

## CHAPTER 2

### MEDICAL ASPECTS OF ABORTION

#### 2.1 INTRODUCTION

Pregnancy, followed by the birth of a child is supposed to be a joyous event, but often this is not the case. This is confirmed by Rodman, Sarvis and Bonar (1987:2) that often the facts do not conform to the ideal situation, where the birth of a child is supposed to be a joyous event. They further indicate that due to a variety of factors that negate what was supposed to be a joyous event, that is, childbirth, a considerable number of women terminate their pregnancies all over the world each year, irrespective of colour, age, race or socio-economic status. This could be attributed to the fact that these pregnancies are unplanned and unwanted. Baird, Grimes and Van Look (1995:1) indicate that between 100 000 and 150 000 unwanted pregnancies, globally, are terminated by induced abortion each day. This clearly indicates that many pregnancies are terminated because they were unplanned and unwanted.

Abortion is an emotive subject, about which widely differing views are held. Despite these different views about abortion, women faced with unwanted pregnancies need to be assisted. The need to have accessible abortion services, with effective methods of termination of pregnancy will always be there.

This chapter deals with the following aspects: definition of medical terms, the classification of abortion, the methods of termination of pregnancy at different periods of gestation, abortion related risks and complications, management of complications, prevention of complications as well as post-abortion family planning.

#### 2.2 LIST OF MEDICAL TERMS

The following terms will be defined to make it easier for the reader to understand the chapter.

- **Abortion**

“the expulsion from the uterus of the products of conception before the foetus is viable.” (Duncan’s Dictionary for Nurses, 1989:3)

- **Amenorrhoea**

"abnormal absence or cessation of the menses" (Duncan's Dictionary for Nurses, 1989:35)

- **Anomalies**

"marked deviation from the normal standard." (Dorland's Illustrated Medical Dictionary, 1981:98)

- **Cannula**

"a hollow tube contained in a trocar that is introduced into a body cavity, after which the trocar is withdrawn and the tube remains in place." (Duncan's Dictionary for Nurses, 1989:123)

- **Catheter**

"a tubular surgical instrument for withdrawing fluids from a cavity of the body." (Dorland's Illustrated Medical Dictionary, 1981:264)

- **Cervix**

"neck: used in anatomical nomenclature to designate the lower front of the part connecting the head and trunk." (Dorland's Illustrated Medical Dictionary, 1981:283)

- **Curettage**

"the removal of growth or other material from the wall of a cavity or other surface with a curet" (Dorland's Illustrated Medical Dictionary, 1981:331)

- **Dilatation**

"a condition of being dilated or stretched beyond the normal dimensions." (Dorland's Illustrated Medical Dictionary, 1981:379)

- **Diuretic**

"an agent that increases the secretion of urine." (Dorland's Illustrated Medical Dictionary, 1981:442)

- **Ectopic**

"out of place." (Stedman's Medical Dictionary, 1990: 501)

- **Embolus**

"a clot or other plug brought by blood from another vessel and forced into a smaller one so as to obstruct circulation." (Dorland's Illustrated Medical Dictionary, 1981:478)

- **Endometrial**

"relating to or composed of endometrium." (Stedman's Medical Dictionary, 1990:529)

- **Gastrointestinal**

"pertaining to or communicating with the stomach and intestines." (Dorland's Illustrated Medical Dictionary, 1981:602)

- **Hypermenorrhea**

"excessively prolonged or profuse menses." (Stedman's Medical Dictionary, 1990:742)

- **Hypertonic**

"having a greater osmotic pressure than a reference solution." (Stedman's Medical Dictionary, 1990:746)

**Hysterotomy(abdominal)**

"a surgical procedure in which the contents of the uterus are evacuated" (Duncan's Dictionary for Nurses, 1981:348)

- **Hysterectomy**

"the removal of the uterus." (Stedman's Medical Dictionary, 1990:756)

- **Intraamniotic**

"within or into the amniotic fluid" (Duncan's Dictionary for Nurses, 1981:364)

- **Intramuscular**

"within the substance of a muscle." (Dorland's Illustrated Medical Dictionary, 1981:753)

- **Intrauterine**

"being or occurring within the uterus" (Duncan's Dictionary for Nurses, 1981:364)

- **Intravenous**

"within a vein or veins." (Dorland's Illustrated Medical Dictionary, 1981:754)

- **Laminaria**

"the sterile applicator made of kelp which, when placed in the cervical canal, absorbs moisture, swells and gradually dilates the cervix" (Stedman's Medical Dictionary, 1990:838)

- **Laparoscopy**

"endoscopic examination of interior of the abdomen by means of a laparoscope." (Dorland's Illustrated Medical Dictionary, 1981:797)

- **Morbidity**

"the condition of being diseased." (Dorland's Illustrated Medical Dictionary, 1981:943)

- **Mortality**

"the death rate : ratio of total number of deaths to the total number of population." (Dorland's Illustrated Medical Dictionary, 1981: 945)

- **Myometrium**

"the smooth muscle coat of the uterus which forms the main mass of the organ" (Dorland's Illustrated Medical Dictionary, 1981:862)

- **Necrosis**

"death of tissue, usually as individual cells." (Dorland's Illustrated Medical Dictionary, 1981: 985)

- **Osmotic**

"pertaining to or of the nature of osmosis." (Dorland's Illustrated Medical Dictionary, 1981: 1066)

- **Osmotic**  
"pertaining to or of the nature of osmosis." (Dorland's Illustrated Medical Dictionary, 1981: 1066)
- **Polymenorrhea**  
"the occurrence of menstrual cycles of greater than usual frequency"(Stedman's Medical Dictionary, 1990:1235)
- **Prostaglandins**  
"a group of several hormone-like physiologically active substances of similar chemical structure"(Duncan's Dictionary for Nurses, 1981:545)
- **Septic shock**  
"shock produced or due to putrefaction." (Dorland's Illustrated Medical Dictionary, 1981: 1365)
- **Suprapubic**  
"situated or performed above the pubic arch." (Dorland's Illustrated Medical Dictionary, 1981:1472)
- **Uterus**  
"the hollow muscular organ in female animals which is the abode and place of nourishment of the embryo and fetus." (Dorland's Illustrated Medical Dictionary, 1981: 1657)
- **Ultrasound**  
"mechanical radiant energy with a frequency greater than 20 000 cycles per second." Dorland's Illustrated Medical Dictionary, 1981: 1645)

### 2.3 THE INCIDENCE OF ABORTION IN SOUTH AFRICA

The Annual Report of the Department of Health (1997:15-16) indicated that 165 hospitals in South Africa have been designated to perform termination of pregnancy and 24 387 women had already had access to termination of pregnancy services by 30 November 1997. These are the statistics from the state abortion facilities only, which means that after the legalisation of termination of pregnancy in 1996 many women utilised the service. According to the Minister of Health, more than 116 000 legal abortions have been performed in South Africa over the past three years, in provincial state hospitals. (Compare The Pretoria News, 2001:3) This clearly shows that

since the legalisation of termination of pregnancy in South Africa, there is a remarkable number of women who request the service at state hospitals.

