	
Thimpu	1976-87	H	44	maternal deaths	ABO							55		6.8	Thimpu General Hospital	5839	
<b>INDIA</b>																	
National	1992	E	4.6 m.	ill.abos	ILL											5694	
National	1991	E		maternal deaths	ILL									20		5759	
National	1990	E	10000	abo. deaths	ABO											5322	
National	1990	HS	3903	abo.adm.	IND,SP		9.1 H	18.8	15.2		0.4	76		18	10 teaching hospitals	5668	
National	1990	H	4134	abo.adm.	SE	4.7									10 teaching hospitals	5668	
National	1987-88	E	5-6mill	ill.abos	ILL											5641	
National	1987	STA												7.6		5641	
National	1986	CS	176	maternal deaths	ABO									8.0		5543	
National	1986	STA		maternal deaths										8.0		5861	
National	1985	STA		maternal deaths	ABO									11.5		5861	
National	1981	STA		maternal deaths	ABO									13.7		5861	
National	1978-79	H	1157	maternal deaths	SE							123		17.5		5577	
National	1977	STA	164	maternal deaths	ABO									7.9		5401	
National	1976	STA	163	maternal deaths	ABO									11.6		5401	
National	1975	STA	170	maternal deaths	ABO									8.2		5401	
National	1973	E	4000000	ind.abos	IND										+2 million sp. abos	4950	
National	1971	E		abos	ABO				10.1							4865	
National	1964	E	3900000	ind.abos	IND										Also 2.6 million sp.abos	4865	
27 Teaching Centres	1978-79	H	1851	maternal deaths	SE							0.4		14.3		4603	
41 Teaching Centres	1978-81	H	4707*	maternal deaths	ABO(L)							0.3	109D	15.1	*incl. L abo. deaths (92/710)	4606	
41 Teaching Centres	1978-81	H	4707*	maternal deaths	ILL								88D	12.2	*incl. 92 L abo. deaths	4606	
Alwar, Rajasthan	1974-79	CS	281*	W pregnant	ABO			3.0	2.9						*349 pregnancies	4611	
Alwar, Rajasthan	1975-78	H	5534	obs.adm.	ABO		50.5								District Women Hospital	4611	
Ambala, North India	1985-86	VAR	55	maternal deaths	ABO							21		9.1	Rural areas, 774 villages	5543	
Anantapur distr,Andhra Pradesh	1984-85	H	136	maternal deaths	SE									11.0	15 hospitals; Urban 7.5%, rural 12.5%	4614	
Anantapur distr,Andhra Pradesh	1984-85	STA	134	matern. deaths*	SE									17.2	*in home; rural	4614	
Anantapur distr.	1984-85	CS	270	maternal deaths	ABO							117		14		5282	

## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort. ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor- tion	GYN OBS	Live Births			Preg- nanc- ies	% of Women Ever/A Abort.				Live Births	Women RepAge
Baduria+2 villages, W. Bengal	1989-90	H	300	W,ever aborting	IND					1.2				Baduria health centre	5710		
Bangalore	1969	H	981	abo.adm.	ABO		9.3H	10.7							4854		
Baroda	1970-72	H	730	abo.adm.	IND	10.2		1.1D			30.6	342D		S.S.G. Hospital	4581		
Bombay State	1960			pregnancies	ABO				7.0						4865		
Bombay State	1960			pregnancies	ABO				7.8						4865		
Calcutta	1979-90	H	42715	abo.adm.(MTP)	SE,HAE						0.3	137	13.5	Eden Hospital	5846		
Calcutta	1986	H	980	abo.adm.	ABO			7.8 D			0.9	71 D	15.8	All abo.deaths SE Chittaranjan Seva Sadan H.	5729		
Calcutta	1981-85	CS	1022	pregnancies	ABO			19.6	15.9					Urban slum; prospective study	5665		
Calcutta	1983-85	H	1162	abo.adm.	ABO			6.3 D			0.3	16 D	5.7	All abo.deaths SE Chittaranjan Seva Sadan H.	5729		
Calcutta	1974-80	H	129	maternal deaths	SE							204	19.4		5565		
Calcutta	1974-80	H	129	maternal deaths	ABO							269	25.6		5565		
Calcutta	1975-77	H	232	maternal deaths	SE						5.9	113	12.9		5576		
Calcutta	1976	H	83	maternal deaths	ILL							162	15.6		5172		
Calcutta	1974	H	76	maternal deaths	SE,HAE								22.4		4696		
Calcutta	1972-73	H	1214	abo.adm.	ILL	18.2		2.4D			15.4				4950		
Calcutta	1973	H	1734	abo.adm.	SE	5.5									4640		
Calcutta	1969-73	H	8029	abo.adm.	ILL,SP		9.5				1				4640		
Calcutta	1972-73	HS	350	sp+ind abo.adm.	IND	13.1					4.3				4891		
Calcutta	1969-72	H	6295	abo.adm.	SE	14.9									4640		
Calcutta	1972	H	496	abo.adm*/ 3 months	ABO			23.2D			0.8	188		*ex. 126 MTP; Eden Hospital	5289		
Calcutta	1972	H	496	abo.adm*/ 3 month	ILL	5.4		1.3 D			7.4	94		*ex. 126 MTP; Eden Hospital	5289		
Calcutta	1969-71	H	199	maternal deaths	IND							123D	19.6		4639		
Calcutta	1971	H	66	maternal deaths	ABO			15.5D			1.3	199D	28.8	Eden Hospital	4639		
Calcutta	1968-70	H	59	maternal deaths	SE,HAE							39	11.9		5356		
Calcutta	1966-68	H	80	maternal deaths	IND								2.5	N.R.S. Medical College	4597		
Calcutta	1966-68	H	80	maternal deaths	ABO								8.8	N.R.S. Medical College H.	4597		
Calcutta	1962	H	73	maternal deaths	ABO			8.4 D			0.9	73 D	13.7	Eden Hospital	4639		
Chandigarh	1981-85	CS	1343	pregnancies	ABO			4.6	4.2					Rural; prospective study	5665		
Chandigarh	1978-81	H	158	maternal deaths	IND,SP							450	31.6	Nehru Hospital	5651		
Chandigarh	1978-81	H	158	maternal deaths	ILL							351	24.7	Nehru Hospital	5651		
Chandigarh	1973-75	H	133	abo.adm.	SE						17.2			P.G.I. Hospital	4641		
Chandigarh	1969-71	H	88	abo.adm.	IND						13.7			P.G.I. Hospital	4641		
Dehradun city	1981-82	H	3427	Pregnancies				11.7	10.4						5767		
Faridkot District, Punjab	1977-79	CS	447	W, 20-44	ABO			9.0	8.5					2615 lifetime pregnancies	5164		
Guntur	1981-86	H	2036	ill+sp abo.adm.	SE	10.3					22.4	212D	18.7	Government General Hospital	5653		
Guntur	1975-80	H	2260	ill+sp.abo.adm.	SE	8.5					28.1	230D	17.6	Government General Hospital	5653		
Guntur, Andhra Pradesh	1987-91	H	147	maternal deaths	ILL							148	19.0	Government General Hospital	5662		
Guntur, Andhra Pradesh	1987-91	H	147	maternal deaths	SE							116	14.9	Government General Hospital	5662		
Guntur, Andhra Pradesh	1977-86	H	457	maternal deaths	SE							191	17.5	Government General Hospital	5662		
Guntur, Andhra Pradesh	1977-86	H	457	maternal deaths	HAE,SE							197	18.8	Government General Hospital	5662		
Guntur, Andhra Pradesh	1977-86	H	457	maternal deaths	ILL							191	17.5	Government General Hospital	5662		
Hyderabad	1981-85	CS	1592	pregnancies	ABO			0.5	0.5					Rual areas; prospective study	5665		
Imphal	1976-85	H	128	maternal deaths	ABO								25		5385		
Imphal	1972-78	H	86	maternal deaths	ABO			35.7			0.4	147	30.2		5578		
Khanna, Punjab State	1960-64			pregnancies	ABO										4865		
Kurseong, Darjeeling	1983-90	H	29	maternal deaths	ILL							76	13.8	K. Subdivisional Hospital	5644		

DK K3000 24 01 10. F34



## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency				Mortality				Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge
						Abor tion	GYN OBS										
Lucknow	1970-73	H	150	maternal deaths	SE									11.3	Queen Mary's Hospital	5813	
Madras	1981-85	H	211	maternal deaths	ABO(L)									12.1	Gov. Hosp. for Women & Children and Institute of Obs. & Gyn.	5652	
Madras	1981-85	H	211	maternal deaths	ILL									9.8	Gov. Hosp. for Women & Children and Institute of Obs. & Gyn.	5652	
Madras	1981-85	CS	926	pregnancies	ABO			7.2	6.6					5665	Urban slum; prospective study	5665	
Madras	1974-75	H	393	maternal deaths	ILL									12.7	4 hospitals	4607	
Madras	1974	H		maternal deaths	ILL									34		5212	
Madras	1967-71	H	10472	abo.adm.	ABO			16.0D								5414	
Madras	1967-71	H	10472	abo.adm.	SE	5.9		0.9D				5.7	53D			5414	
Madras area	1977	CS		pregnancies	IND				15							4593	
Madurai	1977-78	H	380	se.abo.adm.	SE							8.7				4641	
Madurai	1971-73	H	3222	abo.adm, ex. L	ABO		13.5*	16.8D						26.6	Erskine Hospital	4641	
Madurai	1971-73	H	3222	abo.adm, ex. L	SE	12.2	1.6*	2.1D				20.1	413D	34	*% of obs.adm; 1479 L abos	4667	
Madurai	1960-72	H	20778	abo.adm.	ILL	9.8		2.7D				4.6	128D	7.6		5150	
Madurai	1960-72	H	20778	ill+sp abo.adm.	SP,ILL			27.9D				0.5	136D	8.1	Government Erskine Hospital	5212	
Madurai	1960-72	H	29778	ill+sp abo.adm.	ILL	9.8		2.7 D				4.8	120D	7.6	Government Erskine Hospital	5212	
Madurai	1965-70	H		maternal deaths	SE									18.5		4667	
Mysore	1967-71	H	310	maternal deaths	ABO									192		4660	
Mysore	1967-71	H	310	maternal deaths	SE,HAEE									153		4660	
New Delhi	1981-85	CS	1104	pregnancies	ABO			5.7	5.3						Urban slum; prospective study	5665	
New Delhi	1981-83	H	170	maternal deaths	ILL								38D	7.1	Safdarjung hospital	5600	
New Delhi	1975-83	H	573	maternal deaths	ABO									12.3		5543	
New Delhi	1978-80	H	207	maternal deaths	ILL								100D	11.6	Safdarjung hospital	5600	
New Delhi	1974-79	H	317	abo.adm.	IND								6.3		Kasturba Hospital	4641	
New Delhi	1975-77	H	196	maternal deaths	ILL								118D	15.3	Safdarjung hospital	5600	
New Delhi	1973-77	H	2837	sp.abo.adm., ex. MTP	SE	6.7		1.6D				8.9	141D	21.0	Also 6418 MTP	5140	
New Delhi	1973-77	H	2837	sp.abo.adm., ex. MTP	SP			23.5D							Also 6418 MTP	5140	
New Delhi	1969-71	CS	5194	pregnancies	ABO			10.7	9.5							5678	
New Delhi	1962-69	H		maternal deaths	SE									23		5140	
New Delhi	1963	H		abo.adm.	ABO											4853	
New Delhi	1962	HS	110	RS, abo.adm.	ABO			65.2D	39.5			1.6				4853	
New Delhi	1962	H	235	abo.adm.	ABO		19.6	34.5D								4853	
North Bengal, rural	1990	H	50	se.abo.adm.	SE			3.3 D					20	656D	16.4	North Bengal Medical College	5705
Ootacamund, Tamil Nadu	1960	H	768	abos	ABO			57.4								5679	
Pondicherry	1971-79	H	1958	abo.adm.	SE	21.7										5432	
Pondicherry	1968-72	HS	855	pregnancies	ABO			3.5	3.3						Javakarial Health Centre	5682	
Pune	1980-85	H	113	maternal deaths	ABO									10.6		5543	
Punjab, distr. of	1970	PS	351*	ill.abos/month	ILL										*by 36 providers	5411	
Rohtak, Haryana	1978-88	H	160	maternal deaths	IND,SP								361	22.5	Medical College Hospital	5676	
Rural areas	1992			ill.abos	ILL				0.7							5783	
Rural Chandigarh+Hyderabad**	1981-85	CS	4389	W, pregnant	ABO			3.7	3.4						*+Varanasi; prospective study	5683	
Rural Chandigarh+Varanasi**	1981-85	CS	4261	pregnancies	ABO			2.9	2.7						*+Hyderabad; prospective study	5665	
Urban slum areas*	1981-85	CS	3197	W, pregnant	ABO			12.6	10.9						*New Delhi+Calcutta+Madras; Prospective study	5683	
Urban slum areas*	1981-85	CS	3052	pregnancies	ABO			10.5	9.2						Prospective study;	5665	
Urban slums+rural areas	1981-85	CS	7586	pregnancies	ABO			7.2	6.6						Prospective study	5683	
Varanasi	1981-85	CS	1326	pregnancies	ABO			4.2	3.9						Rural; prospective study	5665	
Vellore	1964-73	H	26749	obs.adm.	SE	15.7	1.7*							25	*% of obs.adm.	4632	

## UNSAFE ABORTION IN ASIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency						Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Live Births	Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Women RepAge	
						Abor tion	GYN OBS											
Village, rural	1979	CS	200	RS, W	IND*,SP			14.1	12.1	32	1.4							
<b>IRAN, ISLAMIC REP.</b>																		
National	1972			ind.abos	IND				15-20									
Fars Province, S. Iran	1970-76	H	96	maternal deaths	SE												5265	
Isfahan	1971-75	H	29	maternal deaths	ABO							19 D		7.3			5533	
Shiraz	1963-69	H	96	maternal deaths	ABO									10.3	Amin Maternity Hospital		5158	
Teheran	1973-74	HS	99*	abo.adm.	IND			10.8	7.4	1.4				14.6			5077	
Teheran	1972	CS	452	W, pregnant	IND,SP				24.3								5054	
Teheran	1972	CS	452	W, pregnant	IND				13.1								5265	
Teheran	1969-70	H		records FPL	IND					15							5265	
Teheran	1968-69	HS	1009	abo. referrals	SP,IND						1.7						5265	
Teheran	1963-69	H		maternal deaths	IND,SP												5456	
Teheran	1968-69	HS	1009	abo. referrals	PIND	43								7.3	Pahlavi University Hospital		5606	
Teheran	1967	H	7701	abo.adm.	ABO			16.3	20.0D								5456	
Teheran	1960	H	1446	abo.adm.	ABO			10.2	13.2D								5456	
<b>NEPAL</b>																		
5 zonal hospitals	1989-90	H	312	abo.adm.	ABO				11.2									
Kathmandu valley	1984-85	HS	1576	abo.adm.	PIND	10.5						7.2			>50	5 major hospitals	5882	
																	5704	
<b>PAKISTAN</b>																		
Faisalabad metropolitan	1990	VAR	55	maternal deaths	ABO								12					
Hyderabad	1961-66	H	108	maternal deaths	SP,IND												5850	
Hyderabad	1961-64	H	2091	abo.adm.	SP,IND			19.9	50.0D					6.5	Liaquat Medical College H.		4570	
Karachi	1979-83	H	127	maternal deaths	IND							0.2	96D	5.6	Liaquat Medical College H.		4570	
Karachi	1979-83	H	3249	abos	ABO			70.0D					65D	2.4	Civil Hospital Karachi		4621	
Karachi	1979-83	H	127	maternal deaths	SE,HAE							0.5	345D	12.6	Civil Hospital Karachi		4621	
Saddar, Lahore	1963-65	CS	1447	WM 10-50,pregn.	ILL			7.1	5.7				323D	11.8	Civil Hospital Karachi		4621	
																	5026	
<b>SRI LANKA</b>																		
Colombo	1988	EA	150000	ind.abos	IND													
Colombo	1984	EA	185000*	ill.abos	ILL												4833	
Hospital	1984	H	295085*	ill.abos	ILL												4722	
Mawanella div. health area	1988	CS	1851	W, pregnant	IND,SP			2.5	2.4					0.1	*during 10 years (in 1981 30'552 ill.abos)		4722	
																		5687

## 9.7 Europe

# UNSAFE ABORTION IN EUROPE

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Abor tion	GYN OBS	Live Births			Preg- nanc les	% of Women Ever/A Abort.				Live Births	Women RepAge
<b>NORTHERN EUROPE</b>																	
<b>DENMARK</b>																	
National	1968-72	STA		abo. deaths	SP,ILL							0.1					
National	1971	E	2300	ill.abos	ILL			3							5203		
National	1964	E	13500*	ill.abos	ILL			15-19						Change in law 1970	5021		
National	1960	E	6000	ill.abos	ILL			7.8						*12'000-15'000 ill.abos; 4'000 legal abos Other E 10'000 (3'900 L)	5163 5021		
<b>ESTONIA</b>																	
<b>FINLAND</b>																	
National	1973-77	STA		abo. deaths	SP,ILL							0.1		Data for three years	5203		
National	1968-72	STA		abo. deaths	SP,ILL							0.2			5203		
National	1967	E	30000	ill.abos	ILL			38							5588		
<b>ICELAND</b>																	
<b>IRELAND</b>																	
National	1973-77	STA		abo. deaths	SP,ILL							0.2		Data for three years	5203		
National	1968-72	STA		abo. deaths	SP,ILL							0.2			5203		
<b>LATVIA</b>																	
National	1988	STA	12	maternal deaths	ILL							7	25.0		5643		
<b>LITHUANIA</b>																	
National	1990	E		maternal deaths								6	25	53 IND/1000W	5660		
National	1988	STA	11	maternal deaths	ILL							5	27.3		5643		
<b>NORWAY</b>																	
<b>SWEDEN</b>																	
National	1966-70	STA		ill.abo. deaths	ILL							1			4688		
National	1961-65	STA		ill.abo. deaths	ILL							1			4688		
Stockholm	1965	STA	2200	sp+ill abos	SP,ILL			9.8	8.2						5330		
<b>UNITED KINGDOM</b>																	
National	1974	STA	81	maternal deaths	ILL								4.9		4972		
National	1970-72	STA	38	ill.abo. deaths	ILL										4972		
National	1970	STA	146	maternal deaths	ILL								7.5		4972		
National	1967	E		ill.abos	ILL				10						5588		
National	1966	CS	3500	RS W<65	ILL					4.2				NOP-survey (40% no reply)	4873		
National	1965	STA	221	maternal deaths	ILL								9.5		4972		
National	1963	STA	239	maternal deaths	SP,ILL								20.5		5373		
National	1960	STA	310	maternal deaths	ILL								9.7		4972		
England and Wales	1979-81	STA	1	ill.abo. deaths	ILL										4944		

