MISCARRIAGE

by

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Index

Introduction	01
Definitions of miscarriage	02
How common is miscarriage?	02
Symptoms of miscarriage	03
Types of miscarriage	03
Examinations, tests and advice	05
What is lost when I miscarry?	08
After-effects of miscarriage or D & C	08
Feelings after miscarriage	09
Causes of miscarriage	12
Risk of future miscarriage	20
Planning for the future	21
Counselling	24
Further Reading	33

Acknowledgments

The authors gratefully acknowledge the expert assistance of Dr. Raymond Howard and Dr. Brendan Powell, Consultant Obstetricians and Gynaecologists at St. Joseph's Hospital, Clonmel. Our thanks also to Sr. Jane Salmon, Ward Sister, Maternity Unit, St. Joseph's Hospital, Clonmel, who helped both in the initial and final stages of composition.

The Institute of Obstetricians and Gynaecologists welcomes the publication of this helpful booklet.

First developed by the
Tipperary Childbirth Research Trust

INTRODUCTION

A miscarriage is a very distressing event in a woman's life. Women often feel isolated at this time, feeling that their grief is not understood and that many of their questions remain unanswered. A booklet cannot take the place of a sympathetic listener, but we hope that this booklet contains some advice and information that you will find helpful. Please feel free to discuss anything in the booklet with the hospital staff or your doctors.
You will probably not want to read the whole booklet at once.
For this reason it is divided into convenient sections that can be read independently. We recommend that you 'dip' into the sections you are most interested in at this point. Other sections may be of more interest and relevance later.

A group of women who have had miscarriages have kindly written accounts of their experiences for use in this booklet. Quotations from their accounts will appear in the text. We think you will find this helpful and we are very grateful to them. To protect their privacy, names and identifying data will not be used.

DEFINITIONS OF MISCARRIAGE

Medical Definition of Miscarriage

"Miscarriage is defined as the loss of a conceptus weighting less than 500 grams (which is approximately equal to a gestation period of 21/22 weeks)."

A Personal Definition.

"I started to bleed and had terrible pains. I didn't know what was happening to me and I was terrified. A scan at the hospital showed that I had miscarried but some pieces of tissue were left inside me so I needed a D & C. The whole thing happened so quickly that really only now, three weeks later, I am sitting down to think. I feel empty and alone."

HOW COMMON IS MISCARRIAGE?

About 15% of all pregnancies end in spontaneous miscarriage, although the exact incidence is difficult to determine. Some miscarriages take place very early in pregnancy before the woman even suspects she is pregnant. This is a likely explanation for a period that is a little later and heavier than usual.

Based on figures collected at the National Maternity Hospital, it has been estimated that about 14,000 women miscarry spontaneously every year in Ireland and about half of these women will be admitted to hospital.

SYMPTOMS OF MISCARRIAGE

Most miscarriages start with bleeding and pain of some sort, whether mild or severe. The blood may be of any colour from bright red, as in fresh blood, to dark brown, as with old, stale blood. The pain is usually in the lower back, stomach or thighs. When a woman is threatening to miscarry, the bleeding is usually not very severe and the pain and discomfort is slight. The neck of the womb (uterus) is closed and the womb is the expected size for dates. Bleeding does not mean you will most likely lose your pregnancy. Many pregnant women have bleeding in pregnancy and less than half of these will miscarry. When a woman complains of bleeding in early pregnancy, her doctor will want to consider other possible causes of the bleeding. For example, the bleeding might be caused by a cervical erosion or by very bad cystitis. It may also be caused by a benign or a malignant lesion of the cervix. Therefore a careful and gentle internal examination with a speculum may be done to assist the diagnosis.

Other Symptoms Associated With Miscarriage

Many women describe feeling unwell for several days beforehand. They may complain of flu-like symptoms and nausea, or they may simply have a feeling that "something is wrong". No damage is done to the foetus in a threatened miscarriage. The bleeding is caused by a small part of the placenta or afterbirth separating from the wall of the uterus so the bleeding is from the mother's body not from the foetus.

TYPES OF MISCARRIAGE

An Inevitable Miscarriage

If a woman has been threatening to miscarry, there may come a point of no return. This happens when the cervix or the neck of the womb (uterus) starts to dilate and open up. Once this action starts it is unlikely the pregnancy will be saved. Bleeding and pain are the outstanding features

here, the pain increases as the womb contracts - and the amount of pain varies from woman to woman and miscarriage to miscarriage. There may be associated nausea and vomiting, and in many cases large pieces of tissue, described by women as looking like "pieces of liver", are passed. It can be frightening to experience such a miscarriage and most women find their inability to control what is happening to their bodies very distressing.

An inevitable miscarriage will progress to either an incomplete or complete miscarriage.

Incomplete Miscarriage

As a woman miscarries, sometimes not all of the products of conception are passed from the womb (uterus). This is called an incomplete miscarriage. Usually there is continuous bleeding and crampy pains. Some women require a blood transfusion. Sometimes an ultrasound examination is carried out to confirm the diagnosis. Preparation is then made to take the woman to theatre and to remove by curettage, the remaining pieces of tissue inside the womb. The procedure followed for curettage (more commonly referred to as a D & C) involves firstly putting the woman to sleep in theatre. Then after a gentle internal examination, the cervix or neck of the womb may be carefully dilated and the inside of the womb is curetted using a long handled spoon-like instrument. The whole procedure takes about 10 - 15 minutes.

Complete Miscarriage

When a complete miscarriage occurs, all the products of conception are passed from the womb. This type of miscarriage occurs most frequently before 6 - 8 weeks or after 14 - 16 weeks, and seldom in the intervening period. Where a complete miscarriage is suspected, the treatment will involve continued observation of blood loss in hospital. Where bleeding is prolonged, an ultrasound scan will be necessary to confirm that the uterus is indeed empty and that no small piece of tissue remains inside. Where some tissue still remains, a curettage will be necessary. The period of stay in hospital is on average 24 to 48 hours. Occasionally a slightly longer stay is necessary, as for example when an acquired infection is the cause of the continued bleeding.