## **2.4 CLASSIFICATION OF ABORTION**

According to Plauche', Morrison and O'Sullivan (1992:119) and Pattinson, (1993:191) abortions are divided into two general categories, namely, spontaneous abortions; in which there is expulsion of the products of conception without deliberate interference and induced abortions; in which a deliberate effort to terminate the pregnancy has occurred. These categories will be discussed briefly as follows:

### **2.4.1 Spontaneous abortions**

Plauche' et al. (1992:120) further subdivided spontaneous abortions into the following categories:

#### **2.4.1.1 Threatened abortion**

It is a state in which bleeding of intrauterine origin occurs before the twentieth completed week of gestation, with or without uterine colic, without expulsion of the products of conception and without dilatation of the cervix. (Compare Plauche' et al. 1992:120 and Quilligan & Zuspan 1984:180.) It becomes clear that with threatened abortion the products of conception are not yet expelled from the uterus but there is bleeding only. With the poor prognosis after medical intervention, the therapeutic abortion is done to prevent further complications.

#### **2.4.1.2 Inevitable abortion**

With the inevitable abortion, bleeding of intrauterine origin occurs with continuous and progressive dilation of the cervix (Plauche' et al. 1992:120). On the other hand Quilligan & Zuspan (1984:180) further indicate that this occurs before the twentieth completed week of gestation. The expulsion of the products of conception has not yet happened, but the prospect of saving the pregnancy is not there. Immediate intervention would save the woman's life.

### **2.4.1.3 Incomplete abortion**

According to Plauche' et al. (1992:120) and Quilligan & Zuspan (1984:180) incomplete abortion is an expulsion of some but not all the products of conception. Like the term itself says, the abortion is incomplete, but because it has already started, there is a need to complete the process. This would minimise the complications and ensure the woman's health.

### **2.4.1.4 Complete abortion**

Complete abortion is said to be the expulsion of all the products of conception before the 20<sup>th</sup> completed week of gestation (Compare Plauche' et al.1992: 120 and Quilligan & Zuspan, 1984:180.) In this situation it becomes important to make sure that all the products of conception are expelled, through tissue examination. This could prevent a situation where the necrosis, that is, the dying of tissues, of the remaining products could occur in the woman's uterus, with adverse consequences.

### **2.4.1.5 Missed abortion**

In missed abortion the embryo dies in utero but is retained for 8 weeks or more (Plauche' et al.1992:120). This could have devastating consequences on the woman, who was looking forward to having a child. The woman in this situation would need intense counselling by the social worker, to help her to come to terms with what has happened and also move forward with her life. In cases where the husband or partner is available, he could be drawn into the counselling process, for him not to be left behind with regard to the woman's emotional experience.

### **2.4.1.6 Habitual abortion**

This refers to the occurrence of three or more consecutive spontaneous abortions (Compare Quilligan & Zuspan,1984:180, Plauche' et al.1992:120 & Kruger 1999: 17.) This could have a serious emotional and psychological impact on the woman, because of the repeated nature of this abortion, and counselling is essential, for both the woman and her husband or partner. The impact could be more serious in cases where the pregnancy is planned and the couple were looking forward to having a child. The involvement of the social worker is of great importance in assessing the couple's emotional state and providing the appropriate counselling services.

#### **2.4.1.7 Septic abortion**

According to Plauche' et al. (1992:120) and Pattinson (1993:200) septic abortion refers to an infected abortion in which there is dissemination of micro-organisms and their products into the maternal circulatory system. This could be very dangerous to the woman's life, if intervention is delayed. As a result, there is a need for proper screening of the woman's situation, for proper intervention.

#### **2.4.2 Induced abortion**

Plauche' et al. (1992:120) indicate the categories of induced abortion as follows:

##### **2.4.2.1 Therapeutic abortion**

Therapeutic abortion is the interruption of pregnancy before the twentieth completed week of gestation, for medically approved indications (Compare Quilligan & Zuspan, 1984:180, Plauche' et al.1992:120 and Kruger, 1999: 17.) Therapeutic abortions could be acceptable in a woman with abnormal foetus, but for those who are ready to have children, it could have devastating consequences. In order for them to accept the reality of losing the desired child, there will be a need for counselling. This category of abortion is not specified in the provisions of the new abortion legislation, that is, "The Choice on termination of Pregnancy Act No.92/1996".

##### **2.4.2.2 Non-therapeutic abortion**

This is the interruption of pregnancy without any medical indications. This category is covered in the provisions of section 2(b) of the South African abortion legislation, Choice on Termination of Pregnancy Act (92/1996). The provision of this section and its subsections indicate that from the thirteenth up to the twentieth week of gestation, abortion could be performed if the medical practitioner, after consultation with the pregnant woman, is of the opinion that the continued pregnancy would pose a risk of injury to the woman's physical or mental health; there exist a substantial risk that the foetus would suffer from severe physical or mental abnormality; the pregnancy resulted from rape or incest or the continued pregnancy would significantly affect the social or economic circumstances of the woman. This clearly indicates that any woman presenting one of the above reasons at the abortion clinic will be provided with the service.



The other category of non-therapeutic abortion, as provided by the Choice on Termination of Pregnancy Act (92/1996) section 2(1)(a) refers to abortion that is requested by a woman because of her personal or economic reasons during the first 12 weeks of gestation. This is the category of abortion that this study is based on and it is sometimes referred to as abortion on request or by choice. This provision will be discussed in-depth in chapter 4 of this thesis.

### **2.4.2.3 Criminal or illegal abortion**

Plauche' et al. (1992:120) criminal or illegal abortion refers to the interruption of pregnancy under circumstances not legally acceptable in the country in which the abortion is performed. (Compare Plauche' et al. 1992:120 & Pattinson,1993:198.) Criminal abortion is performed under unsafe circumstances, which could lead to serious complications for the woman. This reason lead to many countries legalising abortion and providing abortion services which are safe for the women.

Methods of termination of pregnancy at different periods of pregnancy and the complications resulting from this procedure, the treatment as well as the prevention of abortion will now be discussed.

## **2.5METHODS OF TERMINATION OF PREGNANCY AT DIFFERENT PERIODS OF GESTATION.**

It is important to look at the methods of termination of pregnancy at the different periods of gestation, because these methods differ according to the period of gestation when the request for termination of pregnancy is made.

### **2.5.1 TERMINATION OF PREGNANCY DURING THE FIRST TRIMESTER.**

It is agreed by WHO (1995:48) and Rodman, et al. (1987:49) that the first trimester refers to the first twelve weeks of gestation. This refers to the first twelve weeks after the first day of the menstrual period. The methods of uterine evacuation during this period of pregnancy can either be medical or surgical. Baird, et al(1995:35) the development of prostaglandins and antiprogestogens has created new possibilities for improved technology in the early termination of pregnancy, as compared to the surgical procedure of vacuum aspiration, which has been the method of choice for many years. This is in agreement with what Rodman, et al. (1987:53) indicate that prostaglandins can be successfully used to contract the cervix, leading to the

extraction of the contents of the uterus. These drugs are said to be accompanied by bleeding, uterine pain and gastrointestinal side effects. The advantages however, when compared to the surgical abortion are regarded minimal (Baird, et al.1995: 50-51). This indicates that the use of the said drugs to terminate early pregnancy, with the minimal risks and complications, can successfully be used instead of surgical methods.

On the other hand WHO (1995:49) indicates the methods of uterine evacuation as follows:

### **2.5.1.1 Vacuum aspiration**

Vacuum aspiration is a minor gynaecological procedure, involving minimum trauma. The cannulae used for this procedure are made of flexible plastic, rigid plastic or metal. The vacuum sources for aspiration are manual syringes, electric pumps and foot-operated mechanical pumps. The use of this method seems to be minimising the complications since it is a minor procedure.

### **2.5.1.2 Dilatation and curettage**

This is an endometrial curettage in which soft plastic instruments are inserted into the uterine cavity and hand aspirators are used as suction sources (Zatuchni, Sciarra & Speidel, 1997:112). According to Rodman, et al. (1987:55), this method is preferred to terminate pregnancies between 6 and 12 weeks. With this method the cervix is dilated first and then the lining of the uterus is scraped by the curettage. Rodman, et al. (1987:56) indicate that this method is relatively safe and takes a short period of time to perform.