# UNSAFE ABORTION IN EUROPE

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Preg- nancies			% of Women Ever/A Abort.	Live Births				Live Births	Women RepAge
						Abor- tion	GYN OBS										
England and Wales	1976-78	STA	10	ill.abo. deaths	ILL												
England and Wales	1973-75	STA	10	ill.abo. deaths	ILL										4944		
England and Wales	1973-74	STA	*	ill.abo deaths	ILL										4944		
England and Wales	1972-74	A	16	abo. deaths	ABO									*AA 5.5 deaths	4872		
England and Wales	1970-72	STA	37	ill.abo. deaths	ILL							0.2			4802		
England and Wales	1968-72	STA		abo. deaths	SP,ILL										4944		
England and Wales	1971			abo.deaths ex.L	ABO										5203		
England and Wales	1969-70	STA	*	ill.abo deaths	ILL										4829		
England and Wales	1967-69	STA	451	maternal deaths	ABO							5		*AA 16 deaths	4872		
England and Wales	1969			abo deaths ex.L	ABO								25.9	86% review of maternal deaths	4619		
England and Wales	1967-69	STA	451	maternal deaths	ILL										4829		
England and Wales	1963-67	A	44	ill+sp.abo. deaths	ILL,SP							3		86% review of maternal deaths	4619		
England and Wales	1967			abo.deaths ex.L	ABO										5203		
England and Wales	1964-66		579	maternal deaths	ILL										4829		
England and Wales	1964-66	STA	455	maternal deaths	ABO									16.8	73% abo. deaths from ILL	4590	
England and Wales	1965			abo.deaths ex.L	ABO									25.3		4619	
London	1960-67	H	1746	abo.adm.	SE	21.9									4829		
London	1960-67	H	1746	abo.adm.	IND	20.4							0.5		5521		
Northern Ireland	1973-77	STA		abo. deaths	SP,ILL										5521		
Northern Ireland	1968-72	STA		abo. deaths	SP,ILL										5203		
Salford	1969-70	H	1014	abo.adm	ILL	6.3									5203		
Salford	1964-65	H	579	abo.adm.	ILL	14.5									5027		
Scotland	1968-72	STA		abo. deaths	SP,ILL										5027		
															5203		
<b>EASTERN EUROPE</b>																	
<b>BULGARIA</b>																	
National	1973-77	STA		abo. deaths	SP,ILL												
National	1968-72	STA		abo. deaths	SP,ILL										5203		
National	1967	E		ill.abos	ILL										5203		
National	1966		17800	non-L abos	ABO			1							5588		
								13							5395		
<b>CZECH REPUBLIC</b>																	
<b>CZECHOSLOVAKIA (former)</b>																	
Czechoslovakia (former)	1973-77	STA		abo. deaths	SP,ILL												
Czechoslovakia (former)	1968-72	STA		abo. deaths	SP,ILL										5203		
Czechoslovakia (former)	1969	E	3500	ill.abos	ILL			2							5203		
Czechoslovakia (former)	1966		25600	non-L abos	ABO			11							5025		
Czechoslovakia (former)	1963	E	10000	ill.abos	ILL			4							5395		
Czechoslovakia (former)	1960-61	E	11000	ill.abos	ILL				4						5588		
															5294		
<b>HUNGARY</b>																	
National	1973-77	STA		abo. deaths	SP,ILL												
National	1968-72	STA		abo. deaths	SP,ILL										5203		
															5203		

DK N 000 01 01 10 17 70  
 WHO/FHE/MSM/93.13  
 Page 77

# UNSAFE ABORTION IN EUROPE

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000				% of All Matern. Deaths	
						Admissions		Preg- nanc ies	% of Women Ever/A Abort.			Live Births	Live Births				Women RepAge
						Abor- tion	GYN OBS										
National	1968	E	10000	ill.abos	ILL			6							5025		
National	1966		33700	non-L.abos	ABO			24							5395		
National	1961	E	33600	sp+ill.abos	SP,ILL			24							5588		
<b>POLAND</b>																	
National	1973-77	STA		abo. deaths	SP,ILL							0.1			5203		
National	1968-72	STA		abo. deaths	SP,ILL							0.1			5203		
National	1966		65500	non-L.abos	ABO			18							5395		
National	1964	E	67066	sp+ill.abos	SP,ILL			12							5588		
<b>ROMANIA</b>																	
National	1991	STA	183	maternal deaths	ABO							41	2	62	5856		
National	1990	STA	148	maternal deaths	ILL									83.8	9 months 5869		
National	1990	STA	263	maternal deaths	ABO							58	4	69	5856		
National	1989	STA	626	maternal deaths	ABO							147	11	87	5856		
National	1988	STA	591	maternal deaths	ABO							138	11	87	5856		
National	1988		505	abo. deaths	IND							138		85.3	5337		
National	1987	STA	575	maternal deaths	ABO							128	10	85	5856		
National	1986	STA	571	maternal deaths	ABO							129	10	85	5856		
National	1985	STA	493	maternal deaths	ABO							118	9	86	5856		
National	1984			maternal deaths	ABO							129		86	5336		
National	1984	STA	522	maternal deaths	ABO							128	10	86	5856		
National	1978			abo. deaths	ABO								9.8		5203		
National	1973-77	STA		abo. deaths	SP,ILL								8.7		5203		
National	1968-72	STA		abo. deaths	SP,ILL								6.7		5203		
National	1972	STA	370	abo. deaths	ABO								8		4802		
National	1971		364	abo. deaths	ILL								4*	*total female population	5200		
National	1970			abo. deaths(L)	ABO(L)								6.9		4829		
National	1967			abo. deaths(L)	ABO(L)								3.8		4829		
National	1966		83	abo. deaths	ILL								.9*	*total female population	5200		
National	1965	STA	64	abo. deaths	ILL								.7*	*total female population	5200		
National	1965			abo. deaths(L)	ABO(L)								1.5		4829		
National	1961		130	abo. deaths	ABO										4872		
<b>SLOVAK REPUBLIC</b>																	
<b>SOUTHERN EUROPE</b>																	
<b>ALBANIA</b>																	
National	1991			pregnancies	ABO*				50						5872		
National	1991	E		maternal deaths	ABO									32	*usually self-induced After legalization, down from 57%	5875	
<b>BOSNIA &amp; HERZEGOVINA</b>																	
<b>CROATIA</b>																	

BR R3C0C SH.01.10.F40V

CROATIA cont.

## UNSAFE ABORTION IN EUROPE

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		% of Women Ever/A Abort.			Live Births	Preg- nanc ies				Live Births	Women RepAge
						Abor tion	GYN OBS										
<b>GREECE</b>																	
National	1985	EA	200000	abos	IND			110									
National	1983	CS		W repr. age	IND				21						4743		
National	1966-67	EA	80000*	ind.abos	IND			52							4743		
National	1966-67	CS	6502*	WM, 20-49	IND			34.1	23.0	34.9	2.2				*60'000-100'000 ind.abos; 154'000 live births		
Athens	1969-70	H	4467	del.adm.	IND,SP					41.3					*21'276 pregnancies; 752 IND/1000W		
Athens	1969-70	H	4467	del.adm.	IND					20.6					5147		
Athens	1966-68	HS	8312	del.adm, ex. primi-gravida	IND					28.9	2.0				5147		
Rural North West	1985	CS	94	W30-40, w.child	IND					31					4882		
<b>ITALY</b>																	
National	1983	EA	99000	ill. abos	ILL												
National	1973-77	STA		abo. deaths	SP,ILL							0.2			4834		
National	1974		276	maternal deaths	ABO								12	Data for three years	5203		
National	1968-72	STA		abo. deaths	SP,ILL							0.4		Underestimation	4630		
National	1969	CS	1538	WM, 18-44	IND			14.5		20.0	1.8			Data from 6 communities	5203		
National	1960-65			ill.abo. deaths	ILL							0.4			4595		
Bari	1961	HS	350	RS, W obs.adm.	ABO				21.8						5190		
Bari	1961	HS	350	RS, W obs.adm.	ILL			10.4D	8.1						4595		
Milano	1972	CS	1146	WM, 18-44	IND			18.8D	15.8	21.9	1.5				4595		
Naples	1972	CS	779	WM, 18-44	IND			18.5D	15.6	25.9	1.9				4595		
Palermo	1972	CS	753	WM, 18-44	IND			24.6D	19.8	31.5	2.2				4595		
Rome	1958-68	PP	533	WM*, pregnant	IND			39.7			1.3				4595		
Rome	1964	HS	1000	W15-45, obs.adm.	IND			40.2						*from central/southern Italy	4595		
Urban: Milano-Naples-Rome	1972	CS	2678	WM, 18-44	IND			20.6D	17.1	26.2	1.8				4595		
<b>PORTUGAL</b>																	
National	1979-88	STA	236	maternal deaths											28		
National	1987		15	maternal deaths	ILL										40		
National	1984	EA	150000	ill.abos	ILL										5761		
National	1983	STA	23	maternal deaths	ABO,SE							6			4613		
National	1979-83	STA	166	maternal deaths	ABO							5			4613		
National	1973-77	STA		abo. deaths	SP,ILL										4613		
National	1968-72	STA		abo. deaths	SP,ILL							0.6		Data for three years	5203		
<b>SLOVENIA</b>																	
National	1966		5300	non-L abos	ABO			18							5395		
National	1961		5565	ill.abos	ILL									9291 legal abos	5413		
<b>SPAIN</b>																	
National	1988	E	105000	abos	IND												
National	1985	STA	20	maternal deaths	ABO									Only 5% done in hospitals	4946		
National	1985	E	64000	ind.abos	IND									45	5677		
National	1973-77	STA		abo. deaths	SP,ILL										5677		
National	1968-72	STA		abo. deaths	SP,ILL							0.2		Data for four years	5203		
												0.2			5203		

# UNSAFE ABORTION IN EUROPE

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of				Av. No of Abo's per W Abort ing	per 100,000		% of All Matern. Deaths				
						Admissions		Live Births	Preg-nanc ies		% of Women Ever/A Abort.	Case Fata- lity (%)				Live Births	Women RepAge
						Abor- tion	GYN OBS										
<b>YUGOSLAVIA (former)</b>																	
Yugoslavia (former)	1973-77	STA		abo. deaths	SP,ILL								0.6		5203		
Yugoslavia (former)	1968-72	STA		abo. deaths	SP,ILL								1.6		5205		
Yugoslavia (former)	1968	E	60000	ill.abos	ILL	30									5025		
Yugoslavia (former)	1967	H	65515	abo.adm.	ABO							0.1			5025		
Yugoslavia (former)	1964		50000	non-L.abos	ABO			12							5395		
<b>WESTERN EUROPE</b>																	
<b>AUSTRIA</b>																	
National	1973-77	STA		abo. deaths	SP,ILL								0.3		5203		
National	1968-72	STA		abo. deaths	SP,ILL								0.3		5203		
<b>BELGIUM</b>																	
National	1985		10800	ind.abos in clinics	IND										5283		
National	1985	E	15590	abos	IND										5331		
National	1979	E	20000	abos	IND			16.1							4953		
National	1973-77	STA		abo. deaths	SP,ILL								0.1		5203		
National	1968-72	STA		abo. deaths	SP,ILL								0.3		5203		
National	1960-65			ill.abo.deaths	ILL								0.5		5190		
Hospital	1979	H	182	abo.adm.	PILL,SE	13.7									4953		
Hospital	1969	H	501	abo.adm.	PILL,SE	35.3									4953		
<b>FRANCE</b>																	
National	1973-77	STA		abo. deaths	SP,ILL								0.2		5203		
National	1968-72	STA		abo. deaths	SP,ILL								0.4	Data for four years	5203		
<b>GERMANY</b>																	
National	1977		198	maternal deaths	ABO									8.5	4647		
National	1973-77	STA		abo. deaths	SP,ILL								0.2		5203		
National	1968-72	STA		abo. deaths	SP,ILL								0.5		5203		
National	1967	E		ill.abos	ILL			100							5588		
National	1960-65			ill.abo. deaths	ILL								0.9		5190		
Eastern regions	1972-73	E	19000	ill.abos	ILL				6						5294		
Hamburg	1963-67	STA	101	maternal deaths	ILL						3			4.0	5550		
Niedersachsen	1960-65	STA	340	maternal deaths	IND									8.2	5553		
Wuppertal	1967-79	H	14	maternal deaths	ABO									14.2	4647		
<b>NETHERLANDS</b>																	
National	1968-72	STA		abo. deaths	SP,ILL								0.1		5203		
<b>SWITZERLAND</b>																	
National	1986	E	8000	ill.abos	ILL			11							5360		
National	1985	E	8000	ill.abos	ILL			11							5360		
National	1980	E	13000	ill.abos	ILL			18							5360		
National	1973-77	STA		abo. deaths	SP,ILL								0.1		5203		



SWITZERLAND cont.

## UNSAFE ABORTION IN EUROPE

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Live Births	Women RepAge
						Abor- tion	GYN OBS										
National	1974	E	15000	ill.abos	ILL			18							5360		
National	1968-72	STA		abo. deaths	SP,ILL							0.3			5203		
National	1970	E	20000	ill.abos	ILL			20							5360		
National	1966	E	50000	ill.abos	ILL			45							5021		
National	1966	E	40000	ill.abos	ILL			37							5360		

## 9.8 Oceania

# UNSAFE ABORTION IN OCEANIA

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No	
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Ever/A Abort.	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths			
						Admissions		Preg- nanc- ies			Live Births	Live Births				Women RepAge
						Abor- tion	GYN OBS									
<b>OCEANIA</b>																
<b>AUSTRALIA</b>																
National	1982-84		1	abo. deaths	ABO											5248
National	1976-78		5	abo. deaths	ABO											5248
National	1968-72	STA		abo. deaths	SP,ILL						0.3					5203
National	1970-72		25	abo. deaths	ABO											5248
National	1967-69			maternal deaths	ILL								7.5			4593
National	1964-66		45	abo. deaths	ABO											5248
<b>FLJI</b>																
National	1969-76	STA	160	maternal deaths	ABO,ILL							17		13.8		4576
<b>NEW ZEALAND</b>																
National	1976	CS	1260	RS, W>15	ABO				3.8						Retrospective study	4947
National	1968-72	STA		abo. deaths	SP,ILL						0.2					5203
National	1970-71	EA	11000	ill.abo attempt	ILL				1.8A						E based on 1972 study	4914
National	1970-71	EA	6500	ill.abos	ILL				1.1A						E based on 1972 study	4914
National	1970-71	CS	1200	RS, W >15	ILL				1.1A						1972 study	4914
National	1961-63	STA		maternal deaths	ABO							5				5564
<b>PAPUA NEW GUINEA</b>																
National	1984-86	VAR	304	maternal deaths	ABO							46		6.6		5695
National	1976-83	VAR	895	maternal deaths	ABO									4.0		5371
National	1971-72	STA	364	maternal deaths	ABO									2.7	8/10 cases SE	4571
National	1971-72	STA	364	maternal deaths	ILL									1.1		4571
Hospital	1964-73	STA	142	maternal deaths	ABO									9.9		4587
Hospital	1964-73	STA	142	maternal deaths	ILL									6.3		4587

## 9.9 Former USSR

# UNSAFE ABORTION IN THE FORMER USSR

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		Preg- nanc ies			% of Women Ever/A Abort.	Live Births				Live Births	Women RepAge
						Abor tion	GYN OBS										
<b>THE FORMER USSR</b>																	
<b>ARMENIA</b>																	
National	1988	STA	22	maternal deaths	ILL							3		9.1	5643		
<b>BELARUS</b>																	
National	1988	STA	40	maternal deaths	ILL							6		25.0	5643		
<b>GEORGIA</b>																	
National	1988	STA	8769	ill.abos	ILL									0	5643		
Tbilisi	1982	E	57600	abos	ILL			335							5689		
<b>KAZAKHSTAN</b>																	
National	1988	STA	198	maternal deaths	ILL							9		17.7	5643		
<b>KYRGYSTAN</b>																	
<b>MOLDOVIA, REP. OF</b>																	
National	1988	STA	31	maternal deaths	ILL							11		32.3	5643		
<b>RUSSIAN FEDERATION</b>																	
National	1991	EA	700	ill.abo. deaths	ILL										5703		
National	1991	STA	630*	maternal deaths	ILL							22		42**	*MMR52/live birth 1.2 million**276 abo deaths; 2.1% L abo.		
National	1991	STA	629*	maternal deaths	ILL							22*		42*	E based on reported MMR 52.43 and 1.2 million confinements		
National	1988	STA	1175	maternal deaths	ILL							15		30.9	5643		
<b>TAJIKISTAN</b>																	
National	1988	STA	88	maternal deaths	ILL							2		3.4	5643		
<b>TURKMENISTAN</b>																	
National	1988	STA	42	maternal deaths	ILL							5		14.2	5643		
<b>UKRAINE</b>																	
National	1988	STA	284	maternal deaths	ILL							10		27.1	5643		
<b>USSR (former)</b>																	
USSR (former)	1986-88	STA	2020	ind.abo. deaths	IND										1549 deaths due to abortions performed outside hospitals		
USSR (former)	1988	E		maternal deaths	ILL								110	25.6	5760		
USSR (former)	1988	STA	737107	ill.abos	ILL						0.1	10		23.2	5643		
USSR (former)	1987	E	13mil.	ill.abos	ILL			232	18.6A						5283		
USSR (former)	1987	E	2500	maternal deaths	ABO*							11	1	25	Also 6.8 million legal abos *presumably incl. L		
USSR (former)	1987			ill.abos	ILL							30			5283		
USSR (former)	1986	STA		maternal deaths	ILL									27.1	4764		
USSR (former)	1980	STA		maternal deaths	ILL							20		35.1	5879		
USSR (former)	1980	s E			ILL			60-85							5643		
USSR (former)	1980			maternal deaths	ILL										5760		
USSR (former)	1980	E		ill.abos	ILL								210	37.4	Based on data from local health surveys		
USSR (former)					ILL										5630		
USSR (former)					ILL										50-100% of legal abortions		

## UNSAFE ABORTION IN THE FORMER USSR

Frequency and Mortality of Abortion not Provided through Approved Facilities and/or Persons

Region, Country or Area	Year	Data Characteristics				Frequency					Mortality			Notes	Ref No		
		Type of Data	Sample Size	Study Group	Type of Abortion	as a Percent of			Av. No of Abo's per W Abort ing	Case Fata- lity (%)	per 100,000		% of All Matern. Deaths				
						Admissions		% of Women Ever/A Abort.			Live Births	Preg- nanc ies				Live Births	Women RepAge
						Abor- tion	GYN OBS										
UZBEKISTAN National	1988	STA	270	maternal deaths	ILL								2		4.8		5643

**10. LIST OF DATA SOURCES**

MSM4561 Aggarwal, V.P. and Mati, J.K.G. Review of abortions at Kenyatta National Hospital, Nairobi. *East African medical journal*, 1980, 57(2): 138-143.