A Missed Miscarriage

In this type of miscarriage the embryo (baby) fails to develop in the womb and instead of being passed from the womb, it is retained inside. The diagnosis may be difficult to make at first because the findings and the symptoms are similar to a threatened miscarriage. Usually the symptoms of pregnancy (i.e. nausea, breast tenderness, urinary frequency) disappear as the womb becomes progressively smaller. There is little or no bleeding, perhaps just a dark brown discharge from the vagina. In this situation it is usual for a woman to have several examinations and a series of ultrasound scans before a definite diagnosis is made. Treatment for a missed miscarriage can be simple, "allowing nature to take its course", i.e. the woman will spontaneously miscarry the foetus, but this may not happen for several weeks after the initial bleed. This approach is unacceptable to many women. Alternatively, treatment can consist of a gentle curettage under general anaesthesia if the womb is not larger than twelve weeks in size by dates and on clinical examination. If, however, the womb is larger than this in size, a drug called Prostaglandin is used in the form of a jelly or tablet inserted vaginally just near the neck of the womb. This helps the woman to spontaneously expel the retained contents. It may be necessary to repeat the medication, and sometimes intravenous treatment (by drip) can also be used. The process is completed by careful curettage under general anaesthesia to ensure that no tissue remains inside. The pregnancy test usually becomes negative in seven to ten days.

EXAMINATIONS, TESTS AND ADVICE

Vaginal bleeding is always taken seriously. Most doctors will advise bed-rest and avoidance of stress, travel, and sexual intercourse, for two to four weeks. A gentle internal examination may be carried out to assess if the neck of the womb is open or closed and to assess the size of the

womb in relation to the date of the last menstrual period. An ultrasound scan, if carried out, will show whether there is an ongoing pregnancy in the womb and endeavour to date the pregnancy. However, scans are not foolproof. The picture is not always clear and there may be difficulty in interpreting it. For this reason a series of clinical reviews and repeated ultrasound scans are often necessary for an accurate diagnosis.

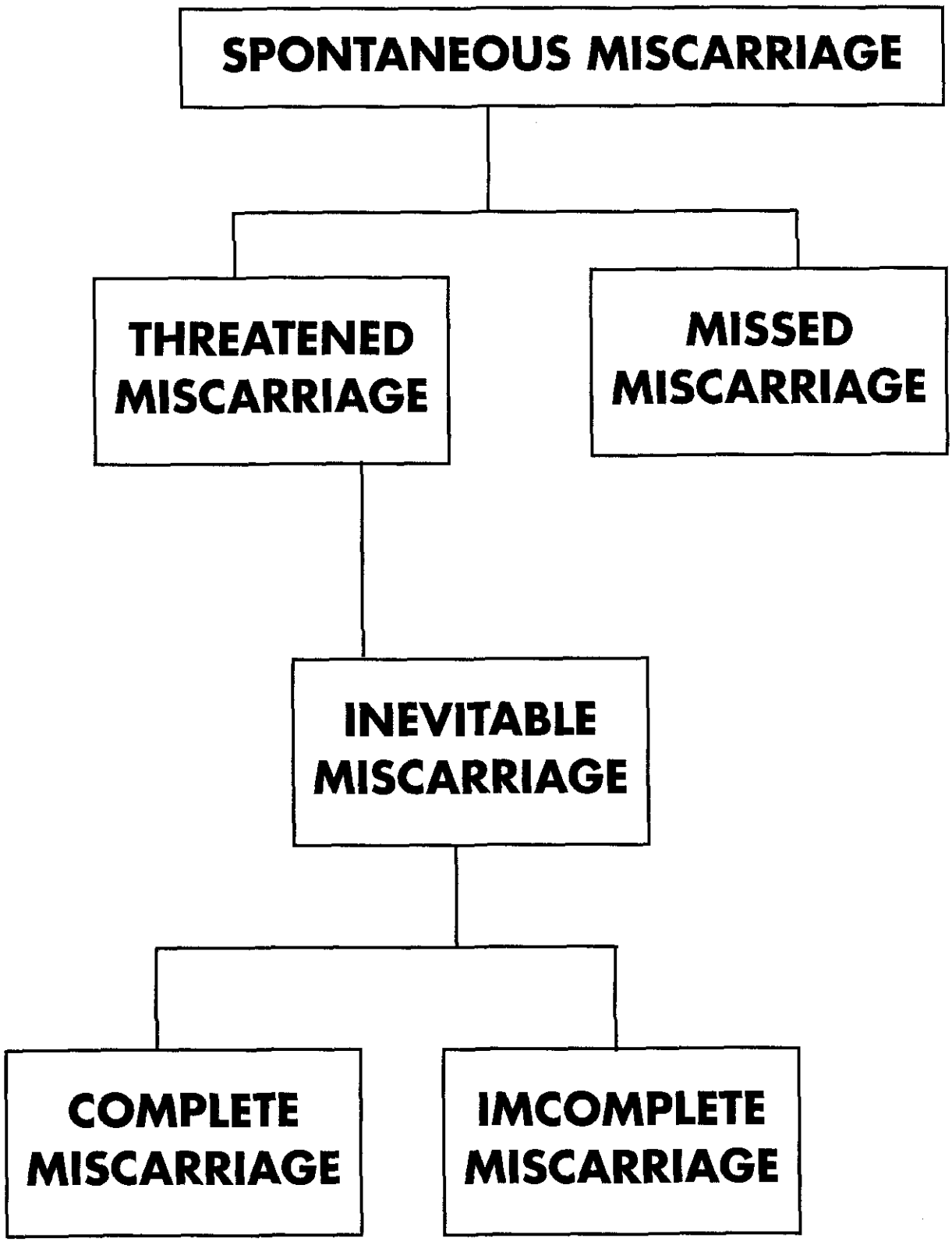
"If someone could have said to me from the first, you're definitely losing, it would have been easier, but they couldn't be sure".

Looking at the picture on the ultrasound screen can be a sad and distressing experience.

"I had a scan which showed no movements, no heartbeat at twenty weeks gestation. Just a stillness. My mind went numb and I just couldn't accept it. I keep thinking about that silence, that stillness, I can't forget that scan".