On the other hand WHO (1995:49) indicates that the use of this method is declining in favour of vacuum aspiration, which is found to be more safer and less traumatic.

It could be concluded that with the development of new technologies, vacuum aspiration is mostly preferred as a method of termination of pregnancy during the first trimester because it is safe and less traumatic, as compared to the use of dilatation and curettage. It is important for the social workers working with these patients to have this knowledge, so that they could provide them with the necessary information. This would help patients to have some expectations and be ready for the procedure.

## **2.5.2 TERMINATION OF PREGNANCY DURING THE SECOND TRIMESTER**

Induction of abortion after 12 weeks of gestation requires fully equipped surgical facilities and a higher level of operative skill, owing to the greater potential for surgical trauma and excessive blood loss (Compare Pattinson, 1993: 199; Baird, et al. 1995:70 and WHO, 1995:52.) This is clearly indicated by one of the provision in the South African abortion legislation, Choice on Termination of Pregnancy Act (92/1996), that termination of pregnancy after 12 weeks of gestation, must be performed by medical practitioners.

This indicates that termination of pregnancy after the viability of the foetus has been reached, is accompanied by complications. This is the reason why it has to be done by highly skilled workers in a well-equipped environment. This requires that abortion services be readily available to all women with unplanned and unwanted pregnancies. This service is also to be in such a way that it is user-friendly, for the women who need it not to hesitate to seek help during the first trimester of the pregnancy. This will eliminate the situation where the women approach the abortion facilities when they are already in the second trimester of their pregnancies. In this way, the complications that accompany the second trimester termination of pregnancy, will be something of the past.

According to Baird, et al. (1995:70), the available methods of termination of pregnancy during this gestation are:

- Medical methods
- Surgical methods
- Combined methods

These methods will subsequently be discussed as follows:

### **2.5.2.1 MEDICAL METHODS**

#### **◆ INVASIVE INTRAUTERINE ADMINISTRATION OF DRUGS**

Invasive intrauterine administration of drugs is accompanied by particular problems and risks, such as faulty injection; the introduction of infection;

massive saline infusion; water intoxication; rupture of membranes and haemorrhage. (Compare Rodman et al. 1987:57 & Baird, et al.1995:75.) Although this is the case, these methods are still used, but with special precautions taken. This indicates the need for the skilled practitioners to minimise the occurrence of complications. This is confirmed by the Choice on Termination of Pregnancy Act (Act 92/1996), that abortion after 12 weeks of gestation, must be performed by medical practitioners.

The invasive methods of termination of pregnancy during the second trimester are discussed below.

#### - **Intra-amniotic administration**

- **Hypertonic saline** as an intra-amniotic method refers to the instillation of hypertonic saline, that is 20% NaCl, into the amniotic sac. According to Baird, et al. (1995:76) this method was first discovered in 1934 and was accompanied by a high rate of maternal deaths. Proper insertion and positioning of the intra-amniotic needle and initial slow instillation of saline over 10 minutes are to be insured, for better results. The needle is inserted in the suprapubic area after an ultrasound scan has been done for accuracy. When used alone, this method takes a relatively long time before the onset of uterine contractions. It is argued by Berger, Brenner and Keith (1981:85), that the success of this method also depends on the active participation of the uterine musculature in the process of self evacuation. On the other hand WHO (1995:52-53) argues that this method should be used with other methods to soften the cervix, such as multiple laminaria tents or prostaglandins suppositories, to ensure better results.

It would seem that these methods should be used with extra care and also used with other methods that soften the cervix, to ensure the success rate and the reduction in the time of the procedure.

- **Prostaglandins** are administered by an intra-amniotic approach to the stimulate myometrium. According to Baird, et al. (1995:77) this method proved to be highly successful and associated with few side effects. This is in agreement with Berger, et al. (1981:104) that this method is more effective than hypertonic saline. It can be deduced that the use of prostaglandins by intra-amniotic administration can produce desired results, that, is induced abortion, in the second trimester of gestation.

- **Hyperosmolar urea** instillation of 80g urea in 5% dextrose is administered by intra-amniotic approach as a method for the induction of abortion during the second trimester. Urea penetrates the cell membranes and acts as an osmotic diuretic, which is relatively harmless. When used alone, urea has a low efficacy and a long induction-abortion interval (Compare Baird, et al.1995:78.) This method should be used together with other methods that soften the cervix, to ensure the desired results and minimise cervical injuries. This clearly indicates that although this method is relatively safe it cannot be used alone, when better results are expected.

#### - **Extra-amniotic administration**

- **Hypertonic Saline**

This solution is administered by a Nelaton or Foley catheter transcervically. According to Baird, et al. (1995:78) this method is not popular as compared to the intra-amniotic administration of the solution. It would seem that this method is not commonly used as it takes a long period to achieve the desired results.

**Rivanol** is a weak base belonging to the acridine dye group with weak antiseptic properties. It is administered by a Nelaton or Foley catheter, passed through the cervix and used together with an intravenous oxytocin drip, to achieve success in 72 hours. This method is accompanied by cervical injuries when used alone. To minimise the injuries to the cervix, it is important to use this method with cervix dilators.

- **Prostaglandins** are administered transcervically by a catheter, with the success rate of 80-90% within 20-24 hours (Baird, et al.1995:80). This is a slow and painful procedure although it is safe and effective.

According to Baird, et al. (1995:81), compared to the intra-amniotic administration, the extra-amniotic route is slightly less effective. This indicates that the popular use of intra-amniotic administration is due to its success rate, as compared to the extra-amniotic administration.

## ◆ NON-INVASIVE ADMINISTRATION OF DRUGS

### - Oral administration

Oral intake of drugs such as progesterone antagonist and mifepristone has been found to result in complete abortion, although the success rate is low. To increase the success rate, prostaglandins are used (Compare Baird, et al.1995:82.) It would seem as if the use of oral administration of drugs to terminate pregnancy has a low success rate if the pregnancy is advanced.

### - Intravenous administration

It is indicated by Baird, et al.(1995:82) that only two drugs are used via this route, namely, oxytocin and prostaglandins. Prostaglandin compound used for this purpose is administered in normal saline, with minimal side effects. In the researcher's opinion not every drug can be administered via this route, due to the side effects, which could occur.

### - Intra-muscular administration

Medical opinion with regard to this method favours a fixed dose of 0.25mg of carboprost, administered every 3 hours. According to Baird, et al.(1995:83), this is accompanied by high incidence of gastrointestinal side effects, therefore suggest that it be used as a supplement of other methods. Sulprostone is also found suitable for intramuscular administration, with less gastrointestinal side effects. It could be concluded that due to the gastrointestinal side effects of the prostaglandins administered intramuscular, they have to be used as supplements to other methods of termination of pregnancy, with low dosage.

### - Vaginal administration of prostaglandins

This is seen as the simple non-invasive and useful method of prostaglandins used in termination of pregnancy in the second trimester of gestation (Compare Baird, et al.1995:83.) This method is also accompanied by side effects such as pain. To minimise the side effects, this method is not used alone as a means of terminating pregnancy during the second trimester of gestation. The researcher is of the opinion that for this method to bring the desired results, it has to be used together with other methods during the second trimester.

It would seem that the non-invasive methods of termination of pregnancy need to be used with great care, as the administration of the different drugs could cause a variety of side effects.