MSM4562 Aggarwal, V.P. and Mati, J.K.G. Epidemiology of induced abortion in Nairobi, Kenya. *J. of obstetrics and gynaecology of Eastern and Central Africa*, 1982, 1(2): 54-57

MSM4564 Aguerro, O. et al. Mortalidad materna en la maternidad Concepcion Palacios, 1964-1972. *Ginecologia y obstetricia de Mexico*, 1974, 35(211): 509-520

MSM4565 Akingba, J.B. Abortion, maternity and other health problems in Nigeria. *Nigerian medical journal*, 1977, 7(4): 465-471

MSM4566 Ampofo, D.A. Causes of maternal death and comments: Maternity Hospital, Accra 1963-67. *West African medical journal*, 1969, 18(3): 75-81

MSM4567 Ampofo, D.A. The dynamics of induced abortion and the social implications in Ghana. *Ghana medical journal*, 1970, 9(4): 295-302

MSM4568 Armon, P.J. Maternal deaths in the Kilimanjaro region of Tanzania. *Transactions of the Royal Society of tropical medicine & hygiene*, 1979, 73(3): 284-288

MSM4569 Arruda, J.M. *Maternal child health-family planning survey, Pernambuco State, Brazil - 1980*. Department of Health and Human Services, Public Health Services, 1981.

MSM4570 Aziz, S.A. Maternal mortality in non-booked patients in a teaching institution in southern region of Pakistan. *Pakistan medical review*, 1968, 3: 54-62

MSM4571 Babona, G. et al. Maternal mortality in Papua New Guinea 1971 and 1972. *Papua New Guinea medical journal*, 1974, 17(4): 331-334

MSM4575 Barford, D.A. and Parkes, J.R. Maternal mortality: a survey of 118 maternal deaths and the avoidable factors involved. *South African medical journal*, 1977, 51(4): 101-105

MSM4576 Bavadra, T.V. et al. Maternal mortality in Fiji 1969-1976. *Fiji medical journal*, 1978, 6(1): 4-11

MSM4579 Beria, J.U. Back-street abortion in Brazil. *Lancet*, 1983, 6 April:

MSM4581 Bhatt, R.V. and Soni, J.M. Criminal abortions in Western India. *Journal of obstetrics and gynaecology of India*, 1973, 23(3): 243-246

MSM4582 Bhuiyan, S.N. and Burkhart, M.C. Maternal and public health benefits of menstrual regulation in Chittagong. *International journal of gynaecology and obstetrics*, 1982, 20: 105-109

MSM4583 Binkin, N. et al. Illegal abortion deaths in the United States: why are they still occurring?. *Family planning perspectives*, 1982, 14(3): 163-167

MSM4585 Brown, I. Maternal mortality: a survey of maternal deaths occurring during 1976. *Central African journal of medicine*, 1978, 24(10): 212-214.

MSM4587 Campbell, G.R. Maternal mortality at Gonka Base Hospital. *Papua New Guinea medical journal*, 1974, 17(4): 335-341

MSM4590 Cheng, M.C. Changing trends in mortality and morbidity from abortion in Singapore: 1964 - 1970. *Singapore medical journal*, 1971, 12(5): 256-258

MSM4593 Chowdhury, T.A. *Bibliography in human reproduction, family planning and population dynamics - Annotated articles and unpublished work in the South East Asia Region. Special supplement No. 11*. New Delhi, India, World Health Organization, Regional Office for South-East Asia, 1977.

MSM4595 Colombo, B. *La diffusione degli aborti illegali in Italia*. Milano, Italy, Vita e Pensiero, 1977.

MSM4596 Courtney, L.D. Maternal parity, age, haemoglobin level mortality rate, labour and complications in a tropical centre. *Journal of the Irish Medical Association*, 1974, 67(6): 159-161

MSM4597 Dawn, C.S. et al. Avoidable factors in maternal deaths. *Journal of the Indian Medical Association*, 1972, 59(3): 101-104

MSM4600 Grech, E.S. et al. Maternal mortality in Uganda. *International journal of gynaecology and obstetrics*, 1969, 7(6): 263-277

MSM4601 Guzman-Serani, R. et al. Epidemiologia des aborto hospitalizado en Valdivia. *Revista médica de Chile*, 1981, 109(11): 1099-1106



- MSM4603 Bhasker Rao, K. *Maternal mortality in India - a FOGSI study. In: Third International Seminar on Maternal Mortality, Delhi, Oct. 1980.* Madras, India, Maternal Mortality Committee, FOGSI, 1981.
- MSM4606 Bhasker Rao, K. *Report of the maternal mortality committee of the FOGSI, 1978-1981.* (Unpublished document), 1984.
- MSM4607 Bhasker Rao, K. and Malika, P.E. A study of maternal mortality in Madras city. *Journal of obstetrics and gynaecology of India*, 1977, 27(6): 876-880
- MSM4609 Binkin, N. et al. Women hospitalized for abortion complications in Mali. *International family planning perspectives*, 1984, 10(1): 8-12
- MSM4611 Datta, K.K. et al. Morbidity patterns amongst rural pregnant women in Alwar, Rajasthan - a cohort study. *Health and population; perspectives and issues*, 1980, 3(4): 282-292
- MSM4613 Araujo, M. da P. *Maternal mortality in Portugal. In: Interregional Meeting on the Prevention of Maternal Mortality, Geneva 11-15 November 1985.* (Unpublished WHO document no. FHE/PMM/85.9.6), 1985.
- MSM4614 Bhatia, J.C. *A study of maternal mortality in Anantapur district, Andhra Pradesh, India.* Bangalore, India, Indian Institute of Management, 1986.
- MSM4615 Farnot, U.C. *Maternal mortality in Cuba. In: Interregional Meeting on the Prevention of Maternal Mortality, Geneva, 11-15 November 1985.* (Unpublished WHO document no. FHE/PMM/85.9.14), 1985.
- MSM4616 Abdullah, S.A. et al. *Maternal mortality in upper Egypt. In: WHO Interregional Meeting on the Prevention of Maternal Mortality, Geneva 11-15 November 1985.* (Unpublished WHO document no FHE/PMM/85.9.18), 1985.
- MSM4618 Alauddin, M. Maternal mortality in rural Bangladesh. The Tangail District. *Studies in family planning*, 1986, 17(1): 13-21
- MSM4619 Editorial. Maternal deaths. *British medical journal*, 1972, 3(829): 714-715
- MSM4620 Bathija, H. *Background information for the meeting to identify research priorities on induced abortion. (Mimeographed document dated 9.2.86).* World Health Organization, HRP, 1986.
- MSM4621 Ahmad, Z. Maternal mortality in an obstetric unit. *Journal of the Pakistan Medical Association*, 1985, 35(8): 243-248
- MSM4624 Harrison, P. On the septic ward. *People*, 1977, 4(3): 12-13
- MSM4630 International Planned Parenthood Federation. Abortion. *People*, 1975, 5(2):
- MSM4631 International Planned Parenthood Federation. *Report to donors. October 1983. Programme and financial statements 1982-1984.* London, United Kingdom, International Planned Parenthood Federation, 1983.
- MSM4632 Issac, V. and Hemalathatt, H. Abortion and renal failure. *Journal of obstetrics and gynaecology of India*, 1976, 26(5): 657-661
- MSM4634 Jubiz, H.A. et al. Comparative maternal mortality during the two periods 1963-1967 and 1968-1972. *Revista colombiana de obstetricia y ginecología*, 1976, 27(3): 129-136
- MSM4635 Kamal, I. et al. *A study of abortion in Cairo University Hospital. IN: Omran, A.R., ed. Egypt. Population problems and prospects.* University of Carolina at Chapel Hill, 1973.
- MSM4639 Konar, M. et al. Abortion mortality: ten years' survey in Eden Hospital with critical analysis of last 3 years. *Journal of obstetrics and gynaecology of India*, 1973, 23(4): 436-442
- MSM4640 Lahiri, D. and Konar, M. Abortion hazards. *Journal of the Indian Medical Association*, 1976, 66(11): 288-294
- MSM4641 Liskin, L.S. Complication of abortion in developing countries. *Population reports, series F*, 1980, 7: 105-155
- MSM4643 Macpherson, T.A. A retrospective study of maternal deaths in the Zimbabwean black. *Central African journal of medicine*, 1981, 27(4): 57-60.
- MSM4644 Makokha, A.E. Maternal mortality - Kenyatta National Hospital, 1972-1977. *East African medical journal*, 1980, 57(7): 451-460
- MSM4645 Measham, A.R. et al. Complications from induced abortion in Bangladesh related to types of practitioner and methods and impact on mortality. *Lancet*, 1981, 1: 199-202
- MSM4647 Mendling, W. and Heinrich, D. Die Muttersterblichkeit in der Rheinischen Landesfrauenklinik Wuppertal von 1917 bis 1979. *Geburtshilfe und Frauenheilkunde*, 1981, 41: 204-207

- MSM4648 Molina Cartes, R. et al. Características del aborto en Chile. *Cuadernos médico-sociales (Santiago)*, 1978, 19(1): 5-18
- MSM4650 Morales, M.A. and Montoya, G.M. Analisis de la mortalidad materna en la region metropolitana de 1973 a 1977. *Revista chilena de obstetricia y ginecologia*, 1978, 43(6): 312-321
- MSM4651 Mtimavalye, L.A.R. Reproductive health care among women in Africa: current trends and the future. *J. of obstetrics and gynaecology of Eastern and Central Africa*, 1982, 1(2): 48-53
- MSM4652 Mtimavalye, L.A.R. et al. Maternal mortality in Dar es Salaam, Tanzania 1974-1977. *East African medical journal*, 1980, 57(2): 111-118
- MSM4653 Narkavonnakit, T. and Bennett, T. Health consequences of induced abortion in rural northeast Thailand. *Studies in family planning*, 1981, 12(2): 58-65
- MSM4654 National Academy of Sciences. *Legalized abortion and the public health*. Washington, D.C., National Academy of Sciences, Institute of Medicine, 1975.
- MSM4655 Ng, K.H. and Sinnathuray, T.A. Maternal mortality from septic abortions in University Hospital, Kuala Lumpur from March 1968 to February 1974. *Medical journal of Malaysia*, 1975, 30(1): 52-54
- MSM4656 Obaidullah, M. et al. Induced abortion in rural Bangladesh. *Rural demography*, 1981, 8(1): 89-120
- MSM4657 Ojo, O.A. and Savage, V.Y. A ten-year review of maternal mortality rates in the University Hospital, Ibadan, Nigeria. *American journal of obstetrics and gynecology*, 1974, 118(4): 517-522.
- MSM4658 Okojie, S.E. Induced illegal abortion in Benin City, Nigeria. *International journal of gynaecology and obstetrics*, 1976, 14(6): 517-521
- MSM4659 Omu, A.L. et al. Adolescent induced abortion in Benin City, Nigeria. *International journal of gynaecology and obstetrics*, 1981, 19(6): 495-499
- MSM4660 Patharajaiah, M.P. and Parvathamma. Study of maternal mortality in Cheluvamba Hospital, Mysore. *Journal of obstetrics and gynaecology of India*, 1975, 25(5): 665-670
- MSM4662 Peru, Ministerio de Salud. *El aborto en los establecimientos de salud del Peru*. Lima, Peru, Direccion General de Salud, Materno Infantil y Poblacion, 1980.
- MSM4663 Population Crisis Committee. World abortion trends. *Population*, 1982, 9: 1-6
- MSM4665 Potts, M. et al. *Abortion*. Cambridge, United Kingdom, Cambridge University Press, 1977.
- MSM4666 Naim, A. and Hassan, H. Obstetric features in Kuwait: a reappraisal. *Journal of the Kuwait Medical Association*, 1974, 8(3): 125-134
- MSM4667 Philips, F.S. and Grouse, N. Septic abortion - three year study 1971-1973. Hazards of septic abortion as compared to medical termination of pregnancy at government Erskine Hospital, Madurai. *Journal of obstetrics and gynaecology of India*, 1975, 652-656
- MSM4668 Melrose, S.B. Maternal deaths at King Edward VIII Hospital, Durban. *South African medical journal*, 1984, 65: 161-165
- MSM4670 Monreal, T. Determinant factors in the illegal abortion trends in Chile. *Boletín de la Oficina Sanitaria Panamericana*, 1979, 86(3): 206-218.
- MSM4673 Lindpainter, L.S. et al. *Maternal mortality in Matlab Thana, Bangladesh 1982: final report for research protocol 83-021(P) of the Community Service research Working Group, International Centre for Diarrhoeal Disease Research*. International Centre for Diarrhoeal Diseases Research, UNDATED
- MSM4675 Merrick, T.W. Fertility and family planning in Brazil. *International family planning perspectives*, 1983, 9(4): 110-119
- MSM4677 Population Institute. Illegal abortion : Latin America's quiet epidemic. *Popline*, 1984, 6(11): 2-4
- MSM4678 International Bank for Reconstruction and Development. *Mauritius. Population sector review. Report no. 4486 MAS*. Washington, IBRD, 1983.
- MSM4680 Lovel, H. and Bakoula, C. Lack of family planning leading to induced abortion in rural Greece. *IPPF medical bulletin*, 1985, 19(3): 1
- MSM4682 Price, T.G. Preliminary report on maternal deaths in the southern highlands of Tanzania in 1983. *J. of obstetrics and gynaecology of Eastern and Central Africa*, 1984, 3: 103-110

- MSM4683 Mtimavalye, L.A.R. et al. *Survey on institutional maternal deaths in 4 regions of Tanzania, July 1983 - December 1984, preliminary report. In: WHO Interregional Meeting on the Prevention of Maternal Mortality, 11-15 Nov. 1985.* (Unpublished document), 1985.
- MSM4684 Kwast, B.E. et al. *Report on maternal health in Addis Ababa.* Addis Ababa, Ethiopia, Swedish Save The Children Federation, 1984.
- MSM4685 Monreal, T. *El aborto como problema de salud publica.* Lima, Peru, Paper written for IPPF (unpublished document), 1978.
- MSM4686 Lamptey, P. et al. Abortion experience among obstetric patients at Korle-Bu hospital, Accra, Ghana. *Journal of biosocial science*, 1985, 17(2): 195-203
- MSM4687 Khan, A.R. et al. Maternal mortality in rural Bangladesh. The Jamalpur district. *Studies in family planning*, 1986, 17(1): 7-12
- MSM4688 Hogberg, U. *Maternal mortality in Sweden.* Umea, Sweden, Umea University, 1985.
- MSM4689 Justesen, A. An analysis of maternal mortality in Muhimbili Medical Centre, Dar es Salaam, July 1983 to June 1984. *J. of obstetrics and gynaecology of Eastern and Central Africa*, 1985, 4: 5-8
- MSM4692 Khan, A.R. et al. Induced abortion in a rural area of Bangladesh. *Studies in family planning*, 1986, 17(2): 95-99
- MSM4693 Rattanaporn, P. *The internal factors affecting maternal mortality.* Bangkok, Thailand, Thesis for MSc in Public Health, Mahidol University, 1980.
- MSM4695 Rochat, R.W. et al. Maternal and abortion related deaths in Bangladesh, 1978-79. *International journal of gynaecology and obstetrics*, 1981, 19: 155-164
- MSM4696 Chowdhury, R.N.N. Maternal deaths due to haemorrhage. *Journal of the Indian Medical Association*, 1976, 67(7): 157-160
- MSM4700 Sanchez Torres, F. illegal abortion in Latin America. *Draper Fund report*, 1980, 9: 14-15
- MSM4704 Tezcan, S. *Health problems of Turkish women. In: Abadan-Unat, N. (ed.) Women in Turkish society.* Leyden, E.J. Brill, 1981.
- MSM4711 Van Coeverden de Groot, H.A. et al. Maternal mortality (letter). *South African medical journal*, 1977, 51(15): 491
- MSM4712 Vaughan, J.E. Maternal mortality at Grey's and Northdale Hospitals, Pietermaritzburg (letter). *South African medical journal*, 1980, 58: 102
- MSM4714 Williams, L.L. Some observations on maternal mortality in Jamaica. *Western journal of nursing research*, 1973, 22(1): 1-14
- MSM4721 Rodriguez Silva, F. Natalidad mortalidad infantil y mortalidad materna. Chile 1964-1977. *Revista chilena de obstetricia y ginecologia*, 1979, 44(4): 140-145
- MSM4722 Wanigasundara, M. Sri Lanka abortions cause concern. *People*, 1984, 11(2): 37
- MSM4726 Segbo, M.P. Catastrophe a Ouaga. *Sages femmes*, 1985, 9(1): 23-25
- MSM4728 Sinnathuray, T.A. et al. Pattern of acute pelvic inflammatory disease in abortion-related admissions. *American journal of obstetrics and gynecology*, 1980, 868(7): 868-871.
- MSM4730 Wanjala, S. et al. *Mortality due to abortion at Kenyatta National Hospital, 1974-83. In: Ciba Foundation Symposium 115. Abortion Medical Progress and Social Implication.* London, Pitman, 1985.
- MSM4731 Tshibangu, K. et al. Avortement clandestine, probleme de sante publique a Kinshasa (Zaire). *J. de gynécologie, obstétrique et biologie de la reproduction*, 1984, 13(7): 759-763
- MSM4732 Tezcan, S. et al. *Abortion in Turkey.* Ankara, Turkey, Hacettepe University Institute of Community Medicine, 1980.
- MSM4733 Radhakeesoon, B. *Impact of government family planning and child health services in Mauritius.* Dundee, (Unpublished MPH thesis). Department of Community Medicine, University of Dundee, 1985.
- MSM4734 Topozada, H.K. Epidemiology of abortion in Alexandria. *Alexandria medical journal*, 1980, 26(1,2): 1-167.
- MSM4740 Crowther, C. Prevention of maternal deaths: a continuing challenge. *Central African journal of medicine*, 1986, 32(1): 11-14.
- MSM4742 Genasci, L. Brazil to launch national programme. *People*, 1986, 13(3): 25