To help with diagnosis, a pregnancy test will also be carried out. In some hospitals this is a blood test but in others it can be a urine test. Like the scan, pregnancy testing is not totally reliable. It is possible to get a false positive reading for several days after a miscarriage, as it takes some time for the pregnancy hormone called HCG to be cleared from the body. Therefore several tests may be done on successive days before treatment is decided upon. All these tests can be worrying, but care with the results is very important.

If you are Rhesus negative blood type you will be offered an Anti D Immunoglobulin injection which protects the mother from producing harmful antibodies in a future pregnancy.



Spontaneous Miscarriage

WHAT IS LOST WHEN I MISCARRY?

"Was my baby a person or was it just a collection of blood clots and cells?"

The most obvious loss from a miscarriage is blood, the amount being small or large, bright red or dark brown, and perhaps containing clots and pieces of tissue. Mostly, as with early miscarriages, a formed foetus cannot be seen. Sometimes there isn't a foetus present to see, as perhaps the fertilised egg scarcely developed or perhaps the foetus developed abnormally in early pregnancy and is now dissolved away. In these cases the woman will just see blood mixed with some clots or pieces of liver-like tissue.

In some cases of late miscarriage, a fully formed foetus may be present. Seeing the baby can be a difficult experience yet it seems to be an experience which women never regret. It is easier to grieve for a baby you see, however tiny or unusual. At most hospitals a photograph is taken where there is a fully formed baby present, and a copy will be offered to the parents as a keep-sake.

In the case of a late miscarriage, where a fully formed baby is lost, parents will wish to consider the alternatives open to them. Parents should have the choice with regard to organising a burial ceremony or they may prefer to leave this matter to the hospital.

AFTER-EFFECTS OF A MISCARRIAGE OR D.&C.

Bleeding is the major symptom associated with miscarriage. Normally after a miscarriage has occurred, bleeding stops after 2 - 3 weeks or even sooner. Where bleeding persists, the cause is usually either acquired infection or retained pieces of tissue in the womb.

You should contact your family doctor if you have any of the following symptoms:

a. Prolonged bleeding (more than two weeks after discharge from hospital).

b. The bleeding is heavier than usual.

c. The blood loss has an offensive smell or has clots in it.

d. You develop a temperature.

e. Severe abdominal pain (more than the crampy pains you would experience with a normal period).

f. If you feel emotionally distressed and feel you need to voice your feelings to someone outside the family.

Many women who have a D & C after a miscarriage feel tired and "under the weather" for the next few days. This may be attributed to the effects of a general anaesthetic, combined with the emotional aftermath of anxiety and sadness following a miscarriage.

A miscarriage is a very distressing experience and it is important that a woman gives herself time to recover physically and emotionally. Therefore, even if you are feeling energetic and adopting a positive attitude, it is usually wise to take some time off work.

FEELINGS AFTER MISCARRIAGE

Sadness and Grief

Most women feel sadness and grief and these feelings may be overwhelming at times. Crying is a natural expression of grief and most women have bouts of weeping. You may find yourself going over the details of your miscarriage again and again. Many women feel the need to seek as much information as possible about their miscarriage, to try and make sense of what happened. If it is a late miscarriage you will want as much information

as possible about your baby. Ordinary life may lose its meaning for a while and things which formerly gave you pleasure may seem pointless.

"All the plans we made, all gone for nothing".

Many women talk about a feeling of 'emptiness'. Loneliness and isolation are also common feelings because although miscarriage is fairly common, it is not talked about very much.

Personal Doubts

It is normal after a miscarriage for a woman to wonder if she is in some way to blame. Women look back over the time before the miscarriage and wonder if they should have done something differently, been more careful in some way. Sometimes there are feelings of guilt.

"I wonder is it that I didn't take enough rest or care of myself. I feel guilty and can't stop worrying about what the baby was like".

But there is little evidence that miscarriage can be prevented by changing your behaviour.

After miscarriage many women also doubt their bodies. Although problems with the woman's physiology account for only a very small proportion of miscarriage (see section on causes of miscarriage) a woman may have doubts about whether her body can function properly.

You may find it helpful to talk over these concerns with someone at the hospital.

Anger

You may also feel anger. Often, as they go back over their experience, women may feel someone has been negligent or callous. Sadly, sometimes insensitive remarks can be made or poor advice given, and this is remembered and is an obvious target for anger. Sometimes women feel angry with God or with life and sometimes it is difficult not to feel angry with other pregnant women. These feelings can last a long time, perhaps several months. It is good to talk them out with someone sympathetic.

Your Partner

"Sometimes I'm like a bear and I say to my husband "just go away and leave me by myself for a while"."

Your partner may also be grieving and you may be able to talk together and understand each others feelings. He may also be feeling sadness and anger. If it was a late miscarriage he too may feel a pressing need to know as much as possible about the baby. But sometimes it is difficult for him to relate to your loss because he has not had the same awareness of being pregnant and beginning to relate to a new life.

"My husband says we must put it behind us and try again to conceive but I can't forget this, I keep thinking about the silence, the stillness on that scan. Why can't I accept like my husband and get on with living?".

Miscarriage, too, is a physical trauma involving pain, internal examinations, perhaps a D & C, and a partner may be out of touch with the feelings aroused by this.

Support from Other People

A friend who has had the same experience can be a great source of support. Some other people, even when they haven't been through the experience, are naturally understanding and provide a listening ear. Some women can turn to their mothers or sisters for emotional support. But some people have difficulty giving support. They feel uneasy or embarrassed. They know there is nothing they can do to put things right. Sometimes people may avoid the topic altogether, sometimes they may try to reassure, try to show that it doesn't matter. There is no right way of handling the situation and people, through feelings of helplessness and awkwardness, often get it wrong. Doctors too, can sometimes come across as uninvolved and detached because of their difficulty in dealing with emotional situations. Like many other people they may be more comfortable dealing with factual issues. Try to accept that people do differ in their ability to understand and their ability to give emotional support in this situation. Try not to allow bitterness about people's treatment of you to add to your difficulties.

Letting go

Gradually a time of acceptance comes as a woman realises that what has happened cannot be changed. She recognises that what has happened is not her fault or anybody's fault. At this stage a woman can begin to let go and look to the future. It is not suggested that you will forget that you have had a miscarriage, it is a part of your life. Most women feel particular sadness around the date their baby would have been due.