### **2.5.2.2 SURGICAL METHODS**

#### **- Vaginal approach**

Cervical dilatation and surgical evacuation of the uterine contents by suction method (D&E) has shown to be safer than other methods, and instrumental for abortion in the second trimester. Dilatation and evacuation uses the dilated cervix as an advantage for the success of the procedure (Compare Berger, et al.1981: 120; WHO, 1995:52; & Baird, et al. 1995:85.) This procedure requires experienced surgeons, special instruments and preoperative cervical dilatation, to minimise complications. Sufficient cervical dilatation is important to minimise trauma to the cervix, when instruments are inserted. It could be concluded that the use of this technique requires a high level of skill to produce the desired results, with minimal vaginal injuries.

#### **- Abdominal approach/abdominal hysterotomy**

It is indicated by Baird, et al. (1995:85), that this is a very complicated and major operation, which is reserved for selected cases only. They further indicate that the incidence of morbidity and mortality with this method is higher than other methods. It could be concluded from the above discussion that due to the complexity of this method, it cannot be used in a routine manner, but only for the selected cases, where a specialised skill is used.

The surgical method of termination of pregnancy during the second trimester that showed to be successful is the vaginal approach. Due to the fact that it is accompanied by less complications, it is the most used, but its success depends on the skill of the medical practitioner, who will make sure that the cervix is fully dilated, before evacuating the contents of the uterus. The abdominal approach seems to be unsafe, therefore, it is used for special cases only.

### **2.5.2.3 COMBINED METHODS**

A combination of methods can be frequently used to improve the outcome of the procedure. According to Baird, et al. (1995:86) any of the pre-induction cervical ripening and dilating agents or devices can be used with any of the

uterine stimulating procedures or dilatation and evacuation. The agent can be given via the same or different route of administration. The time of therapy may be sequential with an interval of up to three days between the methods.

Termination of pregnancy during the second trimester requires a high level of skill to minimise the complications. The methods and techniques need to be used in combination for the desired results to be achieved with less complications. There is a need to have social workers as part of the medical team involved with termination of pregnancy, for them to educate the patients about all the methods used, why and when they are used. This will equip the patients with the necessary information that will enable them to handle the situation better and also give informed consent. This would alleviate the current situation, where patients just undergo the procedure without any information, leaving them unprepared, which could lead to future emotional problems.

## **2.6 ABORTION-RELATED RISKS AND COMPLICATIONS**

When dealing with abortion issues it is always important to consider that the procedure is not free from risks and complications, irrespective of whether it is done legally or illegally. The techniques available, the medical conditions under which abortions are obtained and the skill of those performing the procedure, are some of the factors that affect the outcome. This is confirmed by WHO (1995:11) that approximately 500 000 women die every year from pregnancy-related causes and a large proportion of these deaths are attributable to complications of abortion. Deaths are considered to be abortion-related when they occur within 42 days of an induced abortion procedure (Compare Rodman, et al. 1987:64 & WHO, 1995:11.)

It can be deduced from the above discussion that induced-abortion procedure is accompanied by risks and complications. The extent of risks and complications depend on a variety of factors, for example, the availability of equipment and skilled service providers. The risks and complications of abortion seem to be affecting most black rural women who usually seek abortion during the second trimester. They are provided with drugs and advised to come back to the hospital when they start bleeding. With this lack of observation by the medical staff most women come too late for medical attention, which could be fatal. For some women, because this is kept secret, they are unable to get the necessary support from their family members, with adverse consequences on their health status.



## 2.6.1 ABORTION-RELATED MORTALITY

It is estimated by WHO (1995:11) that 98% of maternal deaths occur in developing countries mainly because of the women's socio-economic conditions and the limited availability of maternal health services. The criminalisation of abortion in a country can also increase the rate of maternal deaths because most unwanted and unplanned pregnancies will be ended illegally, under unsafe conditions. It is further argued that women in developing countries have a much greater risk of abortion-related death than do women in the well developed countries (Compare Rodman, et al. 1987:65; WHO, 1995:12 & Baird, et al. 1995:97.) This clearly indicates that maternal death following induced abortion is rife in underdeveloped countries, because of lack of needed resources. This leads to women opting for unsafe abortions when faced with unwanted and unplanned pregnancies. The problem is compounded by abortion being illegal in some other countries.

It is further argued by Rodman, et al. (1987:65) that legal abortion performed during the first trimester is safe, as compared to abortions performed later, that is after twelve weeks of gestation. The delays in performing abortion can be due to a variety of factors such as, approval from a Hospital Abortion Committee or parental consent for minors, as abortion laws stipulate in other countries. This increases the risk of abortion-related mortality. In the researcher's opinion, because the abortion legislation in South Africa, that is, Choice on Termination of Pregnancy Act (92/1996), does not require that a woman should wait for approval from the hospital abortion committee, and also parental consent is not required, the delay could be caused by the woman being undecided whether to seek an abortion or not. The delay could also be emanating from the woman's inability to determine the gestation period. This emanates from the situation in South Africa, where a considerable number of black women are not educated and some having to travel long distances before reaching the health facility, with serious financial implications.

This clearly indicates the importance of having women educated on the available abortion services, as well as the advantages of seeking abortion during the first trimester of gestation. It is also important to educate women on their fertility, to avoid situations where they could be ignorant about being pregnant, which could lead to seeking abortion very late. This will minimise the abortion-related mortality rate. It is also important for The

Department of Health to ensure that abortion services are available and accessible, by providing the necessary resources, namely, the multi-professional team at all the designated abortion facilities.

## **2.6.2 ABORTION-RELATED MORBIDITY**

Abortion-related morbidity refers to the non-fatal complications of abortion, which may be difficult to define, due to a variety of factors, such as monthly bleeding accompanied by cramps and fluctuating body temperature in many women (Compare Rodman, et al. 1987:66.) This makes it difficult to determine which complication could be attributed to abortion. These non-fatal complications may be categorised as early, delayed or long-term and late complications (Compare Rodman, et al. (1987:67 & Baird, et al. 1995:98.) These categories of complications will be discussed respectively, as follows:

### **2.6.2.1 EARLY OR IMMEDIATE COMPLICATIONS**

According to Rodman, et al. (1987:67) early complications may be due to the woman's pre-existing medical state or to the skill of the operator or they may be related to the gestation period of the pregnancy. The researcher is of the opinion that abortion can aggravate the woman's pre-existing medical problems, as a result, these medical problems must be taken into consideration prior to the abortion procedure. As it has already been indicated earlier, women are to be encouraged to seek abortion during the early stages of the pregnancy, to minimise these early complications. The following early complications will be discussed:

#### **- Uterine perforation**

Uterine perforation is mostly associated with abortions after 12 weeks of gestation. The extent of this problem is determined by the method used to induce abortion. Dilatation and evacuation during the second trimester abortion is reported to be resulting in more serious uterine perforation (Compare Rodman, et al. 1987:68 & Baird, et al. 1995:99.) It becomes very important for the physician performing abortion during the second trimester, to be experienced and also careful. With particular reference to the use of D&E (dilatation and evacuation), the physician must make it a point that the cervix has dilated enough, to minimise the risk of uterine perforation.

## - Haemorrhage

Prolonged or excessive bleeding is the most common complication seen in abortion care services. This problem is attributed to the retained products of conception as well as trauma or damage from chemical agents and complications of blood coagulation (Compare WHO, 1995:43.) It becomes therefore very important to determine the cause of bleeding before intervention measures could be implemented. If retained products of conception are the reason for bleeding, then the uterus should be evacuated and if it is caused by damage or trauma then the lesion should be sutured. To avoid fatality of bleeding, action to stop it should be taken timeously. This could not be achieved with women who are staying far away from the health care centres, and bleeding could lead to death or prolonged hospitalisation.