- MSM4743 Hamand, J. Abortion - a way of life in Greece. *People*, 1985, 12(3): 19-21
- MSM4747 Onanga, B. et al. *Determinants and consequences of pregnancy wastage in Zaire*. Triangle Park, N.C., USA, Family Health International, 1986.
- MSM4748 Kwast, B.E. et al. Maternal mortality in Addis Ababa, Ethiopia. *Studies in family planning*, 1986, 17(6): 288-301
- MSM4750 Greenwood, A. et al. A prospective study of pregnancy in a rural area of the Gambia, West Africa. *Bulletin of the World Health Organization*, 1987, 65(5): 635-644.
- MSM4751 Pan American Health Organization. *Mortalidad materna*. Washington, USA, PAHO, Scientific Reports No. 48, 1986.
- MSM4752 Tietze, C. and Henshaw, S.K. *Induced abortion. A world review 1986. 6th edition*. New York, USA, Alan Guttmacher Institute, 1986.
- MSM4755 Adetero, O.O. Septic induced abortion at Ilorin, Nigeria: an increasing gynaecological problem in developing countries. *Asia-Oceania journal of obstetrics and gynaecology*, 1986, 12(2): 201-205.
- MSM4757 Alauddin, F. *Pregnancy outcome and neo-natal mortality in four upazilas of Bangladesh*. Dhaka, Bangladesh, BAMANEH, 1986.
- MSM4760 Koenig, M.A. et al. Maternal mortality in Matlab, Bangladesh, 1976-85. *Studies in family planning*, 1988, 19(2): 69-80
- MSM4762 Figa-Talamanca, I. et al. Illegal abortion: an attempt to assess its costs to the health services and its incidence in the community. *International journal of health services*, 1986, 16(3): 375-389
- MSM4764 Ryan, M. Illegal abortions and the Soviet health service. *British medical journal*, 1987, 294: 425-426
- MSM4769 Viel, B. *The health consequences of illegal abortion in Latin America*. In: Zatuchni, G.I. et al. *Pregnancy termination: Procedures, safety and new developments*. London, United Kingdom, Harper and Row, 1979.
- MSM4773 Sun, T.H. et al. Trends in fertility, family size preference and family planning practice: Taiwan, 1961-76. *Studies in family planning*, 1978, 9(4): 54-70
- MSM4777 Lim, L.S. et al. Abortion deaths in Singapore 1968-76. *Singapore medical journal*, 1979, 20(3): 391-394
- MSM4779 Chelala, C.A. *Mortalidad materna en las Americas*. PAHO draft, 1987.
- MSM4781 Suarez-Herrera, R. Maternal mortality in Maracaibo 1962 to 1967. *Revista de obstetricia y ginecología de Venezuela*, 1968, 28(4): 521-544
- MSM4783 Teo Yu Keng, M. et al. Septic induced abortion- A report of 100 cases in Sarawak. *Medical journal of Malaysia*, 1982, 37(4): 322-325
- MSM4784 Narone, J.N. et al. Criminal abortions as seen in the University Teaching Hospital, Lusaka. *Medical journal of Zambia*, 1981, 15(3): 80-84
- MSM4788 de la Rosa II, M.J. *Induced abortion: Is it really a problem?*. Paper presented to the National Conference on Safe Motherhood, September 3-4, 1987.
- MSM4789 Locko-Mafouta, C. et al. L'avortement clandestin a Brazzaville. *Médecine d'Afrique Noire*, 1986, 33(3): 199-214
- MSM4790 World Health Organization. Pan American Health Organization. *Elementos basicos para el estudio y para la prevencion de la mortalidad materna*. Washington, USA, PAHO, Programa salud maternoinfantil, 1987.
- MSM4791 Rodriguez, F. et al. Mortalidad materna en Chile. *Revista chilena de obstetricia y ginecología*, 1970, 35(5): 229-240
- MSM4793 Tisne, L. et al. Extension del Programa de atencion integral de la mujer en el area oriente de Santiago y descenso de la morbimortalidad materna y perinatal. Relacion con algunos indicadores socioeconomicos de Chile. *Revista chilena de obstetricia y ginecología*, 1975, 40(5): 246-277
- MSM4796 Colombia. Servicio de Salud del Valle. *Red perinatal valle del Cauca: enfoque integral para intervenciones en salud materna y recién nacido*. Cali, APRISA and CEPADS, 1987.
- MSM4797 Chile, Republica de. *Características de la mortalidad materna y rol de la atencion de salud en su prevencion*. Paper presented at WHO/PAHO Workshop on Maternal Mortality Research, Sao Paulo, April 1988, 1988.
- MSM4802 Tietze, K. and Bongaarts, J. The demographic effect of induced abortion. *Obstetrical and gynecological survey*, 1976, 31(10): 699-709

- MSM4806 Rochat, R.W. et al. An epidemiological analysis of abortion in Georgia. *American journal of public health*, 1971, 61(3): 543-552.
- MSM4812 Polgar, S. and Fried, E.S. The bad old days: clandestine abortions among the poor in New York City before liberatization of the abortion law. *Family planning perspectives*, 1976, 8(3): 125-127
- MSM4822 Khan, A.R. et al. Risks and costs of illegally induced abortion in Bangladesh. *Journal of biosocial science*, 1984, 16: 89-98
- MSM4824 Pongthai, S. et al. Illegally induced abortion: observation at Ramathibodi Hospital. *Journal of the Medical Association of Thailand*, 1984, 67(2): 50-53
- MSM4825 Mhango, C. et al. Reproductive mortality in Lusaka, Zambia, 1982-1983. *Studies in Family Planning*, 1986, 17(5): 243-251
- MSM4826 Olukoya, A.A. Pregnancy Termination: Results of a Community-Based study in Lagos, Nigeria. *International journal of gynaecology and obstetrics*, 1987, 25(1): 41-46
- MSM4827 Boerma, J.T. The magnitude of the maternal mortality problem in Sub-Saharan Africa. *Social science and medicine*, 1987, 24(6): 551-558
- MSM4829 Edstrom, K.G.B. *Health aspects of induced abortion*. Bucharest, Romania, Paper presented at the Population Tribune, 18-30 August, 1974, 1974.
- MSM4830 Rushwan, H.M.E. et al. *Three-center study on incomplete abortions in Khartoum, Sudan. A preliminary report*. International Fertility Research Program Conference Paper, 1975.
- MSM4833 Abeywickrema, D. *KAP study on abortion in Sri Lanka*. Sri Lanka, Family Planning Association of Sri Lanka, 1988.
- MSM4834 Spinelli, A. et al. *Legal abortion in Italy - 1983*. Rome, Italy, Annual report on Legal Abortion in Italy - 1983, 1985.
- MSM4839 Kwast, B. et al. Epidemiology of maternal mortality in Addis Ababa: a community based study. *Ethiopian medical journal*, 1985, 23(7): 1-15
- MSM4840 Akin, A. *Turkish experiences on abortion*. Ankara, Turkey, Department of Community Medicine, Hacettepe University Medical School Ankara, 1986.
- MSM4843 Narkavonnakit, T. Abortion in rural Thailand: a survey of practitioners. *Studies in family planning*, 1979, 10(8/9): 223-229
- MSM4845 Grimes, D.A. et al. Fatal septic abortion in the United States, 1975-1977. *Obstetrics and gynecology*, 1981, 57(6): 739-744
- MSM4852 Choon, H.S. Abortion - a survey of 1000 cases. *Medical journal of Malaysia*, 1963, 18(4): 282-287
- MSM4853 Anand, D. Clinico-epidemiological study of abortion. *Indian journal of public health*, 1965, 9(2): 52-58
- MSM4854 Rao, H.K. et al. A study of abortion cases in Bangalore city hospitals. *Journal of family welfare (Bombay)*, 1971, 18(2): 81-87
- MSM4858 Viel, B. Results of a family planning program in the western area of the city of Santiago. *American journal of public health*, 1969, 59(10): 1898-1909
- MSM4859 Requena, M.B. and Monreal, T. Evaluation of induced abortion control and family planning programs in Chile. *Milbank Memorial Fund quarterly*, 1968, 46(3,2): 191-217
- MSM4860 Mendoza-Hoyos, H. Research studies on abortion and family planning in Colombia. *Milbank Memorial Fund quarterly*, 1968, 46(3,2): 223-234
- MSM4862 Armijo, R. and Monreal, T. The problem of induced abortion in Chile. *Milbank Memorial Fund quarterly*, 1965, 43(4,2): 263-280
- MSM4864 Fortney, J.A. The use of hospital resources to treat incomplete abortions: examples from Latin America. *Public health reports*, 1981, 96(6): 574-579
- MSM4865 Dutta, R. Abortion in India, with particular reference to West Bengal. *Journal of biosocial science*, 1980, 12: 191-200
- MSM4867 Rushwan, H. et al. Contraceptive practice after women have undergone 'spontaneous' abortion in Indonesia and Sudan. *International journal of gynaecology and obstetrics*, 1977, 15: 241-249

- MSM4868 Chaturachinda, K. et al. Abortion: an epidemiologic study at Ramathibodi Hospital, Bangkok. *Studies in family planning*, 1981, 12(6/7): 257-262
- MSM4870 Sainz, S.G. Abortion research in Latin America. *Studies in family planning*, 1976, 7(8): 211-217
- MSM4872 Francome, C. How many illegal abortions?. *British journal of criminology*, 1976, 16(4): 389-392.
- MSM4873 Goodhart, C.B. Estimation of illegal abortions. *Journal of biosocial science*, 1969, 1: 235-245
- MSM4879 Chi, I.C. et al. Incomplete abortions in Accra and Bangkok University hospitals 1972-1973. *International journal of gynaecology and obstetrics*, 1975, 13: 148-161
- MSM4880 Walker, G.J.A. et al. Maternal mortality in Jamaica. *Lancet*, 1986, 486-488
- MSM4882 Pentelakis, S.N. et al. Influence of induced and spontaneous abortion on prematurity and birth-weight. *American journal of obstetrics and gynecology*, 1973, 116(6): 799-805.
- MSM4891 Bose, C. A comparative study of spontaneous and self-induced abortion cases in married women. *Journal of the Indian Medical Association*, 1979, 73(3/4): 56-59
- MSM4900 Gold, J. et al. A cluster of septic complications associated with illegal induced abortions. *Obstetrics and gynecology*, 1980, 56(3): 311-315
- MSM4901 Gallen, M. Abortion in the Philippines: a study of clients and practitioners. *Studies in family planning*, 1982, 13(2): 35-45
- MSM4903 Keng, T.Y.M. et al. Septic induced abortion - a report of 100 cases in Sarawak. *Medical journal of Malaysia*, 1982, 37(4): 322-325
- MSM4914 Facer, W.A.P. et al. Abortion in New Zealand. *Journal of biosocial science*, 1973, 5: 151-158
- MSM4921 Kahan, R.S. et al. The effect of legalized abortion on morbidity resulting from criminal abortion. *American journal of obstetrics and gynecology*, 1975, 121(1): 114-116.
- MSM4925 Seward, P.N. et al. The effect of legal abortion on the rate of septic abortion at a large country hospital. *American journal of obstetrics and gynecology*, 1973, 115(3): 335-338.
- MSM4933 Lwanga, C. Abortion in Mulago Hospital, Kampala. *East African medical journal*, 1977, 54(3): 142-148
- MSM4944 Newton, T. and Currie, E. New health team - no friends of abortion rights. *Breaking chains*, 1986, 44(Dec.): 1-8.
- MSM4945 Begum, S.F. *Monitoring incomplete abortion care at Dacca Medical College*. (Reprint), Noyr.
- MSM4946 El Pais. 105.000 mujeres abortan cada ano en Espana. *El Pais*, 1988,
- MSM4947 Kirkwood, B.J. et al. Abortion experiences among New Zealand women. *New Zealand medical journal*, 1979, 90: 294-297
- MSM4948 Mostafa, A.A. and Barakat, K.I. The abortion load in the Kuwait Maternity Hospital: five years' study. *Journal of the Kuwait Medical Association*, 1979, 13(2): 93-95
- MSM4950 Chatterjee, P. Induced abortion and its hazards. *Journal of the Indian Medical Association*, 1977, 69(8): 173-175
- MSM4951 Gallen, M. Abortion choices in the Philippines. *Journal of biosocial science*, 1979, 11: 281-288
- MSM4953 Vekemans, M. and Dohmen, B. Induced abortion in Belgium: clinical experience and psychosocial observations. *Studies in family planning*, 1982, 13(12): 355-364
- MSM4956 Ellerbrock, T.V. et al. Abortion surveillance, 1982-1983. *Morbidity and mortality weekly report*, 1987, 36(1SS): 11-42
- MSM4960 Tyler, C.W. The public health implications of abortion. *Annual review of public health*, 1983, 4: 223-258.
- MSM4972 Francome, C. Estimating the number of illegal abortions. *Journal of biosocial science*, 1977, 9(4): 467-479
- MSM4975 Paiewonsky, D. *El aborto en la Republica Dominicana*. Santo Domingo, Dominican Republic, CIPAF, 1988.
- MSM5007 The Abortion Law Reform Association, London. *A character for choice - now is the time*. Breaking Chains., 1988.
- MSM5014 Belgharbi, L. *Rapport sur la situation socio-sanitaire des femmes et des enfants en Republique Gabonaise*. Gabon, Ministere de la Sante Publique et de la Population (document du travail), 1986.
- MSM5017 Hong, S.B. *Changing patterns of induced abortion in Seoul, Korea*. Seoul, Korea, Dong-A Publishing Co., 1971.

- MSM5018 Hong, S.B. *Induced abortion in Seoul, Korea*. Seoul, Korea, Dong-A Publishing Co., 1966.
- MSM5021 Van der Tak, J. *Abortion, fertility and changing legislation: an international review*. Lexington, Mass., USA, Lexington Books, 1974.
- MSM5022 Pan American Health Organization. *Health of women in the Americas*. Washington, USA, PAHO, Scientific Publication No.488, 1985.
- MSM5023 Hong, S.B. and Watson, W.B. *The increasing utilization of induced abortion in Korea*. Seoul, Korea, A monograph in the 1971 Fertility-Abortion Survey, 1976.
- MSM5025 David, H.P. *Family planning and abortion in the socialist countries of Central Europe*. New York, USA, The Population Council, 1970.
- MSM5026 Awan, A.K. *Provoked abortions amongst 1447 married women*. Lahore, Pakistan, Maternity and Child Welfare Association of Pakistan, 1969.
- MSM5027 Lane, J. *Report of the Committee on the working of the abortion act. Volume 1. Report*. London, UK, Her Majesty's Stationery Office, 1964.
- MSM5030 Center for Disease Control. *Abortion surveillance 1976*. Atlanta, Georgia, Annual summary 1976, US Department of Health, Education Welfare, 1978.
- MSM5035 Chang, H.K.K. et al. *The medical outcome and psychosocial factors in relation to adolescent child birth in Seoul, Korea and the research findings' follow-up activities*. Korea Institute for Population and Health, Noyr.
- MSM5037 Abernathy, J.R. et al. Estimates of induced abortion in urban North Carolina. *Demography*, 1979, 7(1): 19-29
- MSM5041 Akinla, O. *Abortion in Africa*. In: Hall, R.E. (ed.). *Abortion in a changing world. Proceedings of an International Conference, Hot Springs, Virginia*. New York, Columbia University Press, 1970.
- MSM5046 Ampofo, D.A. 330 cases of abortion treated at Korle Bu Hospital: the epidemiological and medical characteristics. *Ghana medical journal*, 1970, 9(3): 156-162
- MSM5048 Armijo, R. and Monreal, T. *Epidemiology of provoked abortion in Santiago, Chile*. In: Muramatsu, M. and Harper, P.A. (eds.). *Population dynamics: international action and training programmes*. Baltimore, John Hopkins Press, 1965.
- MSM5049 Bachi, R. *Abortion in Israel*. In: Hall, R.E. (ed.) *Abortion in a changing world. Proceedings of an International Conference, Hot Springs, Virginia, November 19-20*. New York, Columbia University Press, 1970.
- MSM5052 Bates, J.E. and Zawadzki, E.S. *Criminal abortion: a study in medical sociology*. Springfield, Ill., Charles C.Thomas, 1964.
- MSM5053 Begum, F. et al. *Experience with abortion related admissions in Dacca Medical College Hospital*. Dacca, Bangladesh, Bangladesh Fertility Research Programme, Technical Report No. 8, 1978.
- MSM5054 Behjatnia, Y. Consultant report: incomplete abortions treated at Jahanshah Saleh Hospital in Teheran, Iran from May 14, 1973 to April 30, 1974. *Acta medica iranica*, 1978, 21(1): 53-67.
- MSM5056 Berquo, E.S. et al. Levels and variations in fertility in Sao Paulo. *Milbank Memorial Fund quarterly*, 1968, 46(3): 167-185
- MSM5057 Bhuiyan, N. et al. *Characteristics of abortion cases admitted in Chittagong Medical College Hospital in 1978*. Dacca, Bangladesh, Presented at the Annual Contributors' Conference of Bangladesh Fertility Research Programme, Technical Report No. 33, 1979.
- MSM5069 Cates, W. and Rochat, R.W. Illegal abortions in the United States: 1972-1974. *Family planning perspectives*, 1976, 8(2): 86-90
- MSM5072 Chen, L.C. et al. Maternal mortality in rural Bangladesh. *Studies in family planning*, 1974, 5(11): 334-341
- MSM5073 Chow, L.P. *Abortion in Taiwan*. In: Hall, R.E. (ed.). *Abortion in a changing world. Vol. 1. Proceeding of an International Conference, Hot Springs, Virginia*. New York, Columbia University Press, 1970.
- MSM5077 Daneshbod, K. et al. Survey of maternal deaths in south Iran: analysis of 96 autopsies. *J. of obstetrics and gynaecology of the British Commonwealth*, 1970, 77: 1103-1108
- MSM5087 Flavier, J.M. and Chen, C.H.C. Induced abortion in rural villages of Cavite, the Philippines: knowledge, attitudes and practice. *Studies in family planning*, 1980, 11(2): 65-71
- MSM5089 Galbinski, A. Contribution to the study of epidemiology of induced abortion. *Jornal brasileiro de ginecologia*, 1971, 71(4): 201-208

MSM5092 Gaslonde, S. *Preliminary analysis of data on abortion from Latin American surveys*. Santiago, Chile, Centro Latinoamericano de Demografia (CELADE), 1973.

MSM5093 Gaslonde, S. *Studies on fertility and abortion in Asuncion, Bogota, Buenos Aires, Lima and Panama City*. Washington, D.C., PAHO, Scientific Publication No. 306, 1975.

MSM5094 Gaslonde Sainz, S. Abortion research in Latin America. *Studies in family planning*, 1976, 7(8): 211-217

MSM5105 International Planned Parenthood Federation. *Family Planning in Chile: a profile of the development of policies and programmes*. London, International Planned Parenthood Federation (IPPF), 1980.

MSM5106 International Planned Parenthood Federation. *Family Planning in Colombia: a profile of the development of policies and programmes*. London, International Planned Parenthood Federation (IPPF), 1979.

MSM5109 Jabeen, S. et al. *A study of the abortion related cases admitted in Sir Salimullah Medical College Hospital, Dacca*. Dacca, Bangladesh, Technical Report No.35, 1979.

MSM5116 Larsen, J.V. Induced abortion. *South African medical journal*, 1978, 53(2): 853-857

MSM5120 Mathur, H.N. et al. Analytical study of abortions in rural community. *Journal of obstetrics and gynaecology of India*, 1979, 29(3): 620-622

MSM5126 Morris, L. et al. Contraceptive use and demographic trends in El Salvador. *Studies in family planning*, 1979, 10(2): 43-52

MSM5128 Morris, L. et al. Contraceptive prevalence in Paraguay. *Studies in family planning*, 1978, 9(10/11): 272-279

MSM5129 Nasah, B.T. Aetiology of infertility in the Came Rounne. *Nigerian medical journal*, 1978, 8(5): 452-456

MSM5130 Nazer, I.R. *Abortion in the Near East*. In: Hall, R.E. (ed.) *Abortion in a changing world. Vol.1. Proceedings of an International Conference, Hot Springs, Virginia*. New York, Columbia University Press, 1970.

MSM5139 Ordonez, B.R. *Induced abortion in Mexico City: summary conclusions from two studies conducted by the Mexican Social Security Institute*. Washington, D.C., PAHO, Scientific Publication No. 306, 1975.

MSM5140 Padubidri, V. and Kotwani, B.G. Septic abortions: 5 years review. *Journal of obstetrics and gynaecology of India*, 1979, 29(3): 593-597

MSM5147 Papaevangelou, G. et al. The effect of spontaneous and induced abortion on prematurity and birth-weight. *J. of obstetrics and gynaecology of the British Commonwealth*, 1973, 80(5): 418-422

MSM5148 Puffer, R.R. and Griffith, G.W. *Maternal deaths*. In: Puffer, R.R. and Griffith, G.W. *Patterns of urban mortality. Report of the Inter-American Investigation of Mortality*. Washington, D.C., PAHO, Scientific Publication No. 151, 1976.