For women who have suffered recurrent miscarriage it can be difficult to face the future positively. A successful pregnancy can seem very remote. It may be appropriate to seek further tests, to look for more information about your miscarriages, to enable you to consider your future plans. Some couples may wish to consider adoption. Professional counselling is available through your family doctor, if you feel you need outside help. If you have been prescribed sleeping tablets, anti-depressants or tranquilizers, you should consider reducing and gradually stopping these. As a general rule, tablets are not a solution to emotional crisis, although they may help in the short-term. Seek your doctor's advice.

The section on 'Planning for The Future' (p. 21) will become more interesting to you as you begin to look ahead.

CAUSES OF MISCARRIAGE

"I took rest and followed my doctor's advice about diet and relaxation, yet I lost my baby. Why did this happen to me? Is there something wrong with me that I'm not being told?"

The belief that your body is at fault is very common following miscarriage but fortunately this is not usually the case. Factors which seem to be related to an increased risk of miscarriage are detailed below:-

Errors in the development of the foetus

These errors may range from minor abnormalities in the development of the foetus to a situation where the foetus has scarcely developed at all.

The conception may fail to be embedded properly in the lining of the womb and thus not develop. In some cases, these errors in development are due to a genetic error. The majority of genetic errors are chance happenings and are unlikely to recur. Further investigation is not generally indicated, except in the case of recurrent miscarriage. Where there is a history of recurrent miscarriage, studies have shown that a small percentage of couples will, on investigation, have an abnormal chromosome pattern. Where a problem is identified, the couple should receive counselling from an experienced genetic counsellor.

Hormonal Causes

One of the most persistent theories about miscarriage has put the emphasis on low levels of female sex hormones. However, it is now known that the hormonal abnormality may be the effect rather than the cause of pregnancy loss. The hormones oestrogen and progesterone are important for maintaining an early pregnancy. However a deficiency in these hormones is difficult to prove. Giving hormone supplements has been used to prevent recurrent miscarriage but scientific evidence of its effectiveness is lacking. Another hormone, human chorionic gonadotrophin (H.C.G.) is important in maintaining early pregnancy. H.C.G. supplement has therefore been used to try to prevent early pregnancy loss.

"What about the oral contraceptive pill?"

Recently there has been a lot of publicity given to the temporary infertility suffered by some women when they come off the pill, but several studies have shown that the pill does not increase the risk of miscarriage, even in women who are taking the pill until the last period before conception. There may be, however, a slight risk of early miscarriage among those women who became pregnant while taking the pill.

Psychological Factors, Stress And Anxiety

It is believed by some women that a stressful situation can lead to a miscarriage. We know the menstrual cycle is influenced by stress and anxiety but there is no direct evidence that stress alone can cause a miscarriage. Stress can be an unwelcome additional factor where a

pregnancy is already at risk. Several studies have shown that women who have suffered recurrent miscarriages are often suffering from a high level of tension and anxiety. This is why part of the treatment offered to women in some centres suffering from recurrent miscarriages involves learning relaxation techniques and increasing psychological support. There is also an idea that work outside the home is in itself a source of stress and thus may be a cause of miscarriage, but there is no scientific basis for this. Being at home is not necessarily easier, physically or emotionally, than being out at work. Unless you are exposed to environmental hazards at work there is no reason to believe your work played a part in your miscarriage.

A physical cause

a. Unusual Uterine Shapes

Occasionally the uterus may be an unusual shape and this may cause increased likelihood of miscarriage, both before and after 14 weeks. It has been suggested that one in a hundred women will have an abnormally shaped uterus. For many women the unusual shape will not cause any problems and hence will not be diagnosed. However, the abnormally shaped uterus is estimated to account for between 8% and 30% of recurrent miscarriages. It is not clearly understood why there is such an increased risk - one possibility is that the abnormal shape does not allow enough space for the conceptus to grow. Another possibility is that the placenta (afterbirth) may implant on part of the womb which has an inadequate blood supply. Lastly, when the womb is an unusual shape, there is an increased chance that the neck of the womb, the cervix, may not work properly.

b. The Cervix.

A cervix that doesn't function properly is called incompetent. This means that the cervix is unable to hold the contents of the womb in place. It opens much too early, allowing the conceptus to be lost before it is fully developed and able to survive. However, successful treatment is available in the form of the cervical stitch. This is just what it says, a stitch put into the cervix closing off the opening to the womb and preventing it from opening prematurely. There are two kinds of stitch: The Shirodkar and the McDonald stitch, called after the doctors who invented them. The stitch is usually put in around fourteen weeks under general anaesthesia

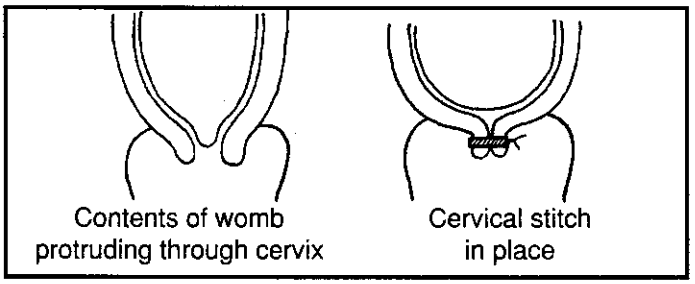
but occasionally it is put in at a later stage, or very rarely, even before the women is pregnant. Research suggests that when the stitch is put in early in pregnancy, there can be up to 80% chance of success. In most cases the stitch is left in place and is taken out around 38 - 39 week gestation.

c. Retroversion

It has been suggested that when the uterus (womb) is tilted backwards it may cause a miscarriage. However, there is no evidence that a uterus in this position leads to miscarriage.

d. Intra-uterine Adhesions

This problem may be suspected from a history of light or absent periods. Adhesions are more likely to be associated with difficulty conceiving rather than with miscarriage. When intra-uterine adhesions are diagnosed, various treatments are available.