## - Unrecognised ectopic pregnancy/failed evacuation

After every abortion the evacuated tissue must be carefully inspected for the presence of foetal tissue or the placental elements before the woman could be released from the abortion facility. Failure to identify an ongoing pregnancy or ectopic pregnancy is potentially lethal (Compare WHO, 1995:47 & Baird, et al. 1995:100.) This clearly indicates the importance of having all the tissue evacuated during an abortion procedure carefully examined. If an ectopic pregnancy cannot be recognised it could rupture and lead to the woman's death. It has been indicated by Bam (2000) and Diseko (2000), during the discussion session on the topic, that this complication is very rare, because abdominal sonar is always used to verify the woman's pregnancy before the procedure could be performed.

This complication can be successfully prevented in women who seek abortion during the first trimester because the whole procedure is done at the hospital. Unlike those who come during the second trimester, where the procedure is started at the hospital and the woman is discharged, to come back when she is bleeding. The uterus could expel the contents whilst she is still at home or on her way to the hospital. If this could happen at home it would be difficult to determine if all the contents of conception has been expelled from the uterus, with devastating results on the woman's health.

possible. As it has already been indicated earlier on, the period of gestation at which abortion is performed, has an effect on the outcomes, including the complications. The researcher is of the opinion that if women could seek abortion before the first 12 weeks of gestation, most complications could be avoided. It is still difficult to determine the immediate complications on women receiving the abortion service at Kalafong Hospital, because there are no follow-up appointments, which according to the researcher need to be included as part of the abortion care services.

### 2.6.2.2 DELAYED COMPLICATIONS

#### - Infection

Infection is seen as one of the most common complications of abortion, particularly when the abortion is incomplete. According to WHO (1995:44-45), the woman who has infection will present with the following:

- Fever
- Foul-smelling vaginal or cervical discharge
- Pain in the abdomen or pelvis
- Prolonged bleeding or spotting
- Tenderness of the uterus or pain with cervical motion.

This implies that women presenting with the above-mentioned symptoms after undergoing abortion, should be screened for infection and be treated immediately.

According to Baird, et al. (1995:101), prophylactic antibiotic at the time of abortion for women without pre-operative screening can prevent this complication. If infection is not treated in time, it could lead to septicaemia or more seriously septic shock, which is life-threatening. It becomes very important to have pre-operative screening for all the women seeking abortion. However, if this cannot be done then prophylactic antibiotics should be given during the abortion procedure. According to Baird, et al. (1995:102) & WHO (1995:45), this has proved to be cost-effective and beneficial to the patients. Patients must always be warned of the signs of infection after the abortion procedure, for them to react immediately at the onset of such signs. This was also confirmed by Bam (2000) and Diseko (2000), and they further said that if women are warned about these signs they are able to seek medical attention before it could be late. They confirmed this based on their experience at the abortion clinics, respectively.

This prevents further complications which could arise from the situation of not treating infection.

### 2.6.2.3 LATE COMPLICATIONS

As it has already been indicated earlier on, induced abortion can have long-term complications on the woman, depending on a number of factors, such as, the period of gestation at the time of abortion; the method of abortion used; as well as the competency of the service provider. Baird, et al. (1995:102) are in agreement with Hodgson (1988:379), that most of the reproductive sequelae have been ascribed to the induced abortion procedure, with no real evidence of a causal relationship. This indicates that the induced abortion cannot exclusively be responsible for some of the complications which the women present with, later in life. According to Baird, et al. (1995:102) women who never had an induced abortion does present with these complications sometimes in life.

The following late complications will be discussed, as they have been found mostly in women who had induced abortions:

#### - **Menstrual disorders**

It is argued by Hodgson (1981:381) that a number of long-lasting menstrual disorders, such as amenorrhea and hyper-polymenorrhea, occur after induced abortion. These disorders are attributed to the traumatic damage of the endometrium. In the researcher's opinion this complication occur mostly in the young women, who seek abortion at an early age, whilst their reproductive organs are still in the developmental process. It could also be added that the method used, together with the expertise of the service provider, play a considerable role in the occurrence of this complication.

#### - **Secondary infertility**

Secondary infertility may occur due to the damage to the uterus and tubes. This is confirmed by the study analysed by Hodgson (1981:382), where induced abortion was found to be the cause of secondary infertility, which is primarily tubal and uterine. This is in contrast to what is said by Baird, et al. (1995:102) that secondary infertility is not increased by induced abortion. It would seem that more research is still needed in this field, to confirm

whether secondary infertility is caused by induced abortion or not, because the literature review could not provide a definite answer.

#### - **Subsequent spontaneous abortions**

An increased incidence of mid-trimester spontaneous abortions has been observed, following induced abortion, caused by dilatation of the cervical tube (Compare Hodgson, 1981:383 & Hern, 1984:283.) Baird, et al. (1995:102-103), further indicate that the method of abortion appears to be playing an important role in this regard. It could be deduced that induced abortion increases the risk of having spontaneous abortions later in life. This could have negative effects on the woman later in life, especially at the time she would be ready to have children.

#### - **Subsequent premature births**

Cervical incompetence caused by induced abortion can lead to subsequent premature births. This was indicated by Dr. Seobi (2001), in one of Radio Pulpit's programme on 20-06-2001, namely, Mahlasedi, that the likelihood that the woman may develop cervical incompetence due to the abortion procedure is great. According to Hodgson (1981:387) induced abortion cannot be the sole reason for the incidence of prematurity, as the latter has multi-causal aetiology, that is, medical, social and economic factors. It could be deduced from the above argument that induced abortion cannot be the sole cause of premature birth. Before it could be concluded that a premature birth resulted from the consequences of induced abortion, there has to be evidence that all the factors mentioned earlier, were not present in the woman. The researcher is of the opinion that women could ultimately develop cervical incompetence after undergoing surgical induced abortion, due to the injuries that could be sustained during the procedure. This situation calls for the service providers to be skilled, so that they can avoid permanent complications for the woman, as this could have serious emotional problems for the woman, by the time she feels ready to have a child.

When looking at the late complications of induced abortion discussed above, it becomes evident that they are not solely caused by induced abortion, because the women who have never had abortion, present with these complications. Although induced abortion could in other cases cause these complications, there are other factors, which are also responsible. It is also

important to note that safe abortions, performed by experts under sterile environment, with appropriate methods, will ensure that these complications are averted.

The researcher is of the opinion that the abortion services in South Africa, after the legalisation of abortion, still need to be improved. It is true that the legalisation of abortion can decrease the incidences of unsafe abortions but this could only be achieved by providing a comprehensive service to the women seeking abortion. At present women who approach the state clinics/hospitals seeking abortion, are not provided with a service immediately, as they have to be screened first. They are given later appointments and for those whose gestation period is above 12 weeks are not helped at Kalafong Hospital but are referred to GaRankuwa Hospital. At GaRankuwa Hospital women are given drugs that will induce abortion at home, and are advised to seek medical attention thereafter. For these women, the procedure is not safe because most are staying far from the hospital, as a result they are unable to reach medical help timeously. Due to the provisions of the Choice on termination of Pregnancy Act (92/1996), where the minor does not need any consent from the parents, many young women seeking second trimester abortion under the above discussed circumstances, could end up losing their lives. They will have no support from the parents and other family members, as they would not be in a position to explain the problem and its cause, for them to receive appropriate help. This could also lead to serious complications, that is, if the young woman could survive.