MSM5149 Ramirez, E.C.E. et al. *The preferred risk of illegal abortion in the Dominican Republic*. In: David, H.P. et al. (eds.) *Abortion in psychosocial perspective: trends in transnational research*. New York, USA, Springer, 1978.

MSM5150 Rao, K.B. Maternal mortality in a teaching hospital in southern India: a 13-year study. *Obstetrics and gynecology*, 1975, 46(4): 397-400

MSM5151 Requena, B.M. *Abortion in Latin America*. In: Hall, R.E. (ed.) *Abortion in a changing world. Vol.1. Proceedings of an International Conference, Hot Springs, Virginia*. New York, Columbia University Press, 1970.

MSM5154 Santamaria, P.L.E. Induced abortion in the Maternal Child Institute. *Revista colombiana de obstetricia y ginecología*, 1970, 21(2): 137-139

MSM5155 Fox, K. *Health status review of Guyana*. (Unpublished document), 1986.

MSM5157 Guido, C. et.al. Analisis de 2746 Abortos Atendidos en el Hospital General de Managua. *International surgery*, 1971, 56(2): 125-127

MSM5158 Ghanai, P. et al. Study of maternal death in Amin Hospital in Isfahan, Iran. *Iranian journal of public health*, 1976, 5(3): 155-167

MSM5159 Santee, B. *A prospective abortion study in Santiago, Chile*. Washington, D.C., PAHO, Scientific Publication No.306, 1975.

MSM5160 Yoseph, S. *Teenage pregnancies and illegal abortion*. National Seminar on Safe Motherhood in Ethiopia, September 18-20, 1989, 1989.

MSM5161 Wegman, M.E. Annual summary of vital statistics - 1988. *Pediatrics*, 1989, 84(6): 943-956

MSM5163 Schwarz, R.H. *Septic abortion*. Philadelphia, Pennsylvania, Lippincott, 1968.



- MSM5164 Sidhu, S. and Sidhu, L.S. Pregnancy wastage in scheduled caste women of Punjab. *Annals of human biology*, 1988, 15(2): 167-170.
- MSM5165 Fox, L.P. Abortion deaths in California. *American journal of obstetrics and gynecology*, 1967, 98: 645-653.
- MSM5166 Rice-Wray, E. The Provoked Abortion - A Major Public Health Problem. *American journal of public health*, 1964, 54(2): 313-321.
- MSM5168 Schor, N. Investigacao sobre ocorrencia de aborto em pacientes de Hospital de Centro Urbano do Estado de Sao Paulo, Brasil. *Revista de saúde pública*, 1990, 24(2): 144-151
- MSM5169 Fauveau, V. and Blanchet, T. Deaths from injuries and induced abortion among rural Bangladeshi women. *Social science and medicine*, 1989, 29(9): 1121-1127
- MSM5172 Sikdar, K. and Konar, M. Trends of maternal mortality in Eden Hospital during 1976. *Journal of the Association of Medical Women in India*, 1979, 69(2): 50-55
- MSM5177 Su, K.H., Chow, L.P. Induced abortion and contraceptive practice: an experience in Taiwan. *Studies in family planning*, 1976, 7(8): 224-230
- MSM5180 Thambu, J.A.M. Abortions: government hospitals, Peninsular Malaysia, 1960-1972. *Medical journal of Malaysia*, 1975, 29(4): 258-262
- MSM5188 Velez Ramirez, O. 1229 cases of abortion in the Caldas University Hospital. *Revista colombiana de obstetricia y ginecologia*, 1970, 21(2): 147-170
- MSM5189 Viada, R. et al. Medical and socio-demographic implications of abortion at Felix Bulnes Hospital in Santiago. *Reproduccion*, 1976, 3(1/2): 33-42
- MSM5190 Viel, B. *The demographic explosion: the Latin American experience*. New York, Irvington, 1976.
- MSM5192 Viel, B. *The sequelae of non hospital abortions*. In: Hall, R.E. (ed.) *Abortion in a changing world*. Vol. 1 (Proceedings of an International Conference, Hot Springs, Virginia. New York, Columbia University Press, 1970.
- MSM5200 Zimmerman, M. Abortion law and practice: a status report. *Population reports, series E*, 1976, 3:
- MSM5203 Tietze, C. *Induced abortion. A World review*. 1981. New York, USA, Population Council, 1980.
- MSM5207 Rodriguez, J. et al. *Avoidable mortality and maternal mortality in Cali, Colombia*. Geneva, Presented at The Interregional Meeting on the Prevention of Maternal Mortality, 11-15 November, Unpublished WHO document No. FHE/PMM/85.9.8, 1985.
- MSM5212 Bhasker, R.K. Maternal mortality in a teaching hospital in southern India. A 13-year study. *Obstetrics and gynecology*, 1975, 46(4): 397-400
- MSM5215 Narone, R.K. et al. A study of 'spontaneous' abortions in Zambia. *J. of obstetrics and gynaecology of Eastern and Central Africa*, 1983, 2: 150-153
- MSM5216 Tezcan, S. and Omran, A.R. Prevalence and reporting of induced abortion in Turkey: two survey techniques. *Studies in family planning*, 1981, 12(6/7): 262-271
- MSM5217 Islam, S. Case studies of indigenous abortion practitioners in Rural Bangladesh. *Studies in family planning*, 1982, 13(3): 86-93
- MSM5220 International Planned Parenthood Federation. *A strategy for abortion management. Report of an IPPF Africa Regional Workshop*. London, IPPF, 1978.
- MSM5221 International Planned Parenthood Federation. *Korea profile. Family planning policies and programmes*. London, IPPF, 1979.
- MSM5230 Adrien, S. *Amelioration de la vie familiale en Republique Populaire du Congo*. Unpublished WHO document AFR/MCH/77, 1977.
- MSM5234 Institute of Population Studies,. *1983 Turkish fertility, contraceptive prevalence and family health status survey, Ankara Turkey*. Ankara, Turkey, Hacettepe University, 1987.
- MSM5238 Avendano, O. El aborto como problema de salud publica en Chile. *Cuadernos médico-sociales (Santiago)*, 1985, 16(1): 30-35
- MSM5239 Bailey, P.E., et al. A hospital study of illegal abortion in Bolivia. *Bulletin of the Pan American Health Organization*, 1988, 22(1): 27-41
- MSM5240 Briley, H. Campaigning in Argentina. *People*, 1988, 15(4): 24

- MSM5241 Center for Disease Control. Abortion surveillance. *Morbidity and mortality weekly report*, 1989, 38(SS-2):
- MSM5244 El-Mouelhy, M.T. *Maternal mortality in Egypt*. Cairo Family Planning Association, unpublished, 1987.
- MSM5248 Khin Kyi, M. Maternal mortality at the Women's and Children's Hospital, South Okkalapa (1978-1982). *Australian and New Zealand journal of obstetrics and gynaecology*, 1988, 28(1): 36-40.
- MSM5253 Rosenfeld, A. Abortion: the neglected problem. *People*, 1988, 15(4): 4
- MSM5255 Unuigbo, J.A., et al. Abortion-related morbidity and mortality in Benin City, Nigeria, 1973-85. *International journal of gynaecology and obstetrics*, 1988, 26: 435-439
- MSM5265 Ayman, T. *Iran*. In: *Psychosocial aspects of abortion in Asia. Proceedings of the Asian Regional Research Seminar on Psychosocial Aspects of Abortion, 26-29 November 1974*. Kathmandu, Nepal, Family Planning Association of Nepal, American Institute for Research, 1975.
- MSM5266 Peled, T. *Israel*. In: *Psychosocial aspects of abortion in Asia. Proceedings of the Asian Regional Research Seminar on Psychosocial Aspects of Abortion, 26-29 November 1974*. Kathmandu, Nepal, Family Planning Association of Nepal, American Institute for Research, 1975.
- MSM5267 Lee, S.J. *Republic of Korea*. In: *Psychosocial aspects of abortion in Asia. Proceedings of the Asian regional research seminar on psychosocial aspects of abortion, 26-29 November 1974*. Kathmandu, Nepal, Family Planning Association of Nepal, American Institute for Research, 1975.
- MSM5268 Puvan, I.S. *Malaysia (West)*. In: *Psychosocial aspects of abortion in Asia. Proceedings of the Asian regional research seminar on psychosocial aspects of abortion, 26-29 November 1974*. Kathmandu, Nepal, Family Planning Association of Nepal, American Institute for Research, 1975.
- MSM5272 Cook, M.J. and Leoprapai, B. *Tailand*. In: *Psychosocial aspects of abortion in Asia. Proceedings of the Asian regional research seminar on psychosocial aspects of abortion, 26-29 November 1974*. Kathmandu, Nepal, Family Planning Association of Nepal, American Institute for Research, 1975.
- MSM5273 Samporno, D. and Sadli, S. *Indonesia*. In: *Psychosocial aspects of abortion in Asia. Proceedings of the Asian regional research seminar on psychosocial aspects of abortion, 26-29 November 1974*. Kathmandu, Nepal, Family Planning Association of Nepal and American Institute for Research, 1975.
- MSM5275 Samil, R.S. Commentary on menstrual regulation as a health service: challenges in Indonesia. *International journal of gynaecology and obstetrics*, 1989, Suppl. 3: 29-32
- MSM5282 Feature Article. The impact of unsafe abortion in the Developing World. *Outlook*, 1989, 7(3):
- MSM5283 International Reference Center for Abortion Research. Abortion. *Abortion research notes*, 1989, 18(3-4): 1-6.
- MSM5284 Kwast, B.E. et.al. Confidential enquiries into maternal deaths in Addis Ababa, Ethiopia 1981-1983. *J. of obstetrics and gynaecology of Eastern and Central Africa*, 1989, 8: 75-82
- MSM5289 Ray, A. *A comparative study of spontaneous abortion and medical termination of pregnancy*. In: *Wadia, S.A.B. Medical and socio-economic aspects of abortion*. Calcutta, Seminar organised by the Family Planning Organisation of India, November 25-27, 1972, 1973.
- MSM5290 Sinnathuray, T.A. et al. *Report on Maternal Health and Early Pregnancy Wastage in Pennsular Malaysia*. Federation of the Family Planning Association, Malaysia and International Development Research Centre, Canada, 1977.
- MSM5294 Frejka, T. Induced abortion and fertility: A quarter century of experience in Eastern Europe. *Population and development review*, 1983, 9(3): 494-520
- MSM5295 Kenya. *A report by the Director of medical services on status of health in Kenya 1979*. Nairobi, Kenya, Ministry of Health, 1982.
- MSM5297 Baldo, M.H. *Maternal mortality in Sudan*. Geneva, Thresented at the Interregional Meeting on Prevention of Maternal Mortality (Document FHE/PMM/85.9.5), 1985.
- MSM5298 Nural Alam, A.H.M. *Prevention of maternal mortality in Bangladesh*. Geneva, Presented at The Interregional Meeting on Prevention of Maternal Mortality, 11-15 November, 1985, (Document FHE/PMM/85.9.15), 1985.
- MSM5300 International Planned Parenthood Federation. Illegal abortion in Latin America. *IPPF medical bulletin*, 1982, 16(4): 1-2
- MSM5301 Westoff, C.F. Abortions averted by sterilization in Korea: 1977-1978. *International family planning perspectives*, 1980, 6(2): 60-64
- MSM5303 Choi, E.H. et al. Abortion and contraception in the Korean fertility transition. *Journal of population and health studies*, 1982, 2(1): 71-87

- MSM5304 Gomaa, R.A. et al. Health profile of Egypt. *Newsletter*, 1982, 3(4):
- MSM5307 Kamaci, M. and Mermut, S. *Turkey: pressures on employment, housing, education and health care*. 1986.
- MSM5312 van der Tak, J. *Impact of changing abortion legislation and practice on fertility trends*. In: David, H.P. (ed). *Abortion research: international experience*. Lexington, Mass., USA, Lexington Books, 1974.
- MSM5319 Akin, A. *Maternal Mortality in Turkey*. Geneva, Presented at The Interregional Meeting on the Prevention of Maternal Mortality, 11-15 November, 1985, 1985.
- MSM5320 Hollebach, P.E. et al. Fertility Determinants in Cuba. *International family planning perspectives*, 1984, 10(1): 12-20
- MSM5322 Bhasker Rao, K. Risk factors in abortion. *The Hindu*, 1990, May 20: 19
- MSM5330 Huldt, L. Outcome of pregnancy when legal abortion is readily available. *Lancet*, 1968, March 2: 467-468
- MSM5331 Vekemans, M. and Verhaegen, B. Enquete sur le nombre d'interruptions volontaires de grossesse pratiquées en Belgique en 1985. *Revue médicale de Bruxelles*, 1987, 8: 21-25
- MSM5336 David, H. Background. Romania ends compulsory childbearing. *Entre nous*, 1990, 14/15: 9-10
- MSM5337 Jeanblanc, A. A brighter future for three million Romanian women?. *Entre nous*, 1990, 14/15: 5
- MSM5344 Fauveau, V. et al. Causes of maternal mortality in rural Bangladesh, 1976-85. *Bulletin of the World Health Organization*, 1988, 66(5): 643-651
- MSM5347 Valaeres, V.G. et al. Postwar abortion experience. *Studies in family planning*, 1969, 46: 10-16
- MSM5348 Requena, M.B. Social and economic correlates of induced abortion in Santiago, Chile. *Demography*, 1965, 2: 33-49
- MSM5349 Fortney, J.A. et al. *Maternal mortality in Indonesia and Egypt*. Geneva, Presented at The Interregional Meeting on Prevention of Maternal Mortality, 11-15 November, 1985, 1985.
- MSM5350 Fortney, J.A. et al. Causes of death to women of reproductive age in two developing countries. *Population research and policy review*, 1987, 6: 137-148
- MSM5353 Abdullah, S.A. et al. *Maternal mortality in Upper Egypt*. Geneva, Presented at The Interregional Meeting on Prevention of Maternal Mortality, 11-15 November .985, 1985.
- MSM5354 El-Mouelhy, M.T. *Maternal mortality in Egypt*. Cairo Family Planning Association (unpublished), 1987.
- MSM5356 Guha, M. Maternal mortality. *Journal of obstetrics and gynaecology of India*, 1972, 22(3): 254-261
- MSM5358 Cervantes, R. et al. *Muerte materna y muerte perinatal en los hospitales del Peru*. Lima, Peru Ministerio de Salud, 1988.
- MSM5359 Adetoro, O.O. A 15-year study of illegally induced abortion mortality at Ilorin, Nigeria. *International archives of occupational and environmental health*, 1989, 29: 65-72
- MSM5360 Stamm, H. et al. Schwangerschaftsabbruch in der Schweiz 1982 bis 1986. *Schweizerische Rundschau fuer Medizin (PRAXIS)*, 1990, 79(9): 229-234
- MSM5362 Munoz Agüero, W. et al. Maternal mortality. Review of cases for a period of 30 years, 1950-1959. *Revista chilena de obstetricia y ginecología*, 1980, 45(3): 156-169
- MSM5366 Viel, P.B. and Campos, W. La experiencia Chilena de mortalidad infantil y materna, 1940-1985. *Perspectivas internacionales en planificación familiar*, 1987, Spec.Issue
- MSM5369 Philippines, National Economic and Development Authority. *Vital statistics report 1975*. National Census and Statistics Office, NEDA - APO Unit, 1979.
- MSM5371 Mola, G. and Atiken, I. Maternal mortality in Papua New Guinea 1976-1983. *Papua New Guinea medical journal*, 1984, 27(2): 65-71
- MSM5373 Peel, J. and Potts, M. *Textbook of contraceptive practice*. Cambridge University Press, 1969.
- MSM5375 Walker, J.A. et al. *Maternal mortality in Jamaica. A confidential inquiry into all maternal deaths in Jamaica 1981-1983*. Interregional Meeting on Prevention of Maternal Mortality. Geneva, Paper presented at the Interregional Meeting on Prevention of Maternal Mortality, 11-15 November 1985, Document No. FHE/PMM/85.9.10, 1985.
- MSM5381 Sanchez Torres, F. Mortalidad materna en el Instituto Materno Infantil, de Bogota (1971 - 1973). *Revista colombiana de obstetricia y ginecología*, 1974, Nov-Dec: 395-401

- MSM5382 Bhuiyan, N. *Characteristics of tubectomy clients of Chittagong Medical University*. (Unpublished), 1978.
- MSM5383 Kamal, G.M. (ed). Septic abortion -- Bangladeshi women want to get rid of it. *MR newsletter*, 1988, 4(1): 1-3
- MSM5384 Lopez Ruiz, R. Morbidity and mortality in the maternity pediatric institute - Concepcion Villavecs de Acosta - in 1965 and 1966. *Revista colombiana de obstetricia y ginecología*, 1968, 19(4): 269-281
- MSM5385 Devi, Y.L. and Singh, J. Maternal mortality. A ten years study in R.M.C. hospital: IMPHAL. *Journal of obstetrics and gynaecology of India*, 1987, 37(1): 90-94
- MSM5386 Kamel, N.M. et al. The antenatal care in Alexandria. Extent of coverage and pattern of attendance. *Bulletin of the High Institute of Public Health, Alexandria*, 1978, 8(2): 353-373
- MSM5388 Guiloff Fishe, E. et al. Family planning programs: World review 1974. Chile. *Studies in family planning*, 1975, 6(8): 267-268
- MSM5389 Kamel, W.H. et al. Pregnancy wastage in a rural community in Egypt. *Egyptian population and family planning review*, 1974, 7(1): 11-20
- MSM5395 Mehlan, K-H. *Abortion in Eastern Europe*. In: Hall, R.E. (ed) *Abortion in a changing world*. New York, Columbia University Press, 1970.
- MSM5401 India, Ministry of Home Affairs, Office of Registrar General. *Vital statistics of India 1976*. New Delhi, Office of Registrar General, 16th Issue, Series 3, No. 12, 1982.
- MSM5411 Bhatia, J.C. Abortionists and abortion seekers. *Indian journal of social work*, 1973, 34(3): 275-285
- MSM5413 Aguero, O. and Torres, J. Frecuencia y letalidad del aborto. *Revista de obstetricia y ginecología de Venezuela*, 1972, 32(1): 3-15
- MSM5414 Rajasekharan, N. and Vijaya, R. Some observations on septic abortion (Analysis of 617 cases - from January 1967 to June 1971). *Journal of obstetrics and gynaecology of India*, 1973, 23: 47-54
- MSM5415 Monreal, T.P. Fecundidad, aborto y nivel de vida en mujeres Mapuches. *Revista médica de Chile*, 1972, 100: 1273-1286
- MSM5418 Nichols, D. et al. Sexual behavior, contraceptive practice, and reproductive health among Nigerian adolescents. *Studies in family planning*, 1986, 17(2): 100-106
- MSM5422 Nichols, D. et al. Sexual behavior, contraceptive practice, and reproductive health among Liberian adolescents. *Studies in family planning*, 1987, 18(3): 169-176
- MSM5428 Bullough, C.H.W. Analysis of maternal deaths in the Central Region of Malawi. *East African medical journal*, 1981, 58(1): 25-36
- MSM5432 Mehta, B. et al. Abortion and M.T.P. cases - A study of hospital admissions from 1971 to 1979. *Indian journal of public health*, 1982, 26(1): 38-41
- MSM5433 Grech, E.S. Obstetric Deaths in Lusaka. *Medical journal of Zambia*, 1978, 12(2): 45-53
- MSM5437 Hickey, M.U. and Kasonde, J.M. Maternal mortality at University Teaching Hospital, Lusaka. *Medical journal of Zambia*, 1977, 11(3): 74-78
- MSM5442 Hogberg, U. Maternal mortality - a world wide problem. *International journal of gynaecology and obstetrics*, 1985, 23: 463-470
- MSM5447 Carrasco, E. *Incidence of abortion, fertility and contraception in Latin America*. In: *International Population Conference, 1973*. Liege, Union Internationale pour l'Etude Scientifique de la Population, 1974.
- MSM5448 Freedman, R. et al. Trends in family size preferences and practice of family planning: Taiwan, 1965-1970. *Studies in family planning*, 1972, 3(12): 281-296
- MSM5449 Chang, K.S. et al. East Asia review, 1972. Korea (South). *Studies in family planning*, 1973, 4(5): 107-111
- MSM5453 Hooi, S.C. Abortion - a survey of 1,000 cases. *Medical journal of Malaysia*, 1963, 18(4): 282-287
- MSM5454 Rattakul, P. Septic abortion, the scourge of modern obstetrics. *Journal of the Medical Association of Thailand*, 1971, 54(5): 312-319
- MSM5456 Jalali, G.H. et al. Study of abortion at Farah Maternity Hospital, Teheran. *Iranian journal of public health*, 1974, 2(4): 212-218
- MSM5462 Hall, M-F. Family planning in Lima, Peru. *Milbank Memorial Fund quarterly*, 1965, 43(4): 100-116