Incompetent Cervix And Cervical Stitch

e. Fibroids

Fibroids, in themselves, do not necessarily increase the risk of miscarriage. What is important is the location of the fibroids, their size and number. Fibroids may interfere with a pregnancy by distorting the cavity of the uterus or by interfering with implantation and blood supply to the placenta.

f. Acquired Infection

Maternal infection, whether just developed or long-standing, if it is severe enough, can cause miscarriage. Certain viruses are known to cause the foetus to develop abnormally and thus lead to an increased risk of miscarriage. These are the Rubella virus (thus the importance of

immunisation in childhood and early adolescence), the Chlamydia virus, the Cytomegalo virus, the Genital Herpes Virus, Toxoplasmosis and Mycoplasma. Toxoplasma is an organism found in cat faeces which may be associated with miscarriage in humans, so if pregnant, wear rubber gloves when looking after a cat and doing the garden. This is a simple precaution against a very remote possibility. Sheep at lambing are a potential source of Chlamydia, particularly if there is miscarriage or abortion in the sheep. Pregnant women should avoid contact with these animals at that time. Listeria has been shown to be associated with recurrent miscarriage in animals, but not in the human. Brucella, which is mainly found in animals, has been associated with miscarriage in humans.

g. Mycoplasma

About 50% of all women have an organism called mycoplasma in their cervices, and it has been suggested that this may be associated with an increased risk of miscarriage. However, this seems unlikely, as so many women have this organism and they all certainly don't miscarry. Women who have a history of recurrent miscarriages and are known to have mycoplasma in their cervices may be treated with an antibiotic (Erythromycin) either before they become pregnant or during pregnancy.

An Immunological Cause

The immune system is the mechanism by which the body defends itself against foreign and possibly harmful substances. It is because of the immune system that transplanted organs are sometimes rejected. The tissue that implants in the mother's womb is, in a sense, a foreign body, because the father's genes have contributed to it. Occasionally the mother's body rejects the implanted bundle of cells, and when this happens she will have recurrent miscarriages. Women, whose partner is a close relative, are particularly at risk. While treatment called immunotherapy has been offered to some couples with recurrent miscarriage, this treatment carries certain risk of cross-infection and immunosuppression, and its success rate to date has been disappointing.

Maternal Diseases

Systemic lupus erythematosus more commonly referred to as SLE, Wilsons Disease, and epilepsy, are all associated with a higher risk of miscarriage. Some research has suggested that endometriosis may be associated with an increased risk of miscarriage, but further work and study is required here. Women who have diabetes which is poorly controlled are known to have an increased risk of abnormality in the foetus and of miscarriage. Diabetes which is well controlled is not in itself a risk factor for miscarriage. Glucose tolerance testing is offered to women if the doctor feels from the woman's history and the physical examination, that such a test might be helpful. Women who have any of these conditions do benefit from preconceptual care and counselling, which aims to ensure that their pregnancies are planned when their condition is well controlled, or in remission, and medication is at a minimum.

Drugs

Certain drugs are known to cause birth defects and women are generally advised to stop taking drugs that are not medically prescribed during pregnancy. At present there is little evidence that taking drugs in pregnancy can actually cause a miscarriage. One study did find an increased risk of miscarriage among migraine sufferers and among the wives of male migraine sufferers and this was attributed to the longterm use of Ergotamine drugs. Antimetabolic drugs used for treating cancers or immune disease, and also anaesthetic gases, may lead to an increased risk of spontaneous miscarriage. Smoking and alcohol also constitute a risk to pregnancy. The Health Promotion Unit have published two useful booklets, "Women and Alcohol" and "Smoking and Pregnancy" which detail the risks involved.

Environmental Hazards

Pollution is a source of concern and anxiety for many today, especially women, as they are closely concerned with the welfare of children, both born and unborn. Any toxin that harms the foetus could lead to an increased risk of miscarriage, therefore environmental toxins and hazards such as solvents, heavy metals and industrial chemicals, may be implicated in some miscarriages. There is at present a great lack of research here,

leaving questions like this unanswered. However, while these toxins and hazards may represent an increased risk, even where women are known to be exposed to toxins, many babies will be born at term and healthy. A study of visual display units (VDUs) by the Royal College of Obstetricians and Gynaecologists in England did not find an association between VDU use and an increased risk of pregnancy loss.

"Can The Cause Be With The Father?"

Sometimes the father may have a genetic problem. He may be carrying an abnormal gene and this can lead to miscarriage. Both too many sperm (hyperspermia) and too few sperm have been associated with an increased risk of miscarriage. This may be due to a decreased genetic content (D.N.A.) in the sperm.

Sexual Activity

Sexual activity is frequently blamed for causing miscarriage. Often men as well as women search for reasons why the miscarriage occurred. Couples may wonder if engaging in sexual intercourse a day or so before it happened, caused the miscarriage. In a healthy normal pregnancy sexual activity does not seem to pose any risk and is not discouraged. However, it is known that a man's semen contains prostaglandin, which is the substance involved in causing the cervix to soften and dilate at the start of labour. Theoretically it is possible, therefore, that this effect might occasionally cause the cervix to start dilating prematurely. So women with a history of previous miscarriage or premature labour will probably be advised to avoid sexual intercourse at certain times.

Age

"I am a 38 year old and I have six children at home ..... I miscarried at ten weeks and although I am nearly three months over it, I can't come to terms with what happened to me. I blame my age and yet I have a friend near me who had a baby at forty years".

Women over 35 years are more likely to miscarry than younger women. One reason for this is that certain chromosonal abnormalities become more common with age. These abnormalities are called the 'trisomies'. The chromosomes or genetic material are grouped not in pairs, as they

should be, but in threes. Downs Syndrome is the most common trisomy. A very high proportion of foetuses with this type of chromosonal abnormality will be miscarried.

If you do miscarry in your late thirties it may take you longer to become pregnant again, as fertility declines somewhat after 35. However, it is easy to get a distorted impression of the risks and difficulties of having a baby in your late thirties. Many women feel, perhaps, a sense of panic, a sense that time is running out, when they read the statistics about miscarriages, Downs Syndrome and declining fertility.

However, while it is desirable, where possible, to plan pregnancies in the twenties and early thirties, it should be remembered that the majority of women in their late thirties can conceive and bear healthy normal babies.