The other concern is the financial implications for these women, who have to travel long distances to reach the clinic/hospital. The researcher believes that if the services could be more accessible to all the population, specifically for rural women, some of the complications could be avoided.

#### - **Psychological sequelae**

Although abortion is a choice that a woman makes, it is not free from emotional stress. According to Baird, et al. (1995:104), the likelihood of adverse emotional outcomes increases with advancing gestation age and the second trimester abortions are more emotionally stressful. To women who abort desired pregnancies because of foetal indications, such as congenital anomalies, there are long-term emotional effects. The women who seek abortion because of a variety of personal factors, experience it as a relief. It

is argued that adolescents are the ones who experience abortion as a relief (Baird, et al. 1995:104). This could be attributed to the fact that adolescents feel that they still have a lot of things to do, before they could assume the responsibility of child-rearing.

In the opinion of Baird, et al. (1995:104), symptoms of emotional distress observed in women after abortion are a continuation of symptoms present before the abortion. These symptoms are seen to be more a result of the circumstances leading to the abortion, than the result of the procedure itself. It would seem that how the woman will experience abortion depends on a variety of factors. This aspect of abortion will be dealt with in-depth in chapter 3 of this thesis.

#### **2.6.2.4 RISK FACTORS FOR THE ABORTION COMPLICATIONS**

When considering the complications of abortion it becomes very important to also consider a variety of factors that are contributing to these complications. The researcher agrees with what is said by Baird, et al. (1995:106), that several personal and technical factors strongly influence the likelihood of complications from abortion. As it has been indicated earlier on, the age of the woman who seeks abortion, plus the advanced gestation period, increase the risk of serious complications. Some of the factors cannot be controlled by the service providers.

In cases where the service providers can have control of the factors to reduce complications, they really have to take that step. In the opinion of Baird, et al. (1995:106), labour-induction methods have higher complication rates. Therefore the choice of the method of abortion should be done with serious consideration of the risks or complications. The skill of the service provider plays an important role in this regard, as well as the availability of services and facilities. With the advances in technology every effort need to be made to overcome complications from the abortion procedure.

### **2.7 MANAGEMENT OF COMPLICATIONS**

Women who have undergone abortion need to be followed up, to establish any complications that may occur, either immediately or later. If in South Africa, the abortion services could include follow-up, many complications could be treated immediately, with positive results. The skills and attitudes of the service providers also play an important role in the treatment or



management of women who present with complications of abortion. This position is held by WHO (1995:40), that whenever a health care worker at any level of the health care system is consulted by a woman of reproductive age, with the symptoms such as unexpected bleeding, fever or lower abdominal pain; pregnancy-related complications should be suspected, regardless of the woman's menstrual or contraceptive history. Thorough assessment by the service providers is crucial in this instance, because misdiagnosis could lead to inappropriate treatment, which could lead to negative results.

According to WHO (1995:41), the major life-threatening complications resulting from unsafe abortion are haemorrhage, infection, injury to the genital tract and internal organs, as well as retained products of conception. The management of these complications will be discussed briefly as follows:

#### - **Management of haemorrhage**

In an abortion case excessive bleeding can occur because of retained products of conception, trauma from chemical agents or complications of blood coagulation. If retained products of conception are the reason for bleeding, then the uterus should be re-evacuated. In case where the reason is cervical trauma, the lesion should be sutured (Compare WHO, 1995:43.) This clearly indicates that bleeding occurring after the abortion procedure needs to be given a special attention. As excessive bleeding could be fatal, the woman needs to be properly assessed and intravenous fluid replacement coupled with blood transfusion has to be done. It is argued by WHO (1995:44) that selective use of transfusions of blood and blood products is important to reduce the risk of transmitting infectious agents such as hepatitis or HIV. This precaution needs to be taken at all costs and the researcher believes that with the fast spreading infection of HIV, the health department, specifically the blood transfusion services in South Africa, is giving this issue the attention it deserves. This is evident in the way people who donate blood are subjected to intense screening.

#### - **Management of infection**

The treatment of infection in abortion patients is largely determined by the severity thereof. According to WHO (1995:45) these patients can be successfully treated by antibiotic therapy along with evacuation of the uterine contents. Hospitalisation will be required if septicaemia is

diagnosed, followed by specific laboratory assessment. This should be done quickly but with special care, to prevent the occurrence of septic shock, which is life-threatening. This indicates the importance of specialised skills on the part of the service providers, so that they could identify the intensity of infection on assessing the patient. This will be more beneficial for the patient because appropriate treatment will be administered immediately to avoid further complications.

The researcher agrees with WHO (1995:45) that prophylactic use of antibiotics in abortion care should be strongly recommended, when dealing with patients considered to be at high risk, that is, those with a history of pelvic inflammatory diseases and those with multiple sexual partners. This would reduce the occurrence of infections later, after the abortion procedure, and also make the abortion services in the country more desirable.

#### **- Management of injury to the genital tract and internal organs**

Injury to the genital tract and internal organs is a life-threatening complication as well as a cause of serious long-term morbidity among abortion patients (Compare WHO, 1995:45.) In cases where injury is suspected, laparoscopy should be done, to determine the extent and the location of the injury. This will enable the service provider to administer an appropriate intervention procedure. In the researcher's opinion the skills of the service providers in this regard is an important aspect. Without these specialised skills, the patient could end up been mismanaged, which could lead to further complications or even death.

#### **- Management of toxic and chemical reactions**

Toxic and chemical reactions can result from drugs used to induce abortion, with symptoms varying, depending on the particular substance used, as well as the method of application. It is suggested by WHO (1995:46) that women diagnosed with other abortion complications, mentioned earlier, should also be assessed for toxic chemical and drug reaction, because in most cases a combination of methods of abortion are used. The patient should be thoroughly assessed and treated appropriately to prevent further complications. It therefore becomes very important to have patients treated symptomatically, that is, attention will be on the symptoms presented by the patient, followed by thorough assessment.

## - Management of failed evacuation

Even if the induced abortion procedure is done in an appropriate setting, it does happen at times that some of the products of conception could be left in the uterus. This calls for the specialised expertise on service providers, coupled with special care when dealing with these women. As a result of this situation it becomes extremely important to inspect the evacuated tissue

to make sure that all the products have been evacuated. This clearly indicates the importance of having women who have undergone evacuation to be followed-up in a short-term interval, so that any complication could be detected sooner. This would minimise the adverse results on the women's health, following the abortion procedure.

The management of complications depends largely on the expertise of the service providers, as well as the time taken by the patient to reach the health facility. This makes it very important for the abortion services to be more accessible to the whole population and not only for those who stay in urban areas. If the services are not decentralised to reach the whole population, the country will still have a high mortality rate related to abortion, as well as a high rate of unsafe abortions. The other important factor in this regard is the follow-up system for the patients after the abortion procedure. The researcher has observed that there are no follow-up services for patients who seek abortion at state hospitals/clinics, which means that it is not known how many of these women present with complications later. This may result in mismanagement when these women go back to the health facilities with some complications, as it won't be known whether these complications are abortion-related or not. A well co-ordinated and comprehensive abortion service is a need for all the women who utilise this service in South Africa, specifically at the state health facilities.

## 2.8 PREVENTION OF COMPLICATIONS

The prevention of unsafe abortions, coupled with a variety of complications, need to be the priority of every government. It is important to note that the problem of treating the complications of abortion has an impact not only on the women, their families and the medical community, but also affects every sector of society. WHO (1195:115) indicates that in addressing this problem, it becomes important to have the community, provincial, national

and local leaders informed concerning the magnitude, nature and implications of the problem of unwanted pregnancy. Solutions to this problem need to be a multi-disciplinary effort. The social worker as a member of this team, could play an important role in community health education and health promotion. Relevant health programmes could be used in this regard to empower the women.