- MSM5463 Requena, M.B. Studies of family planning in the Quinta Normal district of Santiago. The use of contraceptives. *Milbank Memorial Fund quarterly*, 1965, 43(4): 69-99
- MSM5466 Armagnac, C. and Retel-Laurentin, A. Relations between fertility, birth intervals, foetal mortality and maternal health in Upper Volta. *Population studies*, 1981, 35(2): 217-235
- MSM5468 Al-Saigh, B.R. et al. The problem of pregnancy wastage from an epidemiological perspective: an exploratory study in Basrah. *Medical journal of Basrah University*, 1980, 3(1): 19-41
- MSM5469 Anonymous. El aborto social. *Boletín de salud pública*, 1974, April: 63-66.
- MSM5470 Kouwakanou, J.D.H. *Contribution a l'etude des avortements provoques. A propos de 707 cas recensés a la maternité du C.N.H.U. de Cotonou.* Doctoral thesis, Université Nationale de Benin, 1986.
- MSM5474 Bhatia, J.C. and Neumann, A.K. Social correlates of foetal mortality in rural Ghana. *Journal of family welfare*, 1982, 28: 46-57
- MSM5475 Imoedemhe, D.A.G. et al. Intestinal injuries following induced abortion. *International journal of gynaecology and obstetrics*, 1984, 22: 303-306
- MSM5476 Park, T.K. An analysis of all pregnancy outcomes in a rural Korean community. *Yonsei medical journal*, 1979, 20(2): 170-182
- MSM5480 Canto de Cetina, T.E. et al. Aborto incompleto: características de las pacientes tratadas en el Hospital O'Horan de Merida, Yucatan. *Salud pública de México*, 1985, 27(6): 507-513
- MSM5482 Monreal, T. et al. Abortos hospitalizados en El Salvador. *Salud pública de México*, 1977, 19(3): 387-395
- MSM5483 Valenzuela, A.V. and Jara, I. Abortions in two Philippine hospitals. *Journal of the Philippines Medical Association*, 1978, Nov-Dec: 379-390
- MSM5484 Norambuena, J.C.C. et al. Aborto. Analisis y evolucion de los egresos hospitalarios por aborto en el area de Talcahuano 1970-1976. *Cuadernos médico-sociales (Santiago)*, 1980, 5-10
- MSM5485 Crowther, C. and Verkuyl, D. Characteristics of patients attending Harare Hospital with incomplete abortion. *Central African journal of medicine*, 1985, 31(4): 67-70.
- MSM5493 Yoseph, S. and Kifle, G. A six-year review of maternal mortality in a teaching hospital in Addis Ababa. *Ethiopian medical journal*, 1988, 26: 115-120
- MSM5504 Koetsawang, S. et al. Study of spontaneous abortion in Thailand. *International journal of gynaecology and obstetrics*, 1978, 15: 361-368
- MSM5506 Chattopadhyay, S. et al. Maternal mortality in Riyadh, Saudi Arabia. *British journal of obstetrics and gynaecology*, 1983, 90: 809-814.
- MSM5507 Mashini, I. et al. Maternal mortality in the American University of Beirut Medical Center - AUBMC, 1971-1982. *International journal of gynaecology and obstetrics*, 1984, 22: 275-279
- MSM5509 Donaldson, P.J. et al. Abortion and Contraception in the Korean Fertility Transition. *Population studies*, 1982, 36(2): 227-236
- MSM5512 Hong, S. and Tietze, C. Survey of Abortion Providers in Seoul, Korea. *Studies in family planning*, 1979, 10(5): 161-163
- MSM5521 Bateman, D.E.R. Cases of abortion treated at the Lambeth Hospital, 1960-1967. *J. of obstetrics and gynaecology of the British Commonwealth*, 1968, 75: 1169-1172
- MSM5522 Brown, I. Maternal mortality: a survey of maternal deaths occurring during 1976. *Central African journal of medicine*, 1978, 24(10): 212-214
- MSM5527 Jain, A.K. Fetal wastage in a sample of Taiwanese women. *Milbank Memorial Fund quarterly*, 1969, 47(3): 291-306
- MSM5528 Utian, W.H. The cause of death following abortion: an analysis of 28 consecutive cases at Groote Schuur Hospital. *J. of obstetrics and gynaecology of the British Commonwealth*, 1968, 75: 705-712
- MSM5530 Barno, A. Criminal abortion deaths, illegitimate pregnancy deaths, and suicides in pregnancy. *American journal of obstetrics and gynecology*, 1967, 98(3): 356-367.
- MSM5532 Karchmer, S. et al. Studies on maternal mortality in Mexico. *International journal of gynaecology and obstetrics*, 1976, 14: 449-454

- MSM5533 Borazjani, G. et al. Maternal mortality in South Iran: a seven-year survey. *International journal of gynaecology and obstetrics*, 1978, 16(1): 65-69
- MSM5534 Oduntan, S.O. and Odunlami, V.B. Maternal mortality in Western Nigeria. *Tropical and geographical medicine*, 1975, 27: 313-316
- MSM5540 Valenzuela, A.V. Abortion in Filipino women. *Journal of the Philippine Medical Association*, 1970, 46(11): 655-667
- MSM5541 Koetsawang, A. and Koetsawang, S. *Nation-wide study on health hazard of illegally induced abortion*. Bangkok, Thailand, Mahidol University, 1987.
- MSM5542 Koetsawang, S. *Incidence of abortion in Siriraj Hospital Bangkok from 1968-1979*. Bangkok, Thailand, Mahidol University, 1980.
- MSM5543 Kumar, R. et al. Maternal mortality inquiry in a rural community of North India. *International journal of gynaecology and obstetrics*, 1989, 29(4): 313-319
- MSM5544 Picaud, A. et al. La mortalite maternelle au Centre Hospitalier de Libreville (1984-1987). *J. de gynécologie, obstétrique et biologie de la reproduction*, 1989, 18(4): 445-450
- MSM5546 Khin-Kyi, M.K. Maternal mortality at the Workers' Hospital, Rangoon (1983-1987). *Australian and New Zealand journal of obstetrics and gynaecology*, 1988, 28(3): 242-243.
- MSM5549 Montgomery, T.A. et al. Maternal deaths in California, 1957-1962. *California medicine*, 1964, 100(6): 412-421.
- MSM5550 Rosenfield, A. Maternal mortality in developing countries. An ungoing but neglected 'epidemic'. *Journal of the American Medical Association (JAMA)*, 1989, 262(3): 376-379
- MSM5553 Hilfrich, H.J. and Siedentopf, H.G. Bericht uber 340 mütterliche Todesfälle. *Zeitschrift fuer Geburtshilfe und Gynaekologie*, 1967, 167: 262-285
- MSM5556 Topozada, H.K. and Topozada, M.K. *Experience with abortion in a private practice*. In: Omran, A. (ed). *Egypt: population problems and prospects*. Chapel Hill, N.C., University of North Carolina, Carolina Population Centre, 1973.
- MSM5561 Kady, A.A. et al. Obstetric deaths in Menoufia Governorate, Egypt. *British journal of obstetrics and gynaecology*, 1989, 96(1): 9-14.
- MSM5562 Cooreman, B.F. et al. Maternal deaths at Pelonomi Hospital, Bloemfontein, 1980-1985. *South African medical journal*, 1989, 76(1): 24-26
- MSM5564 Shepherd, J.M. and Benny, P.S. Septic Abortion in Wellington 1960-1979. *New Zealand medical journal*, 1984, 97: 322-324
- MSM5565 Mitra, J. and Khara, B.N. Maternal mortality - a review of the current status in a teaching institution. *Journal of obstetrics and gynaecology of India*, 1983, 33: 209-213
- MSM5566 Leko, R.J. Outcome of pregnancy and delivery at the Central Maternity Central Hospital Yaounde. *Annales universitaires des sciences de la santé*, 1987, 4(1): 322-330.
- MSM5567 Tshibangu, K. et al. Avortement clandestin, probleme de sante publique a Kinshasa (Zaire). *J. de gynécologie, obstétrique et biologie de la reproduction*, 1984, 13(7): 759-763
- MSM5570 Siqueira, F.A.A. de et al. Mortalidade materna no Brasil, 1980. *Revista de saúde pública*, 1984, 18: 448-465
- MSM5572 Okoisor, A.T. Maternal Mortality in the Lagos University Teaching Hospital. *Nigerian medical journal*, 1978, 8(4): 349-354
- MSM5574 Kong, H. and Ng, K.H. Maternal mortality in University Hospital Kuala Lumpur, Malaysia. *Medical journal of Malaysia*, 1974, 28(4): 226-228
- MSM5576 Sikdar, K. and Konar, M. Maternal mortality from sepsis. *Journal of obstetrics and gynaecology of India*, 1979, 29: 1149-1154
- MSM5577 Bhasker Rao, K. Maternal mortality in India - a cooperative study. *Journal of obstetrics and gynaecology of India*, 1980, 30(6): 859-864
- MSM5578 Lakshmi, Y. and Singh, J. A seven years review of maternal mortality at district and regional medical college hospitals Imphal - MANIPUR. Analysis of some of the causative factors. *Journal of obstetrics and gynaecology of India*, 1981, 31: 267-271
- MSM5580 Kashlan, K.E. et al. Induced abortions recorded spontaneous in hospital admission. *Egyptian population and family planning review*, 1974, 7(2): 79-85

- MSM5581 Herrera M., M. Aborto y planificación familiar. *Cuadernos médico-sociales (Santiago)*, 1973, 14(2): 9-19
- MSM5582 Crowther, C.A. Maternal deaths at Harare Maternity Hospital during 1983. *South African medical journal*, 1986, 69(3): 180-182
- MSM5586 Mati, J.K.G. *Abortion in Africa. In: Family welfare and development in Africa. Proceedings of the IPPF Africa regional conference.* London, IPPF, 1977.
- MSM5588 Novak, F. *Abortion in Europe. In: Hankinson, R. et al. (eds). Proceedings of the 8th International conference of the IPPF, Santiago, Chile 9-15 April, 1967.* London, IPPF, 1967.
- MSM5589 Nazer, I.R. *Abortion in the Near East. In: Hankinson, R. et al. (eds). Proceedings of the 8th international conference of the IPPF. Santiago, Chile 9-15 April, 1967.* London, International Planned Parenthood Federation, 1967.
- MSM5590 Armijo, R. *Abortion in Latin America. In: Hankinson, R. et al. (eds). Proceedings of the 8th International conference of the IPPF, Santiago, Chile 9-15 April, 1967.* London, International Planned Parenthood Federation, 1967.
- MSM5591 Overstreet, E.W. *Abortion in North America. In: Hankinson, R. et al. (eds). Proceedings of the 8th international conference of the IPPF, Santiago, Chile, 9-15 April 1967.* London, International Planned Parenthood Federation, 1967.
- MSM5592 Frank, O. The demand for fertility control in sub-Saharan Africa. *Studies in family planning*, 1987, 18(4): 181-201
- MSM5595 Chowdhury, G.A. *Baseline survey of the Bolora project area.* Dhaka, Bangladesh, Bangladesh Women's Health Coalition, 1986.
- MSM5596 Chowdhury, G.A. *Baseline survey of the Mirpur project area.* Dhaka, Bangladesh, Bangladesh Women's Health Coalition, 1986.
- MSM5597 Chowdhury, G.A. *A study on socio-demographic characteristics of 300 MR clients in Mirpur coalition clinic, Dhaka. October 1983-March 1984.* Dhaka, Bangladesh, Bangladesh Women's Health Coalition, 1984.
- MSM5598 Chowdhury, G.A. *A study of post-MR contraceptive use by clients of coalition clinic Narayangong. November 1986-March 1987.* Dhaka, Bangladesh, Bangladesh Women's Health Coalition, 1988.
- MSM5600 Sengupta, A. and Gode, A.G. The study of maternal mortality and morbidity in a North Indian hospital - A 9 years review. *Journal of obstetrics and gynaecology of India*, 1987, 37(3): 394-399
- MSM5606 Ahmad, M.M. *Epidemiology of induced abortion in the Middle East; In: Hafez, E.S.E. (ed), voluntary termination of pregnancy.* Lancaster, UK, MTP Press Limited, Falcon House, 1984.
- MSM5608 Requena B., M. (ed.). *Aborto inducido en Chile.* Santiago, Chile, Sociedad Chilena de Salud Publica A.G., 1990.
- MSM5609 Lewis Enoch, E.M. *Trends in fertility, family structure and contraceptive practice. A generation study.* Department of Medical Demography, London School of Hygiene and Tropical Medicine, University of London, 1988.
- MSM5611 Unuigbo, J.A. et al. Preventable factors in abortion-related maternal mortality in Africa: focus on abortion deaths in Benin City, Nigeria. *Tropical medicine and parasitology*, 1988, 1(1): 36-39
- MSM5612 Lema, V.M. et al. *Epidemiology of abortion in Kenya.* Nairobi, Kenya, The Centre for the Study of Adolescence (CSA), 1989.
- MSM5614 World Bank. *Mauritius. Population sector review.* Washington, International Bank for Reconstruction and Development (IBRD), Report no. 4486, 1983.
- MSM5615 Fincancioglu, N. Turkey launches new drive. *People*, 1986, 13(3): 28-29
- MSM5616 Sabchez-Torres, F. Illegal abortion in Latin America. *Draper Fund report*, 1980, 9: 14-15
- MSM5617 Editorial. Brazil to launch national programme. *People*, 1986, 13(3): 25
- MSM5618 Bongwele, O. et al. *Determinants and consequences of pregnancy wastage in Zaire.* Research Triangle Park, North Carolina, USA, Family Health International, 1986.
- MSM5619 Jimenez G., J. et al. *Mortalidad materna en Costa Rica.* Sao Paulo, Unpublished paper presented at the AMR Workshop on maternal mortality research, 12-15 April, 1988.
- MSM5621 Fauveau, V. et al. The effect of maternal and child health and family planning services on mortality: Is prevention enough?. *British medical journal*, 1990, 301: 103-107.
- MSM5622 Cecatti, J.G. *Report for debriefing.* Unpublished Consultant Report M3/445/34AF, 1990.
- MSM5624 Galimberti, D. et al. *Programa educativo para una maternidad sin riesgo.* Buenos Aires, (Unpublished paper), 1990.

- MSM5625 Rossi, S. et al. *Investigacion comportamiento reproductivo*. (Unpublished paper), 1989.
- MSM5626 World Bank. *Brazil. Women's reproductive health*. (Unpublished confidential report 8215-BR), 1989.
- MSM5627 Catano, L.O. *Prevalence of induced abortion in Medellin and Bello, Antioquia, Colombia. 1991*. London School of Hygiene and Tropical Medicine, Unpublished research project submitted for M.Sc., 1990.
- MSM5632 Myanmar, Department of Health. *Project agreement: Strengthening of maternal and child health services*. (Unpublished paper), 1990.
- MSM5633 Mundigo, A.J. *Mortality and morbidity due to induced abortion*. Cairo, International Union for the Scientific Study of Population, Seminar on maternal and child mortality, 1991.
- MSM5636 Toure, B. et al. Levels and causes of maternal mortality in Guinea (West Africa). *International journal of gynaecology and obstetrics*, 1992, 37(2): 89-95
- MSM5637 Zulkifli, S.N. Trends in selected obstetric complications from University Hospital, Kuala Lumpur, Malaysia. *International journal of gynaecology and obstetrics*, 1991, 35: 19-27
- MSM5638 Nasah, B.T. et al. The risk approach for reducing maternal mortality: the Yaounde experience. *International journal of gynaecology and obstetrics*, 1991, 36: 195-201
- MSM5639 Mauritius. *Health statistics annual 1989*. Ministry of Health, 1990.
- MSM5640 Begum, S.F. *Maternal mortality in Bangladesh*. In: Kessel, E. and Awan, A.K. (eds). *Maternal and child care in developing countries*. Thun, Switzerland, Ott Publishers, 1989.
- MSM5641 India. *Children and women in India. A situation analysis, 1990*. UNICEF, 1990.
- MSM5642 Ristori C., C. et al. Indicadores biodemograficos, Chile, 1960-1987. *Boletín epidemiológico de Chile*, 1988, 15(7-9): 105-117.
- MSM5643 Popov, A.A. Family planning and induced abortion in the USSR: Basic health and demographic characteristics. *Studies in family planning*, 1991, 22(6): 368-377
- MSM5644 Ray, A. Maternal mortality in a subdivisional hospital of Eastern Himalayan region. *Journal of the Indian Medical Association*, 1992, 90(5): 124-125
- MSM5645 Zetina, C.E. *Embarazo, parto y puerperio*. In: *Secretaria de Salud. La mujer adolescente, adulta, anciana y su salud*. Mexico, Direccion General de Salud Materno Infantil, 1992.
- MSM5647 Chile. *Health situation and health care in Chile, 1992*. Ministry of Health, 1992.
- MSM5648 Rita, M. Estudo da mortalidade materna hospitalar em 1987 em Luanda. *Acta medica angolana*, 1988, 7: 31-40.
- MSM5649 Konje, J.C. et al. Health and economic consequences of septic induced abortion. *International journal of gynaecology and obstetrics*, 1992, 37(3): 193-197
- MSM5650 Galvez M., A. de la. Mortalidad materna: situacion actual. *Revista boliviana de ginecología y obstetricia*, 1988, 11(2): 9-13
- MSM5651 Jindal, U.N. et al. Causes of maternal mortality in a tertiary care center in Chandigarh. *Journal of obstetrics and gynaecology of India*, 1989, 39(6): 787-791
- MSM5652 Beebi, A.N. Five year study of maternal mortality at the institute of obstetrics and gynaecology, Madras (1981-1985). *Journal of obstetrics and gynaecology of India*, 1987, 37(6): 820-822
- MSM5653 Kamalajayaram, V. and Parameswari, T. A study of septic abortion cases in the last 6 years. *Journal of obstetrics and gynaecology of India*, 1988, 38(4): 389-392
- MSM5654 Indonesia. *Safe motherhood. 1. Assessment of maternal health situation and health services; 2. Assessment of socio-cultural aspects; 3. Assessment of midwifery education and practices*. Ministry of Health, United Nations Development Programme and World Health Organization, 1991.
- MSM5655 Tarafdara, A.I. et al. Women, health and development in Bangladesh. *Asia-Pacific journal of public health*, 1991, 5(4): 359-363.
- MSM5656 Gongoro, H. Maternal mortality in Botswana 1982-1986. *Journal of the Medical and Dental Association of Botswana*, 1988, 18(3-4): 49-61
- MSM5657 Chipangwi, J.D. et al. Maternal mortality in the Thyolo district of Southern Malawi. *East African medical journal*, 1992, 69(12): 675-679
- MSM5658 Sangala, V. Maternal deaths in 1990 at Kamuzu Central Hospital. *Malawi medical journal*, 1992, 8(1): 24-28