Diet

There is a considerable body of evidence suggesting that a good well-balanced diet is important for a healthy pregnancy outcome. Poor diet may play a role in some miscarriages. For example, a diet that is low in trace elements such as iron and zinc, and low in important vitamins, can be associated with an increased rate of congenital abnormalities, leading in turn to an increased risk of miscarriage. Women planning a pregnancy should take the vitamin Folic Acid, pre-conceptually, to reduce the chances of neural tube defects such as spina bifida.

Other Areas Commonly Asked About

"Could exercise increase the risk of miscarriage?"

It used to be widely believed that vigorous exercise made a woman more likely to miscarry. At present it is felt that, in general, exercise poses no real risk. There are occasions when physical exertion can be risky, for example, sudden severe bouts of exercise or even less vigorous activity could endanger the pregnancy, if the pregnancy for some reason is at risk. In a normal healthy pregnancy where no problems exist, the mother is encouraged to exercise regularly.

"I had several internal examinations, could this have made me miscarry?"

It is difficult to determine whether such an examination by itself could cause a miscarriage. It remains a very valuable method for both assessing and treating women who present with bleeding in the first and second trimester of pregnancy. It is understood that stimulation of the cervix can cause prostaglandins to be released and, therefore, lead to progressive dilatation of the cervix. Where there is a suspicion that the internal examination may trigger a miscarriage in an unstable pregnancy or in a woman with a history of recurrent miscarriages, such an examination is avoided.

"If I fall or injure myself when pregnant can I miscarry?"

In early pregnancy it is unlikely that you will miscarry as a result of a fall because in the first twelve weeks of pregnancy the womb is well protected by the pelvic bones. Later, as the womb gets bigger and rises out of the pelvis, the foetus is more vulnerable, but injury remains a very unusual cause of miscarriage.

"I was pregnant with twins and subsequently miscarried one twin, but went on to deliver the other twin normally. Does having twins increase the risk of miscarriage?"

By the use of the ultrasound scan in early pregnancy, it has become apparent that many pregnancies, which progress as a single pregnancy often originated as a twin pregnancy. Sometimes there are two amniotic sacs but only one contains a foetus. In these cases either both sacs will be miscarried or just the empty sac will be miscarried, in which case the foetus may be carried to term. Where two foetuses are present it is possible for one to be miscarried early in pregnancy and for the pregnancy to continue with a single foetus. It is not only early in pregnancy that miscarriage is more common in twin pregnancies, later miscarriages caused by cervical incompetence are more common too, perhaps because there is more strain on the cervix. The miscarriage risk increases again with triplets and other multiple pregnancies.

RISK OF FUTURE MISCARRIAGE

"I wanted to try again as soon as possible for another baby but I'm afraid that this will happen to me again."

Approximately 15% of all pregnancies end in spontaneous miscarriage. A woman who has had one miscarriage should be reassured that her chances of having another one are not markedly increased. However, a person who has had two consecutive early miscarriages or a total of three, whether consecutive or interspersed with normal pregnancies, has an increased likelihood of a further miscarriage and should attend for investigations. Also any woman who has had a miscarriage and a pregnancy where there has been an error in foetal development should have further investigations as there is a 27% chance of finding a genetic problem in one member of this parent couple.

Suggested Risk Figures

For a couple who have had one miscarriage, the likelihood of another occurring is approximately 20%. For a couple who have had two miscarriages, whether consecutive or interspersed with normal pregnancies, the risk is approximately 25%. Where three miscarriages have occurred either consecutively or interspersed with normal pregnancies the risk of another occurring is approximately 33%.

Recurrent Miscarriage

Of all the causes of childlessness recurrent miscarriage by virtue of its "so near and yet so far away" nature, remains one of the most difficult for couples to accept. Medically it is defined as occurring once a couple has had three consecutive and spontaneous miscarriages. However, the probability of achieving a successful outcome in the next pregnancy is still greater than 50% even with no treatment after three consecutive miscarriages. Suggested causes have been mentioned already. Uterine abnormalities including cervical incompetence, fibroids, intra-uterine adhesions and retroverted uterus account for approximately 13% - 15% of recurrent miscarriages. Infections account for approximately 15% (i.e. maternal infections). Problems with foetal development and hormonal

problems account for approximately 3% each and other maternal diseases and immunological causes account for a small percentage of recurrent miscarriages. But it must be remembered that in more than 50% of miscarriages no cause is found. If you have a history of miscarriage, a trusting relationship with your doctor will be particularly important for you.

PLANNING FOR THE FUTURE

Starting Another Pregnancy

After miscarriage many women find that they yearn for another baby. Some women find that they become completely preoccupied with becoming pregnant again. This craving for another baby is entirely normal. Often the longing for another baby will be tinged with fear, fear that something will go wrong again. While there is no ideal time to start another pregnancy, some guidelines are given below.

Pregnancy, even when interrupted by an early miscarriage, involves profound changes in a woman's system. Stores of essential nutrients, needed to sustain a foetus in a future pregnancy, may have been depleted. It is important to allow these stores to be replenished. Leaving an interval between pregnancies also allows you time to grieve for your loss. What is lost cannot be replaced and you will need time to mourn. In time you will be ready to welcome a new pregnancy and another unique baby.

How Long Should I Wait?

The World Health Organisation, on the basis of research into pregnancy outcomes, has recommended that women should wait nine months after the birth of a full-term baby before conceiving again.

The longer a pregnancy has lasted, the more stress it will have placed on the woman's body. Most doctors recommend waiting 2 - 3 months after an early miscarriage before trying to conceive. For later miscarriages a good guideline is to wait a month for each month the pregnancy lasted i.e. wait five months after a miscarriage at five months.

Generally periods tend to return 4 - 6 weeks after a miscarriage but it may

sometimes take longer. The menstrual cycle is also affected by factors such as stress, diet, or extremes of exercise. If your periods have not returned three months after your miscarriage, consult your doctor for a general check up.

During this waiting period, when you will be recovering physically and emotionally from your miscarriage, you can also prepare for your next pregnancy by re-assessing your diet and your lifestyle, to give yourself the best possible chance of success.