According to WHO (1995:115), basic elements of a multi-faceted effort to address this problem are:

- Educating the public.
- Providing acceptable and accessible family planning and counselling services to prevent unwanted pregnancy.
- Promoting the expansion of services for emergency treatment of all abortion complications through a decentralised health delivery system.
- Providing high-quality medical services for termination of pregnancies resulting from contraceptive failure, for medical indications, and for other reasons within the provisions of the abortion policies of the particular country.

These elements will be discussed briefly as follows:

#### **- Educating the public**

Informing the community about reproductive health concerns, including safe motherhood, is an essential part of preventative health care (Compare WHO, 1995:116.) This could be accomplished by the involvement of team members and the community leaders. It is important to note that community involvement is an integral part of educating the community. Health education programmes can be effectively used to have the community informed about important reproductive health issues.

Health education is a tool that will prevent situations where women would sit with their reproductive problems, without knowing where to go for help. If they are informed they will know exactly where to go for help and when to seek help, without endangering their health. Situations where women seek abortion very late, when it is no longer possible, will be prevented, and they would not end up opting for unsafe and dangerous procedures. The social worker could assist in the planning and implementation of health education programmes. This could be successfully done when the women are involved in the whole process.

- **The role of family planning in preventing abortion.**

It has been indicated by WHO (1995:116), that contraceptive services have a vitally important role to play in promoting safe motherhood, that is, to prevent further unwanted pregnancy; or to prevent additional high-risk pregnancies. The researcher is in agreement with the above statement because if the contraceptive services are available and accessible, as well as user-friendly they will be utilised optimally and unwanted and unplanned pregnancies would be prevented. In South Africa the contraceptive services are available and free at all state health care facilities, but there is still a high rate of unwanted and unplanned pregnancies. This calls for further research to establish the factors that lead to this state of affairs. The researcher is of the opinion that there is lack of effective education programmes that are responsive to the needs of the women population in the country. Social workers in the health care field, could utilise their skills in primary health care to have health education done effectively to prevent unwanted and unplanned pregnancies, that end up in abortions, sometimes accompanied by complications.

It becomes very important to have the community, specifically women, educated on the available methods of contraception and also allow them to choose the suitable method. This will motivate them to use the contraceptives, thus reducing the risk of unwanted and unplanned pregnancy. Educating the women, coupled with giving them a chance to choose the method that is suitable for them, would give them a sense of responsibility and being in control of their reproductive lives, hence the increase in compliance. It is also important to have the information provided in simple and non-judgemental manner, as this would enhance understanding. With these efforts made, the service providers need to always remember that South Africa has a high percentage of women who are illiterate, as a result there is a need to go to their level of understanding when information is provided. It is also important to have these efforts made by the multi-disciplinary team, and not only health professionals.

- **Expanding access to safe, high-quality emergency abortion care.**

This is seen by WHO (1995:118) as an essential life-saving component of the safe motherhood programme. This is the case because when a woman is faced with an unplanned and unwanted pregnancy, it is possible that she

would consider abortion, irrespective of whether it is legal or not, in a given country. Even if the contraceptive services are available, there are still unwanted pregnancies, therefore there is a need to have safe and high-quality abortion services. There are also spontaneous abortions that need to be attended to, as a result the service have to be safe and of high quality, so that complications could be prevented.

In South Africa the services are available but not accessible to everybody as not all the hospitals are not mandated to perform abortion. In cases of emergency, women reach the service point late, with complications having developed. It would be beneficial if the service is accessible for utilisation in times of need.

- **The role of elective abortion, where the pregnancy resulted from contraceptive failure or where there is a medical reason.**

It is important to note that abortion services that are of high-quality and within the prescribed laws of the country, provide women with a chance to decide on a safe option, when faced with an unwanted pregnancy. This also applies to women whose pregnancies have medical indications for termination, because they will know that they will be provided with a high quality service.

### **2.8.1 POST-ABORTION FAMILY PLANNING**

Induced abortion, whether it occurs in a safe setting with legal requirements or in an unsafe and illegal setting, is an indication of a desire to postpone childbearing. It is for this reason that family planning should always be part of the abortion services. It is argued by WHO (1995:75), that if it is impossible to provide family planning at the abortion clinic, then women are to be provided with proper counselling and be referred to the family planning service delivery point. Effective family planning programmes would reduce the mortality and morbidity that could result from abortion.

The woman's family planning needs should be thoroughly assessed through counselling. The woman needs to be given the chance to express her feelings with regard to pregnancy and when she would like to be pregnant. All the information regarding the available methods of contraception should be provided, so that the woman could make a choice. WHO (1995:66)

argues that adequate counselling that assists women in making fair and informed choices based on information about all available methods, is one of the most basic aspects of quality in family planning, following induced abortion. This counselling should be readily available for all women who have had an abortion, before they are discharged from the clinic/hospital. In cases where the woman is unable to make a decision immediately an interim method should be provided and a follow-up appointment be arranged. This would provide the woman with a chance to think more about her circumstances and make a decision that would best suit her, without any pressure. If the family planning services are user-friendly and rendered with sensitivity, women will use them to the fullest. This would prevent induced abortion being requested due to unwanted and unplanned pregnancies. On the other hand the funds that are allocated for abortion services would be channelled for other necessary services. The social worker could play an important role in educating women on the available contraceptives. The knowledge base and communication skills possessed by the social worker enable him/her to play this role effectively.

The most commonly used methods of contraception are:

- Oral contraceptives
- Intrauterine devices
- Suppositories
- Condom
- Diaphragm
- Injectables
- Implants
- Tubal ligation
- Vasectomy

(Compare Parnell, 1989: 50-84; WHO, 1995:61; Roux, 1995:14 & Huntington, 1999:61-72.)

The table for explaining the management of contraceptive methods used, following abortion formulated by WHO (1995:62-65) is included, to illustrate clearly which method is appropriate as well as the time for use, following abortion.

Table 1

| Method              | Timing                      | Advantages            | Remarks             |
|---------------------|-----------------------------|-----------------------|---------------------|
| Oral contraceptives | Begin use preferably on the | - Highly effective if | - Require continued |

|                             |  |  |   |
|-----------------------------|--|--|---|
|                             | <p>day of the abortion or within a week</p>  | <ul style="list-style-type: none"> <li>- used regularly</li> <li>- Can be started immediately even if infection is present</li> <li>- Can be provided by trained non-physicians</li> </ul>   | <p>motivation and regular use</p> <ul style="list-style-type: none"> <li>- Re-supply must be available</li> </ul>   |
| Intrauterine devices (IUDs) | <ul style="list-style-type: none"> <li>- Can be inserted immediately after first-trimester spontaneous or induced abortion, if the uterus is not infected.</li> <li>- In the second trimester expulsion rates are lowest if insertion is delayed for six weeks.</li> <li>- If the uterus is infected; insertion should be delayed and an interim method should be used.</li> </ul> | <ul style="list-style-type: none"> <li>- Can be inserted by trained non-physicians</li> <li>- Convenient to use; not related to intercourse</li> <li>- Provides long-term protection</li> <li>- Immediate return to normal fertility following removal.</li> </ul> | <ul style="list-style-type: none"> <li>- Risk of uterine perforation during insertion</li> <li>- May increase risk of PID and subsequent infertility for women at risk of sexually transmitted diseases</li> <li>- Trained provider required to discontinue use</li> <li>- May increase menstrual bleeding</li> </ul> |
| Implants                    | <ul style="list-style-type: none"> <li>- Insertion can take place</li> </ul>   | <ul style="list-style-type: none"> <li>- Once inserted, convenient to</li> </ul>   | <ul style="list-style-type: none"> <li>- May cause irregular</li> </ul>   |