- MSM5659 Wiebenga, J.E. Maternal mortality at Queen Elizabeth Central Hospital. *Malawi medical journal*, 1992, 8(1): 19-23
- MSM5660 World Health Organization. Regional Office for Europe. *Highlights on health*. Unedited draft WHO/EURO, unnumbered, 1993.
- MSM5661 Assiut University Hospital. *Workshop on maternal mortality and un-met needs in maternal health and family planning in Upper Egypt*. Assiut University Hospital, 1988.
- MSM5662 Kamalajayaram, V. Maternal mortality - 15 yeras study. *Journal of obstetrics and gynaecology of India*, 1992, 42(6): 781-786
- MSM5664 Mbizvo, M.T. et al. Maternal mortality in rural and urban Zimbabwe: social and reproductive factors in an incident case-referent study. *Social science and medicine*, 1993, 36(9): 1197-1205
- MSM5665 Indian Council of Medical Research (ICMR). *A national collaborative study of identification of high risk families mothers and outcome of their offsprings*. New Delhi, India, ICMR, 1990.
- MSM5666 Cantrelle, P. et al. Mortalite maternelle. Deux etudes communautaires en Guinee. *Les dossiers du CEPED*, 1992, 20: 1-43
- MSM5667 Chile, Ministerio de Salud. *Status of health and health care services in Chile*. Santiago, Chile, Ministry of Health, 1993.
- MSM5668 Indian Council of Medical Research (ICMR). *Collaborative study on high risk pregnancies and maternal mortality (institution based)*. An ICMR task force study. New Delhi, Indian Council of Medical Research, 1990.
- MSM5670 Khin Kyi, M. Maternal mortality at the Women's and Children's Hospital, South Okkalapa (1978-1982). *Australian and New Zealand journal of obstetrics and gynaecology*, 1988, 28(1): 36-40.
- MSM5671 Singh, S. and Wulf, D. Estimating abortion levels in Brazil, Colombia and Peru, using hospital admissions and fertility survey data. *International family planning perspectives*, 1991, 17(1): 8-13
- MSM5673 Soltani, M.S. et al. Facteurs associes aux faibles poids de naissance dans le Sahel Tunisien. *Archives francaises de pediatrie*, 1991, 48(6): 405-408.
- MSM5674 Mallen, G., A. *Morbilidad*. In: *Secretaria de Salud. La mujer adolescente, adulta, anciana y su salud*. Mexico, Direccion general de Salud Materno Infantil, 1992.
- MSM5675 Briggs, N.D. Maternal death in the booked and unbooked patients: University of Port Harcourt Teaching Hospital experience. *Tropical journal of obstetrics and gynaecology*, 1988, 1(1): 23-26
- MSM5676 Tewari, S. and Gulati, N. Maternal mortality: A study of 11 years at Medical College Hospital Rohtak (Haryana). *Journal of obstetrics and gynaecology of India*, 1990, 40(2): 236-239
- MSM5677 Onis, M. de and Villar, J. *La mujer y la salud en Espana. Informe basico. Volumen 2*. Ministerio de Asunto Sociales, Instituto de la Mujer, 1992.
- MSM5678 Hooja, V. et al. Outcome and survival of a birth cohort in a community of South Delhi: Preliminary report of a prospective study. *Indian pediatrics*, 1972, 9(9): 495-505
- MSM5679 Sarkar, D. Birth weight in a hospital sample from South India. *Indian journal of pediatrics*, 1968, 35(245): 266-275
- MSM5680 Kusun, J.A. et al. A longitudinal study of pregnant women in relation to outcome of pregnancy in Kenya. *Indian journal of nutrition and dietetics*, 1979, 16(5): 195-205
- MSM5682 Srinivasa, D.K. et al. Certain aspects of infant mortality - A prospective study in an urban community. *Indian pediatrics*, 1976, 13(6): 409-414
- MSM5683 Indian Council of Medical Research (ICMR) and United Nations Children's Fund (UNICEF). Birth weight. A major determinant of child survival. *Indian journal of pediatrics*, 1987, 54(6): 801-805
- MSM5684 Senegal. *Statistiques sanitaires et demographiques, 1986-87 et 1988*. Ministere de la Sante Publique, Div. Statistiques, 1989.
- MSM5685 Togo. *Statistiques Sanitaires 1987*. Direction Generale de la Sante Publique, Division de l'Epidemiologie, 1988.
- MSM5686 Akin, A. *Strengthening integrated FP/MCH services in 17 provinces. Report on a baseline study carried out in nine provinces*. World Health Organization, Restricted paper, TUR/MCH/501, 1985.
- MSM5687 Sri Lanka Family Health Bureau. *Study on low birth weight and neonatal morbidity and mortality*. Colombo, Sri Lanka, Family Health Bureau, Ministry of Health and Women's Affairs, 1992.

MSM5688 Richards, A. et al. The incidence of major abdominal surgery after septic abortion - an indicator of complications due to illegal abortion. *South African medical journal*, 1985, 68: 799-800

MSM5689 Remennick, L.I. Epidemiology and determinants of induced abortion in the U.S.S.R. *Social science and medicine*, 1991, 33(7): 841-848

MSM5690 Sabatello, E.F. Estimates of illegal abortion in Israel, 1980-83. *Israel journal of medical sciences*, 1990, 26(4): 204-209

MSM5691 Okonofua, F.E. et al. Illegal induced abortion: A study of 74 cases in Ile-Ife, Nigeria. *Tropical doctor*, 1992, 22(2): 75-78

MSM5692 Ogunniyi, S.O. et al. Abortion-related deaths in Ile-Ife, Nigeria: A 12 year review. *African journal of medicine and medical sciences*, 1990, 19(4): 271-274.

MSM5693 Odujinrin, O.M.T. Sexual activity, contraceptive practice and abortion among adolescents in Lagos, Nigeria. *International journal of gynaecology and obstetrics*, 1991, 34(4): 361-366

MSM5694 Maitra, K. *Unsafe abortion in India*. New Delhi, India, The World Bank Meeting of Partners for Safe Motherhood, 9-11 March, 1992, 1992.

MSM5695 Mola, G. Maternal death in Papua New Guinea, 1984-1986. *Papua New Guinea medical journal*, 1989, 32(1): 27-31

MSM5698 Naamane-Guessous, S. Traditional methods still widely used. *Planned parenthood challenges*, 1993, 1993(1): 14-16

MSM5699 Mohammad, K. Taking risks to save life and health. *Planned parenthood challenges*, 1993, 1993(1): 34-35

MSM5701 Ogunniyi, S.O. and Faleyimu, B.L. Trends in maternal deaths in Ilesa, Nigeria, 1977-1988. *West African journal of medicine*, 1991, 10(1): 400-404

MSM5702 Rogo, K.O. Mortality in acute gynecology: a developing country perspective. *International journal of gynaecology and obstetrics*, 1989, 30(4): 343-347

MSM5703 Spanjer, J.M. Eurothema's. Liefde, lust en lijden in Oost-Europa. *Nederlands tijdschrift voor geneeskunde*, 1991, 135(12): 528-530

MSM5704 Thapa, P.J. et al. A hospital-based study of abortion in Nepal. *Studies in family planning*, 1992, 23(5): 311-318

MSM5705 Sanyal, R. et al. Study on septic abortion in a rural medical college. *Journal of obstetrics and gynaecology of India*, 1991, 41(6): 760-763

MSM5706 World Health Organization. HRP. *Hospital-based descriptive study of illegally induced abortion-related mortality and morbidity and its cost on health services*. Geneva, World Health Organization, Task force on safety and Efficacy of Fertility Regulating Methods, 2-4Oct, 1990.

MSM5707 World Health Organization. Pan American Health Organization. *Regional plan of action for the reduction of maternal mortality in the Americas*. Provisional agenda item 5.9, 23rd Pan American Sanitary Conference, CSP23/10, 7 August, 1990.

MSM5708 Lethbridge, D.J. and Wang, R. Patterns of contraceptive use among urban women in Taiwan. *Health care for women international*, 1991, 12(4): 431-441

MSM5709 Brooke, J. Brazil abortions: Illegal in name only. *New York Times International*, 1991, July 21: 5

MSM5710 Mondal, A. Induced abortion in rural society & need for people's awareness. *Journal of obstetrics and gynaecology of India*, 1991, 41(4): 450-453

MSM5711 Ujah, I.A. Sexual activity and attitudes toward contraception among women seeking termination of pregnancy in Zaria, northern Nigeria. *International journal of gynaecology and obstetrics*, 1991, 35(1): 73-77

MSM5712 Mostafa, G. et al. The relationship between sociodemographic variables and pregnancy loss in a rural area of Bangladesh. *Journal of biosocial science*, 1991, 23(1): 55-63

MSM5713 Gardeil, F. and Sangala, V. Retrospective study of 600 consecutive admissions with abortions at Kamazu Central Hospital. *Malawi medical journal*, 1991, 7(83): 113-114

MSM5715 Chumbe, O. et al. *Aborto septico en el Hospital de Apoyo "Maria Auxiliadora"*. Lima, Peru, X Congreso Peruano de Obstetricia y Ginecologia. (Abstract: Movimiento Manuela Ramos, Guia bibliografica, 1992), 1990.

MSM5716 Carranza, C. et al. *Factores maternos que influyen en la frecuencia del aborto en las mujeres que demandan atencion en la unidad de Ginecologia del Hospital de Apoyo No. 2 Cayetano Heredia*. Lima, Peru, Thesis presented at the U.P.C.H. (Abstract: Movimiento Manuela Ramos, Guia bibliografica, 1992), 1988.

- MSM5717 Saona, P. *Epidemiologia del aborto. Hospital de Apoyo Cayetano Heredia 1975-1984*. Lima, Peru, Thesis presented at U.P.C.H. (Abstract: Movimiento Manuela Ramos, Guia bibliografica, 1992), 1988.
- MSM5718 Maradiegue, E. Mortalidad por aborto septico en el Hospital Cayetano Heredia. *Ginecologia y obstetricia*, 1987, 31(3): 36-40
- MSM5719 Rechkemmer, A. and Diaz, V. *El aborto septico en el hospital Loayza*. VII Congreso Peruano de Obstetricia y Ginecologia (Abstract: Movimiento Manuela Ramos, Guia bibliografica, 1992), 1985.
- MSM5720 Taco, E. et al. *Aborto septico*. Lima, Peru, VII Congreso Peruano de Obstetricia y Ginecologia (Abstract: Movimiento Manuela Ramos, Guia bibliografica, 1992), 1985.
- MSM5721 Turkey, Government of, and United Nations Children's Fund (UNICEF). *The situation analysis of mothers and children in Turkey*. UNICEF Turkey Office, 1991.
- MSM5723 Giri, K. *Tour report on visit to Mongolia from 10 to 18 August 1989*. (unpublished), 1989.
- MSM5724 Centers for Disease Control. *Haiti national contraceptive prevalence survey, 1989. Final English language report*. Port-au-Prince, Haiti, Child Health Institute and Centers for Disease Control (Atlanta), 1991.
- MSM5725 El Salvador, Asociacion Demografica Salvadorena. *Encuesta nacional de salud familiar, FESAL-88*. San Salvador, El Salvador, Asociacion Demografica Salvadorena (PRO-FAMILIA) and Centers for Disease Control, 1989.
- MSM5726 Remez, L. Steady rise in abortion deaths in Rio de Janeiro hospital over 10 years. *International family planning perspectives*, 1990, 16(4): 154-155
- MSM5727 Archibong, E.I. Illegal induced abortion - a continuing problem in Nigeria. *International journal of gynaecology and obstetrics*, 1991, 34(3): 261-265
- MSM5728 Kampikaho, A. and Irwig, L.M. Incidence and causes of maternal mortality in five Kampala hospitals, 1980-1986. *East African medical journal*, 1991, 68(8): 624-631
- MSM5729 Das, B. et al. Maternal mortality. *Journal of the Indian Medical Association*, 1990, 88(9): 249-250
- MSM5730 Chukudebelu, W.O. and Ozumba, B.C. Maternal mortality in Anambra State of Nigeria. *International journal of gynaecology and obstetrics*, 1988, 27(3): 365-370
- MSM5731 Ruminjo, J.K. Socio-demographic and gynaecological variables of maternal mortality in a Kenyan subdistrict: January 1981-September 1988. *East African medical journal*, 1990, 67(2): 118-125
- MSM5732 Honduras. Ministerio de Salud Publica/ASHONPLAFA/Management sciences for Health/Family Health International. *Epidemiology and Family Health Survey, Honduras, 1987, Final report*. Tegucigalpa, Honduras, Honduran Ministry of Public Health/Association for Family Planning in Honduras(ASONPLAFA)/Management Sciences for Health/Family Health International, 1989.
- MSM5733 Sosa, D. et al. *The Costa Rica fertility and health survey, 1986*. Costa Rica Demographic Association and Centers for Disease Control, 1987.
- MSM5734 Tafforeau, J. et al. *Rapport preliminaire: enquete sur le bien etre familial a N'Djamena*. In: Brandon, L.L. *Rapport final de la conference sur le bien-etre familial au Tchad*. N'Djamena, Chad, 1988.
- MSM5735 Adekolu-John, E.O. Maternal health care and outcome of pregnancies in Kainji Lake Area of Nigeria. *Public health*, 1989, 103(1): 41-49
- MSM5736 Baranov, A.A. Maternal and child health problems in the USSR. *Archives of disease in childhood*, 1991, 66(4): 542-545.
- MSM5737 Keita, N. et al. Etude de la mortalite maternelle au CHU de Donka (Conakry, Guinee). *J. de gynécologie, obstétrique et biologie de la reproduction*, 1989, 18(7): 849-855
- MSM5738 Laurenti, R. et al. Mortalidade de mulheres em idade fertil no Municipio de Sao Paulo (Brasil), 1986. II- Mortes por causas maternas. *Revista de saúde pública*, 1990, 24(6): 468-472
- MSM5739 Blumenthal, P.D. After office hours. *Obstetrics and gynecology*, 1990, 76(1): 147-148
- MSM5740 Adewole, I.F. Trends in postabortal mortality and morbidity in Ibadan, Nigeria. *International journal of gynaecology and obstetrics*, 1992, 38(1): 115-118
- MSM5741 Rosselot V., J. and Mardones R., F. Salud de la familia y paternidad responsable. La experiencia de Chile 1965-1988. *Revista médica de Chile*, 1990, 118(3): 330-338
- MSM5743 Nash, E.S. Teenage pregnancy - need a child bear a child?. *South African medical journal*, 1990, 77(3 Feb): 147-151

MSM5744 Megafu, U. and Ozumba, B.C. Morbidity and mortality from induced illegal abortion at the University of Nigeria teaching hospital, Enugu: a five year review. *International journal of gynaecology and obstetrics*, 1991, 34(2): 163-167

MSM5745 Mahomed, K. and Chawapiwa, A. Socio-demographic characteristics of women presenting with abortion - A hospital based study. *Central African journal of medicine*, 1992, 38(6): 233-237.

MSM5747 Haile, A. Fertility conditions in Gondar, northwestern Ethiopia: An appraisal of current status. *Studies in family planning*, 1990, 21(2): 110-118

MSM5748 Adetoro, O.O. et al. Socio-cultural factors in adolescent septic illicit abortions in Ilorin, Nigeria. *African journal of medicine and medical sciences*, 1991, 20(2): 149-153.

MSM5749 Brion, M.C. *Law, custom and stereotyping*. New York, N.Y., Paper presented at the 5th Annual International Women's Rights Action (IWRAW) Conference, Jan.20-22, (Popline Abstract), 1990.

MSM5750 Asociacion Chilena de Proteccion de la Familia (APROFA). *Memoria 1990*. Santiago, Chile, APROFA, (Popline Abstract), 1991.

MSM5751 Dervisoglu, A.A. *Turkish experiences on abortion*. Unpublished paper. (Popline Abstract), 1988.

MSM5752 Suthutvoravut, S. and Chaturachinda, k. Risk of low birthweight at Ramathibodi Hospital. *Journal of the Medical Association of Thailand*, 1980, 71(Sup.2): 6-11

MSM5753 Anonymous. *Turkey*. (Unpublished tables and overheads), UNDATED

MSM5754 Espinola Z., C. *Embarazo, parto y puerperio*. In: *Secretaria de Salud. La mujer adolescente, adulta, anciana y su salud ...* Mexico, Secretaria de Salud, Subsecretaria de Servicios de Salud, Direccion General de Salud Materno Infantil, 1992.

MSM5755 Konje, J.C. and Obisesan, K.A. Septic abortion at University College Hospital, Ibadan, Nigeria. *International journal of gynaecology and obstetrics*, 1991, 36(2): 121-125

MSM5756 Mojarro, O. and Hernandez, D. Razones de mortalidad materna en el IMSS. *DEMOS*, 1991, 4: 6-7

MSM5757 Makokha, A.E. Medico-social and socio-demographic factors associated with maternal mortality at Kenyatta National Hospital, Nairobi, Kenya. *J. of obstetrics and gynaecology of Eastern and Central Africa*, 1991, 9(1): 3-6

MSM5758 Silva-Dreyer, A.M. *Estadisticas sobre planificacion familiar y aborto en Chile*. Santiago, Chile, Instituto de la Mujer, Informativo No. 4 (Popline Abstract), 1990.

MSM5759 Shiva, M. Of human rights and women's health. *Women's global network for reproductive rights newsletter*, 1991, 36: 55-57

MSM5760 Khomassuridze, A.G. *Abortion and contraception in Georgia*. Tbilisi, Paper presented at UNFPA-WHO/EURO-IPPF-Zhordania Institute Conference From Abortion to Contraception, 10-13 October 1990, 1990.