Diet

Eat a well-balanced diet and try to eat food from each of the following groups every day.

Grains, Vegetables and Fruit, Meat, Fish and Eggs,
Diary Products (milk, cheese, yogurt).

Eat natural foods instead of processed food (i.e. from packets or tins), because essential nutrients are often lost when food is processed. Eat a wide variety of foods. A good diet for pregnancy is not about cutting down or cutting out certain foods in your diet. However cakes, desserts and biscuits will not help your health and may reduce your appetite for nutritious food. Make sure you are getting enough protein because this is the basic building material of life and is what your baby will need to grow. The foods rich in protein are lean meat, fish, beans, nuts, brewers yeast, milk, cheese and other dairy products.

Brewer, author of "What every pregnant woman should know", recommends that absolute vegetarians (i.e. who use no animal protein) must be very careful when planning their pregnancy diets. A woman who is vegetarian or vegan should modify her diet to include eggs and milk products.

Eat to appetite (of nutritious food) and do not try to lose weight when you are trying to become pregnant. Women who are very underweight may stop ovulating and be unable to conceive.

Take vitamin and mineral supplements when you are planning a pregnancy but avoid large or mega does of any vitamin during pregnancy. The best time to start vitamin and mineral supplements is perhaps a month before you try to conceive, and continue for at least the first three months of pregnancy when the foetus is most vulnerable. Folic acid occurring naturally in leafy vegetables is an important supplement which research

suggests can protect against neural tube defects, e.g. spina bifida.

Most doctors now advise women who have had a miscarriage to take a folic acid and vitamin supplement prior to conception. Where there was any history of neural tube defect in a previous pregnancy, where the woman is epileptic and taking anti-epileptic drugs, or is a diabetic, she will be advised to take a higher dose of folic acid.

Alcohol and Cigarettes

If you and your partner are trying to conceive it is wisest to avoid alcohol altogether or at least limit your intake to an occasional glass of wine. In any case, two or three weeks into pregnancy many women may lose their appetite for alcohol. However, the baby is vulnerable from the start. If you are a smoker you should stop before you become pregnant. There is clear evidence that smoking is detrimental to the health and development of the foetus.

Relaxation

By practising relaxation techniques on a regular basis it is possible to lessen your worries and anxieties and achieve more of an 'inner peace'. Some treatment centres in the U.K. use relaxation training as part of their treatment for women who have suffered recurrent miscarriages. You too, can derive some benefit from relaxation training.

Lie down in a warm quiet place. Start with your feet and work upwards. Repeat each exercise. Tense the muscles in your feet by pushing your toes away from you, holding this for 5 - 10 seconds and then relaxing. Work upwards to your tummy muscles (hold in your tummy for 5 - 10 seconds then relax fully), your hands (clench your fists, hold and then relax), your shoulders (hunch your shoulders, hold and then relax), your face (push your lower jaw forward hold and then relax, then screw your eyes up, hold and then relax). Hold your breath (5 seconds or so) and then breathe out and relax. Lastly concentrate on your breathing and each time you breathe out imagine yourself sinking deeper into the bed or chair.

Practising relaxation once or twice daily for about 20 minutes can be both

beneficial and enjoyable. Regular meditation (as in T.M.) also helps greatly in reducing stress levels. Advice about relaxation and/or a relaxation tape with a set of exercises may be available at your local hospital.

COUNSELLING

Sometimes it can help to talk to someone sympathetic who can answer your questions and give you information and advice. It is often helpful for a couple to attend a counselling session together. Some women and their partners find counselling at the time of the miscarriage helps a lot but for others it may be weeks or months later that they feel a sympathetic counsellor could help. In some hospitals a member of staff may offer this type of counselling. Alternatively, the hospital staff may be able to recommend a suitable counsellor.

MATERNITY HOSPITALS AND UNITS, AND IRISH MISCARRIAGE ASSOCIATION CONTACTS

CAVAN.	CAVAN GENERAL HOSPITAL, Lisdarn, Cavan, Tel: (049) 61399 24 hour treatment and information service
	THE MISCARRIAGE ASSOCIATION OF IRELAND Contact: Rosemary Tighe, Tel: (049) 34205

CLARE.

THE MISCARRIAGE ASSOCIATION
OF IRELAND
Contact: Bridget O'Neill, Tel: (061) 301 111,
Ext. 2260/2345

CORK.

ERINVILLE HOSPITAL,
Western Rd., Cork.
Tel: (021) 275 211
24 hour Treatment & Advisory Service
Pregnancy Loss Clinic for patients,
Tuesday 2.00-3.30 p.m.
(by appointment only).
Information booklet on Miscarriage given to all relevant patients. Patients referred back to GP for follow-up.

ST. FINBARRS HOSPITAL,
Douglas Rd., Cork City.
Tel: (021) 966 555
24 hour Treatment & Advisory Service.
Information booklet on Miscarriage given to all relevant patients.
Patients referred back to GP for follow-up.

BON SECOURS HOSPITAL,
College Rd., Cork.
Tel: (021) 542 807
24 hour treatment and information facility.
Referral from consultant or general practitioner.
Miscarriage Association Meetings on 2nd Monday of each month, in the Hospital.

THE MISCARRIAGE ASSOCIATION
OF IRELAND
Contacts: Margaret Everett, Tel: (021) 331 729
Ursula Jermyn, Tel: (021) 831 039.

DONEGAL.

LETTERKENNY GENERAL HOSPITAL.
Tel: (074) 25888
Pregnancy Loss Clinic every 4 to 6 weeks on a Friday.
Contact Gynae ward for details.

DUBLIN.

COOMBE WOMEN'S HOSPITAL,
Dolphins Barn St., Dublin 8
Tel: (01) 453 7561
24 hour treatment and information service.
Counsellor/Midwife available.
Hospital information sheet available.
Information also on the Internet at HTTP/www.coombe.ie.
Miscarriage Clinic, Thursday at 2.00 p.m.

NATIONAL MATERNITY HOSPITAL,
Holles St., Dublin 2.
Tel: (01) 661 0277.
24 hour advice and treatment service.
Miscarriage Clinic Tues. 9.00 - 10.30 a.m., or Unit 5.