|                    |   |   |   |
|--------------------|---|---|---|
|                    | <p>immediately after abortion</p> <ul style="list-style-type: none"> <li>- If adequate counselling and informed decision-making cannot be guaranteed, it should be delayed and an interim method used.</li> </ul> | <p>use</p> <ul style="list-style-type: none"> <li>- Can be administered by trained non-physicians</li> <li>- Provides long-term protection</li> <li>- Immediate return to normal fertility following removal</li> </ul> | <p>bleeding or no bleeding; excessive bleeding may occur in rare instances</p> <ul style="list-style-type: none"> <li>- Less effective in heavier women</li> <li>- Trained provider required to discontinue use</li> <li>- Cost-effectiveness depends on long-term use</li> <li>- Must be replaced after 5 years to avoid a decrease in effectiveness and potential increase in risk of ectopic pregnancy.</li> </ul> |
| <p>Injectables</p> | <ul style="list-style-type: none"> <li>- The first injection can take place immediately after abortion in the first or second trimester</li> <li>- If adequate counselling and informed decision-</li> </ul>      | <ul style="list-style-type: none"> <li>- Easily administered by non-physicians</li> <li>2 Convenient for woman; not related to intercourse</li> </ul>   | <ul style="list-style-type: none"> <li>- May cause irregular bleeding; excessive bleeding may occur in rare instances</li> <li>- Possible delayed return to fertility</li> <li>- Re-supply must be</li> </ul>   |

|                      |  |  |  |
|----------------------|--|--|--|
|                      | <p>making cannot be guaranteed, it may be best to delay using</p>  |  | <p>available</p> <ul style="list-style-type: none"> <li>- Convenient access to clinic important as regular return visits are required.</li> </ul>  |
| Female sterilisation | <ul style="list-style-type: none"> <li>- It is imperative that adequate counselling and informed consent precede sterilisation and this is likely in the emergency context</li> <li>- Technically, sterilisation can be performed immediately after first trimester spontaneous or elective abortion, and after treatment of abortion complications except where there is infection or severe blood loss</li> <li>- Sterilisation</li> </ul> | <ul style="list-style-type: none"> <li>- Permanent method</li> </ul> | <ul style="list-style-type: none"> <li>- Permanence of the method increases the importance of adequate counselling and fully informed consent; this is not likely to be possible at the time of emergency</li> </ul> |

|                                |  |   |  |
|--------------------------------|--|---|--|
|                                | <p>after a first-trimester abortion is similar to an interval procedure</p> <ul style="list-style-type: none"> <li>- Sterilisation after a second-trimester abortion is similar to a postpartum procedure</li> </ul> | <p>discontinued when pregnancy desired</p> <ul style="list-style-type: none"> <li>- Easily discontinued when pregnancy desired</li> </ul>   | <p>Less effective than other methods</p> <ul style="list-style-type: none"> <li>- Require continued motivation and regular use</li> <li>- Re-supply must</li> </ul>                  |
| Male sterilisation             | <p>Timing not related to abortion</p>  | <p>Permanent method</p>   | <p>Permanence of the method increases the importance of adequate counselling and fully informed consent</p>  |
| Barriers not requiring fitting | <p>Begin use as soon as intercourse is resumed</p>   | <ul style="list-style-type: none"> <li>- Useful as interim methods if initiation of another chosen method must be postponed</li> <li>- Medical supervision not required</li> <li>- Provide some protection against sexually transmitted diseases</li> <li>- Easily</li> </ul> | <ul style="list-style-type: none"> <li>- Less effective than other methods</li> <li>- Require continued motivation and regular use</li> <li>- Re-supply must be available</li> </ul> |

|                                       |   |   |  |
|---------------------------------------|---|---|--|
|                                       |   | discontinued when pregnancy is desired.         |  |
| Fitted barriers used with spermicides | Fitting and use should be delayed until the cervix and vagina have returned to normal   | - Easily discontinued when pregnancy is desired | <ul style="list-style-type: none"> <li>- Less effective than other methods</li> <li>- Require continued motivation and regular use</li> <li>- Re-supply must be available</li> </ul>   |
| Periodic abstinence                   | Not recommended for immediate post-abortion use. The first ovulation after an abortion will be difficult for the woman to predict and the method is unreliable until after the first post-abortion menses | - No cost                                       | <ul style="list-style-type: none"> <li>- Unreliable immediately after abortion</li> <li>- Alternative methods are recommended until resumption of normal cycle</li> <li>- Women and their partners must be motivated and have a thorough understanding of how to use the method</li> </ul> |

Post-abortion family planning is something that has to be seriously considered immediately after the woman has undergone termination of pregnancy. Of importance is to provide the woman with the information regarding contraceptives, so that she could choose the method that will suit her best. This could improve compliance in the utilisation of contraceptives,

hence reducing the occurrence of unwanted and unplanned pregnancies, that could end up in abortions.

## 2.9 SUMMARY

In this chapter the following aspects were discussed:

The methods of abortion at different periods of gestation, where it was found that termination of pregnancy at advanced gestation period is very risky. It could result in serious complications for the woman. The skills and the technology used here also play an important role, in bringing the desired results, with minimal complications. The social worker could play a vital role here in preparing the patients, by providing them with detailed information on the different procedures, depending on their gestation period. This would help ease the anxiety and equip the women, as well as enabling them to have some expectations, with regard to what is about to happen to them.

Abortion-related risks and complications were also discussed, where maternal mortality and morbidity were highlighted at length. It has been found that abortion may be accompanied by a variety of complications, irrespective of whether it is done legally or illegally. The abortion-related complications become more serious with advanced pregnancies. The accessibility of the abortion services could assist in reducing the complications, as women would receive the necessary treatment timeously. Follow-up services are also a need, as part of the abortion services, to reduce the advancement of complications and provide women with the necessary treatment as early as possible.

Management of abortion-related complications is an important part of the abortion services. It is only through follow-up services that these complications could be detected and treated immediately. Assessment plays an important role because the extent of the problem could be determined, so that appropriate treatment could be provided.

The prevention of unsafe abortions, accompanied by a variety of complications should be the focus. Complications of abortion could be eliminated by having abortion services readily available and accessible to all women, that is, those staying in rural areas, as well as those staying in urban areas. These services need to be accessible to avoid a situation where a

woman has to travel a long distance to reach the services. This complicates the situation more, with adverse consequences. Health education is seen as a tool that can assist in alleviating the serious abortion-related complications. This could work hand in hand with accessible family planning programmes, as women would be educated on their health and sexuality. In this way women would have insight and knowledge on the available services, on how to utilise them, as well as when to utilise them. The social worker as a member of the multi-disciplinary team here could be involved in planning, implementation and evaluation of the health education programmes, to ensure their effectiveness. The knowledge-base and skills of the social worker with regard to working with communities would enable him/her to play this role with success.

Post abortion family planning is the other important part of the abortion services. This would ensure that women do not use abortion as a means of family planning. Women need to be educated on the available family planning methods and be given a chance to choose the method they would like to use. Giving women a chance to choose would encourage compliance, hence preventing unwanted and unplanned pregnancies that could end up in abortion.

The following chapter will deal with the psychosocial aspects related to abortion on the woman.