MSM5761 Donnay, F. et al. *Getting an abortion in Europe. Analysis in four European countries on quality of services and perception of providers*. Tbilisi, Background Document presented at UNFPA-WHO/EURO-IPPF-Zhordania Institute Conference from Abortion to Contraception, 10-13 October 1990, 1990.

MSM5763 Wong, S.S. and Anokute, C.C. The effect of consanguinity on pregnancy outcome in Saudi Arabia. *Journal of the Royal Society of Health*, 1990, 110(4): 146-147.

MSM5764 Abudejaja, A.H. et al. Experience of a family clinic at Benghazi, Libya, and sociomedical aspects of its catchment population. *Family practice*, 1987, 4(1): 19-26

MSM5765 Seidman, D.S. et al. Child-bearing after induced abortion: reassessment of risk. *Journal of epidemiology and community health*, 1988, 42(3): 294-298

MSM5766 Rehan, N.-e. Effect of ante-natal care on birth weight. *Journal of the Pakistan Medical Association*, 1982, 32(4): 93-99

MSM5767 Lakshmi, G.R. and Bandyopadhyay, S.S. Study on the outcome of pregnancies for one year in Dehradun city. *Indian journal of medical sciences*, 1989, 43(8): 210-214

MSM5768 Barros, F.C. et al. The Pelotas (Brazil) birth cohort study 1982-1987: strategies for following up 6000 children in a developing country. *Paediatric and perinatal epidemiology*, 1990, 4(2): 205-220

MSM5769 United Nations Children's Fund. *Analisis de situacion economico-social de Nicaragua*. Managua, UNICEF, 1991.

MSM5770 Ozgur, S. Fertility rates in women in rural Turkey. *Journal of the Pakistan Medical Association*, 1989, 39(3): 72-74

- MSM5771 Mongolia, Ministry of Health and United Nations Children's Fund. *An analysis of the situation of children and women in Mongolia - 1990*. Ulan Bator, Mongolia, Ministry of Health & Social Services and UNICEF, 1990.
- MSM5772 Serenius, F. and Fougerouse, D. Health and nutritional status in rural Saudi Arabia. *Saudi medical journal*, 1981, 2(Sup.1): 10-22
- MSM5773 Aguayo H., J.R. Aborto: un problema de salud publica o de planificacion familiar. *Emisor demografico*, 1991, 5(1): 19-24
- MSM5774 Pardo, F. and Uriza, G. Estudio de morbilidad y mortalidad por aborto en 36 instituciones de Bolivia, Colombia, Peru y Venezuela. *Revista colombiana de obstetricia y ginecologia*, 1991, 42(4): 287-289
- MSM5775 Dewart, T. Reproductive risks. Guatemala. *Links. Health and development report*, 1992, 9(2): 13, 25
- MSM5777 Mpangile, G.S. 6.7% practice family planning. Findings of a baseline survey of knowledge, attitudes and practice in a Tanzanian village. *Integration*, 1991, 30: 34-37
- MSM5782 El-Mouelhy, M.T. Maternal mortality in the last two decades in Egypt. *Saudi medical journal*, 1992, 13(2): 132-136
- MSM5783 Skandhan, K.P. Abortion in India. *Lancet*, 1992, 340(8820): 676-6777
- MSM5786 Agyei, W.K. and Epema, E.J. Sexual behavior and contraceptive use among 15-24-year-olds in Uganda. *International family planning perspectives*, 1992, 18(1): 13-17
- MSM5792 Laguardia, K.D. et al. A 10-year review of maternal mortality in a municipal hospital in Rio de Janeiro: a cause for concern. *Obstetrics and gynecology*, 1990, 75(1): 27-32
- MSM5793 Mirghani, O.A. and Magzoub, M.E.M.A. A community-based survey on the incidence and aetiology of maternal mortality in Gezira Province - Sudan. *Saudi medical journal*, 1992, 13(3): 249-253
- MSM5795 Younis, N. et al. Analysis of maternal deaths in two Egyptian hospitals. *Population studies (Cairo)*, 1979, 1(1): 59-65
- MSM5796 Asociacion Civil G.I.D.A.P.S. *Factores de riesgo en la mortalidad femenina de 10 a 54 anos. Partido de la Matanza. Provincia de Buenos Aires, ano 1990*. Buenos Aires, Asociacion Civil G.I.D.A.P.S., 1993.
- MSM5797 Ghana, Ministry of Health, Health Research Unit. *Report on the national consultative meeting on safe motherhood in Ghana*. Ghana, Ministry of Health, 1993.
- MSM5799 Avendano P., O. El aborto como problema de salud publica en Chile. *Cuadernos médico-sociales (Santiago)*, 1985, 26(1): 30-35
- MSM5800 Madebo, T. and G/Tsadic, T. A six month prospective study on different aspects of abortion. *Ethiopian medical journal*, 1993, 31: 165-172
- MSM5801 Begum, S.F. et al. *Hospital-based descriptive study on illegally induced abortion - related mortality and morbidity, and its cost on health services*. Mirpur, Dhaka, Bangladesh Association for Prevention of Septic Abortion (BAPSA), 1991.
- MSM5803 Lavin, P. *A descriptive interim analysis of 1355 abortion related cases admitted from January to November 1991 to Hospital Barros Luco-Trudeau*. Santiago, Chile, Draft report, Unidad de Epidemiologia Clinica (CEU), 1993.
- MSM5804 World Health Organization. Pan American Health Organization. *Base de datos de salud materno-infantil*. Washington, WHO/PAHO, 1992.
- MSM5806 Mpangile, G.S. et al. *Factors associated with induced abortion in public hospitals in Dar es Salaam, Tanzania*. The Tanzania Family Planning Association (UMATI), 1993.
- MSM5810 Theodore, H. *Analyse de la mortalite maternelle*. Port-au-Prince, 1992.
- MSM5811 Kosenko, E. *Federal Programme "Safe Maternity". Substantiation of the draft*. Personal communication, 1993.
- MSM5813 Engineer, A.D. and Lakshmi. Maternal mortality. *Journal of obstetrics and gynaecology of India*, 1976, 26(2): 186-192
- MSM5814 Mtimavalye, L.A.R. *Maternal mortality in Tanzania*. Paper presented at WHO Multidisciplinary Consultative Meeting on Human Reproduction, Yaounde 4-7 Dec, 1978.
- MSM5815 Sulaiman, S. *Strengthening of maternal and child health programme in Burma*. Unpublished WHO document no. SEA/MCH/133, 1980.
- MSM5816 Williams, B. *Data on four problem areas to be discussed*. Yaounde, Unpublished WHO document no. HRP/RMC/78.1. presented at the Regional Multidisciplinary Consultative Meeting on Human Reproduction, 4-7 December, 1978.

MSM5817 Songane, F. Analise dos casos de mortes maternas ocorridas nos primeiros 7 meses de 1984. In: Boletim Informativo do servico de ginecologia obstetricia., *Boletim informativo do servico de ginecologia obstetricia*, 1985, 9: 18-26.

MSM5818 Gadalla, S. *Reproductive age mortality survey*. (Unpublished data), 1984.

MSM5819 Speckhard, M.E. et al. Risk factors associated with pregnancy related deaths in Puerto Rico. *Boletín de la Asociación Médica de Puerto Rico*, 1986, 78(1): 2-6.

MSM5820 Winit, P. et al. Maternal mortality in Ramathibodi Hospital: a 14 year review. *Journal of the Medical Association of Thailand*, 1985, 68(12): 654-658

MSM5821 Boes, E.G.M. Maternal mortality in southern Africa 1980-1982. *South African medical journal*, 1987, 71: 158-161

MSM5822 van Roosmalen, J. *Maternal health care in the South Western Highlands of Tanzania.*, Amsterdam, Doctoral thesis, Universiteit van Amsterdam, 1988.

MSM5824 Dervisoglu, A. *Report on data collection on birth and perinatal infant and maternal deaths in Adiyaman and K. Maras provinces in 1986*. (Unpublished paper), 1987.

MSM5825 Niome-Nze, R. et al. *La mortalite maternelle au Centre Hospitaliere de Libreville (Gabon)*. (Unpublished document), UNDATED

MSM5826 Laurenti, R. *Mortalidade de mulheres de 10 a 49 anos no municipio de Sao Paulo (com enfase a mortalidade materna). Alguns resultados de uma investigacao*. Sao Paulo, Unpublished paper presented at WHO/PAHO Workshop on Maternal Mortality Research, April 1988, 1988.

MSM5827 Becker, R.A. and Lechtig, A. *Brasil: Aspectos da mortalidade infantil, pre-escolar e materna*. (Unpublished paper), 1987.

MSM5828 Bernis, L. de. *Mortalite maternelle N'Djamena (Tchad), 1986*. Paper presented at Seminaire Centre International de l'Enfance, Reduire la Mortalite Maternelle dans les Pays en Developpement, 1988.

MSM5829 Viggiano, M.G.C. et al. Mortalidade materna na Maternidade do Hospital Geral do Goiania, (1975-1983). *Jornal brasileiro de ginecologia*, 1985, 95(3): 101-104

MSM5830 Viggiano, M.G.C. et al. Mortalidade materna na Maternidade Nossa Senhora de Lourdes. Incidencia, causas e responsabilidades. *Jornal brasileiro de ginecologia*, 1979, 87(3): 137-141

MSM5831 Agoestina, T. and Soejoenoes, A. *Maternal and perinatal mortality: pilot study*. Coordinating Board of Indonesian Fertility Research (BKS PENFIN), 1988.

MSM5832 El-Shafei, A.M- et al. Maternal mortality in Bahrain with special reference to sickle cell disease. *Australian and New Zealand journal of obstetrics and gynaecology*, 1988, 28(1): 41-44.

MSM5833 Molina M. de I., M. et al. *Resumen de la metodologia y resultados de la investigacion sobre mortalidad materna en la provincia de cordoba, Argentina*. (Unpublished), 1989.

MSM5834 Fuente, M. de la. Maternal mortality and morbidity: a call for women for action. *Women's global network for reproductive rights newsletter*, 1989, 30:

MSM5835 El Khady, A. et al. *Maternal mortality in Giza, Egypt*. Family Health International, 1989.

MSM5836 Hwa Tay, V.L. *Country report, Singapore*. Manila, Philippines, World Health Organization, Regional Office for the Western Pacific, Workshop on Risk Approach in Mother and Child Health Care, 1989.

MSM5837 Gueye, A. et al. *Rapport de la deuxieme mission d'identification pour la reduction de la mortalite maternelle au Senegal*. Ministere de la Sante Publique, Ministere du Developpement sociale, UNDP, WHO, Colombia University, 1989.

MSM5838 Zambia, Ministry of Health. *Family Health Programme - maternal mortality*. Lusaka, Working paper presented at the Preliminary Workshop on the UNFPA Funded Family Health Programme, 1988.

MSM5839 Norbhu, J. *A retrospective study of maternal mortality at general hospital Thimphu between 1976-1987*. Unpublished communication to WHO/SEARO, 1987.

MSM5840 Castellanos, M. de J. et al. *Mortalidad materna - Honduras 1990*. UNAH, MSP, OPS, UNFPA, MSH, 1991.

MSM5841 Jarquin, J.D. and Rocuts, F.K. *Epidemiologia y prevencion de la muerte materna institucional en El Salvador 1983-1987*. San Salvador, Ministerio de Salud Publica y Asistencia Social (unpublished paper), 1989.

MSM5842 Karim, R. et al. *Briefing on Safe Motherhood Initiative*. Kuala Lumpur, Public Health Institute/Ministry of Health (unpublished), 1991.

- MSM5843 Osterbaan, M. and Barreto da Costa, M.V. *A mortalidade materna na Guineia-Bissau*. Bissau, (Unpublished project report), 1991.
- MSM5844 Ayhan, A. et al. Maternal mortality: a report from a university hospital in Ankara. *Asia-Oceania journal of obstetrics and gynaecology*, 1991, 17(1): 37-44.
- MSM5845 Cavalleri, M. *Analisis de la mortalidad materna en la VI Region 1989-90*. Matagalpa, Colectivo de Mujeres de Matagalpa, 1991.
- MSM5846 Bera, S.K. and sengupta, A. Evaluation of aetiological factors of maternal death in Eden hospital (twelve year study). *Journal of obstetrics and gynaecology*, 1992, 42(2): 182-188
- MSM5847 Keeling, J.W. et al. Maternal mortality in Jamaica: health care provision and causes of death. *International journal of gynaecology and obstetrics*, 1991, 35: 19-27
- MSM5848 Ashworth, M.F. Harare Hospital maternal mortality report for 1987 and a comparison with previous reports. *Central African journal of medicine*, 1990, 36(9): 209-212
- MSM5849 Kosenko, E. *Russian Federal Programme "Safe Maternity"*. Communications from International relations Board, Ministry of Health, 1993.
- MSM5850 Bashir, A. et al. Maternal mortality 1990. Results from a survey of Faisalabad metropolitan. *The Gynaecologist*, 1993, 3(2-3): 75-85
- MSM5851 Pan American Health Organization, Program on Maternal and Child Health and Population. Maternal mortality in the Americas. *Epidemiological bulletin of the Pan American Health Organization*, 1993, 14(1): 1-8
- MSM5852 Gomez S., P.I. et al. Mortalidad materna en el Instituto Materno Infantil de Santafe de Bogota D.C. 1985-1989. *Revista colombiana de obstetricia y ginecología*, 1993, 44(1): 39-47
- MSM5853 Younis, M.N. et al. Effect of high parity on maternal mortality. *Population science*, 1987, 7: 85-94
- MSM5856 World Health Organization. *World health statistics annual*. Geneva, World Health Organization, 1992.
- MSM5857 Paxman, J.M. et al. The clandestine epidemic: The practice of unsafe abortion in Latin America. *Studies in family planning*, 1993, 24(4): 205-226
- MSM5858 Colombia, Ministry of Health. *Programa materno infantil. Hechos y proyecciones*. Bogota, Ministry of Health, 1987.
- MSM5859 Philippines, Republic of and United Nations Children's Fund. *Situation of children and women in the Philippines 1990*. UNICEF, 1990.
- MSM5860 Hull, T. et al. Induced abortion in Indonesia. *Studies in family planning*, 1993, 24(4): 241-251
- MSM5861 United Nations Children's Fund. *Children and women in India. A situation analysis*. United Nations Children's Fund, 1990.
- MSM5862 Yousef, S. *Teenage pregnancies and illegal abortion. In: National Seminar on Safe motherhood. Seminar report and recommendation*. Addis Ababa, Ethiopia Ministry of health and United Nations Fund for Population Activities (UNFPA), 1989.
- MSM5863 Raikes, A. *Pregnancy, birthing and family planning in Kenya: Changing patterns of behaviour. A health service utilization study in Kisii District*. Copenhagen, Denmark, Ceter for Development Research (CDR), 1990.
- MSM5864 Huntington, D. et al. A new approach to eliciting information about induced abortion. *Studies in family planning*, 1993, 24(2): 120-124
- MSM5865 United Nations Children's Fund. *Children and women in Uganda. A situation analysis*. Kampala, Uganda, UNICEF, 1989.
- MSM5866 Anonymous. Abortions - an emotional volcano. *Epidemiological comments*, 1991, 18(10): 213-220
- MSM5867 Bernis, L.D. de. Causes of maternal mortality. *Children in the Tropics*, 1990, 187/188: 19-26
- MSM5868 Chow, L.P. et al. Feasibility of the Randomized Response Technique in rural Ethiopia. *American journal of public health*, 1979, 69(3): 273-276.
- MSM5869 International Reference Center for Abortion Research. Additional country notes. *Abortion research notes*, 1990, 19(3-4): 2-4.
- MSM5871 International Reference Center for Abortion Research. Country notes. *Abortion research notes*, 1991, 20(3-4): 3-5.

MSM5872 International Reference Center for Abortion Research. Central and eastern Europe continued. *Abortion research notes*, 1991, 20(1-2): 2-4.

MSM5873 International Reference Center for Abortion Research. Abortion Australia. *Abortion research notes*, 1992, 21(1-2): 2-5.

MSM5875 International Reference Center for Abortion Research. A Polish tragedy. *Abortion research notes*, 1993, 22(1-2): 2-6.

MSM5877 The Alan Guttmacher Institute. *Cruel choices: Unsafe abortion and unplanned childbearing as a result of unintended pregnancies in Latin America*. New York, The Alan Guttmacher Institute (Draft), 1993.

MSM5878 Newsdesk. Abortion debate in Nigeria. *Africa health*, 1993, 14(3): 3.

MSM5879 Volgina, V.F. and Gurtovoi, B.L. (Abortion as a cause of maternal mortality). *Akusherstvo i ginekologija (Moskva)*, 1990, 1990(10): 11-15.

MSM5880 Driessen, F. *Maternal deaths in 12 Malawi hospitals in 1989*. (unpublished document), 1990.

MSM5881 Catano Osorio, L.O. et al. *Maternal mortality and associated factors, Antioquia, Colombia*. (unpublished document), 1990.

MSM5882 Malla, D.S. *Research on prevention of maternal mortality in hospitals of Nepal*. H.M.G., Nepal and World Health Organization, 1992.

MSM5883 Ward, A. *Maternity report - St. Luke's Hospital, Anua, Uyo, 1991*. Akwa Ibom State, 1992.

MSM5884 Doorn, G.F. van. *Maternal mortality in Lesotho*. Maseru, Lesotho, (Unpublished report), 1993.

MSM5885 Espinoza V., L. et al. Estudio clinico epidemiologico del aborto, en mujeres chilenas. *Revista chilena de obstetricia y ginecologia*, 1985, 50(4): 278-285

MSM5887 Senanayake, P. Abortion symposium illustrates support in Africa. *IPPF open file*, 1993, October: 4

MSM5888 Okonofua, F.E. and Ilukoma, A. *Prevention and morbidity and mortality from unsafe abortion in Nigeria. Proceedings of a seminar organize by the Department of Obstetrics, Gynaecology and Perinatology, Obafemi Awolowo University, 199* New York, USA, The Population Council, 1993.

MSM5891 Stewart, M.K. and Festin, M. *Validation study of women's reporting and recall of major obstetric complications treated at the Philippine General Hospital*. Draft report, 1993.

MSM5892 Gil, E. et al. *Maternal mortality and risk factors. A case control study*. Medellin, 1992.

MSM5893 Gebrelassie, O. *Practice and prospects of community based maternal services in Ethiopia*. Addis Ababa, Paper presented at the National Seminar on Safe Motherhood in Ethiopia, 1989.

MSM5894 Honore et al. *Obstetric care surveillance in Abidjan. Final report*. Triangle Park, N.C., USA, Family Health International, 1987.

MSM5896 Mauritius Ministry of Health, University of Mauritis and Centers for Disease Control and Prevention. *Mauritius contraceptive prevalence survey 1991. Final report*. 1993.

MSM5897 Centro Paraguayo de Estudio de Poblacion (CEPEP). *Encuesta de planificacion familiar 1987. Informe final*. Asuncion, Paraguay, CEPEP, 1989.