ROTUNDA HOSPITAL,
Parnell St., Dublin 1
Tel: (01) 873 0700
Drop-in Emergency Service.
Pregnancy Loss Clinic.
Postnatal Clinic offering expert medical advice.

DUBLIN.

MOUNT CARMEL HOSPITAL,
Braemor Pk., Dublin 14.
Tel: (01) 492 2211
24 hour treatment and information service.
Referral from consultant or
general practitioner.

THE MISCARRIAGE ASSOCIATION
OF IRELAND
Carmichael Centre,
North Brunswick St., Dublin 7.
Tel: (01) 873 5702, (01) 872 5550,
(01) 872 2914,
FAX (01) 873 5737

GALWAY

OBSTETRIC & GYNAECOLOGY DEPARTMENT,
UNIVERSITY COLLEGE HOSPITAL,
Galway.
Tel: (091) 524 222
24 hour treatment. Telephone help line.
Counselling service by Midwives or other
appropriate professional (as necessary).

PORTIUNCULA HOSPITAL,
Ballinasloe,
Co. Galway.
Tel: (0905) 42140.
Midwives provide a first-line counselling
service supported by the Pastoral Care Team.

KERRY.

TRALEE GENERAL HOSPITAL,
Tralee. Co. Kerry.
Tel: (066) 26222
24 hour treatment and information service.
Counselling from Chaplaincy Service.
Information booklet published by the Health Promotion Unit, Department of Health.
Information regarding the Miscarriage Association of Ireland, and the contact numbers.
Patients are referred back to the GP or are given an O.P.D. appointment for the Gynae Clinic.

THE MISCARRIAGE ASSOCIATION OF IRELAND,
Contacts: Margaret Everett, Tel: (021) 331729,
Ursula Jermyn, Tel: (021) 831039.

KILKENNY.

ST. LUKE'S HOSPITAL,
Kilkenny.
Tel: (056) 51133
24 hour treatment service.
Full information and counselling available.

THE MISCARRIAGE ASSOCIATION OF IRELAND,
Contact: Margaret Bolger,
Tel: (051) 79036.

LAOIS	PORTLAOISE GENERAL HOSPITAL. Tel: (0502) 21364 24 hour treatment and information service
LIMERICK	REGIONAL MATERNITY HOSPITAL Tel: (061) 327455 Counselling Midwife available for in-house counselling and follow-up service.
	THE MISCARRIAGE ASSOCIATION OF IRELAND Meetings first Wednesday of every month at Social Service Centre, Henry St., Limerick, at 8.00 p.m.Contact: Bridget O'Neill, Tel. (061) 301111, Ext. 2260/2354
LOUTH.	OUR LADY OF LOURDES HOSPITAL, Drogheda. Tel: (041) 37601 24 hour treatment and information service. Counselling by qualified Midwife Counsellors, Medical staff and Social Workers. Miscarriage Self Help Support Group, Meetings first Tuesday of every month, Room 109 Maternity, at 2.30 p.m.
	LOUTH COUNTY HOSPITAL, Dublin Rd., Dundalk Tel: (042) 34701. 24 hour treatment and information service.
	THE MISCARRIAGE ASSOCIATION OF IRELAND Contacts: Sylvia Mathews, Tel (041) 34869. Sarah, Tel. (041) 22353.

MAYO	CASTLEBAR GENERAL HOSPITAL, Tel: (094) 21733. 24 hour treatment and information service. Counsellor available.
MONAGHAN	MONAGHAN GENERAL HOSPITAL Tel (047) 81811 24 hour treatment and information service. Counsellor available.
	THE MISCARRIAGE ASSOCIATION OF IRELAND, Contact: Rosemary Tighe, Tel: (049) 34205.
OFFALY	THE MISCARRIAGE ASSOCIATION OF IRELAND, Contact: Monica Cully, Tel. (0405) 37253.
SLIGO	SLIGO REGIONAL HOSPITAL. Tel: (071) 71111 Emergency treatment service. Counselling provided by Midwife.
TIPPERARY	ST. JOSEPH'S HOSPITAL, Clonmel, Co. Tipperary. Tel: (052) 21900. 24 hour private and confidential service available. Counselling provided by staff.
	THE MISCARRIAGE ASSOCIATION OF IRELAND. Contact: Margaret Bolger, Tel: (051) 79036. Bridget O'Neill, Tel: (061) 301111, Ext. 2260/2354.

WATERFORD	WATERFORD REGIONAL (MATERNITY UNIT) Tel: (051) 873 321 Counselling on 24 hour basis by midwife with consultant support. Midwives also available for continuing support and counselling in the immediate post partum days. Consultant support available for this service. Information booklet on Miscarriage given to all relevant patients. Patients given appointment approximately 6 weeks later in the Gynae Clinic. For late miscarriage, the local branch of ISANDS (The Irish Stillbirth and Neonatal Death Society): Contact: Bridie Whittle, Tel. (051) 885437.
WESTMEATH	LONGFORD/WESTMEATH GENERAL HOSPITAL Tel; (044) 40221 24 hour treatment and information service. THE MISCARRIAGE ASSOCIATION OF IRELAND. Contact: Monica Cully, Tel: (0405) 37253.
WEXFORD	WEXFORD GENERAL HOSPITAL. Tel: (053) 42233. Staff available for support and advice. Hospital information leaflet on Miscarriage available. THE MISCARRIAGE ASSOCIATION OF IRELAND. Contact: Vanessa Lawlor, Tel. (053) 42121. Nancie Murphy, Tel: (053) 45251

USEFUL FURTHER READING

Moulder, Christine (1990)

'Miscarriage, Women's Experiences And Needs.'

Published by Harper Collins, London.

Lachelin, Gillian (1996)

'Miscarriage The Facts.'

2nd edition. Published by Oxford University Press, Oxford.

Colgan, Karina (1994)

'If It Happens To You.'

Published by Farmar, Ranelagh, Dublin.

Regan, Professor Lesley (1997)

'Miscarriage, What Every Woman Needs To Know.'

Published by Bloomsbury, London.

Published by
The Health Promotion Unit
Department of Health
Hawkins House
Dublin 2
Telephone (01) 6714711