



KEEPING BABY
SAFE IN
PREGNANCY.

Keeping Baby SAFE in Pregnancy

Dr Jane Warland



Bendigo Bank **sids**and kids

Rationale for the project



- Bendigo bank Funding
- SIDS and Kids SA , UniSA collaboration
- Incidence of stillbirth in Australia has not changed in more than 10 years
- It is time to look at ways to reduce stillbirth rate.
- Educating pregnant women about protective behaviours they can adopt may be one way of doing this.
- Currently there is no public health information about risk factors for stillbirth

What was the project about?



- Funding was to produce an information brochure
- The aim of the pilot study was to investigate what women knew about stillbirth and whether an information brochure would help them better understand the risk factors and what they could do to keep safe.
- NOT about reducing incidence but increasing awareness.





Who was involved?



- Pregnant woman attending a small regional health service
- Midwives and Obstetricians gave out the questionnaire and answered any questions the women may have after they have read the brochure



What questions were asked?

- Demographics

- Age
- Level of Education
- Type of care
- Obstetric History



- Questions about Stillbirth


- What it is
- How often it occurs
- Risk factors
- Ways to avoid Risk



- Second Questionnaire

- Questions about brochure and repeat questions about stillbirth.


Pilot Brochure



KEEPING BABY SAFE IN

PREGNANCY

sids and kids
red nose day
SOUTH AUSTRALIA



RISK FACTORS

If you have any of these risk factors, it is important to keep ante-natal appointments, follow the information in this pamphlet AND talk about your individual situation with your obstetrician or midwife.


BABY SIZE
Babies who are smaller than they should be for their gestational age are at greater risk.

MOTHER'S AGE
Women older than 35 are at greater risk of stillbirth.

BMI
Body Mass Index greater than 25: Obesity has been linked with increased risk of stillbirth. If you start your pregnancy overweight then you should aim to gain less than the normal weight (12kg) in pregnancy.

MEDICAL CONDITIONS:
If you have a medical condition such as high blood pressure or diabetes you may be at increased risk of stillbirth especially if this condition is severe or not well controlled. It is important to keep all antenatal appointments and follow all medical advice with care.

TWINS
If you are expecting twins you may be at increased risk of stillbirth, especially if they share one placenta. Your obstetrician or midwife is likely to monitor your pregnancy more closely (ultrasounds and tests) to ensure your babies arrive safe and well.



What is Stillbirth?

Stillbirth is when a baby is born with no signs of life because it has died in the womb. Stillbirth can happen anytime from the middle to the end of pregnancy.

What can I do to keep my baby safe?

Stillbirth often can't be predicted or avoided. However, there are a number of things that you can do to lower your risk.

What are my risks?


Information about risk

This pamphlet gives some current information on the main things expecting mothers can do and what to avoid.


Information about incidence

* Dept. of Infrastructure, Transport, Regional Development and Local Government, 2009 and Journal of Consumers Health Forum of Australia 2009.

diet is very important
things to avoid...
things to include



no un-pasteurised cheeses




no raw seafood



no ready-to-eat meals or pâté



regular folic acid/ folate



balanced diet



Pre and post intervention



- Women at various stages in pregnancy asked if they would like to participate
 - Initially Given
 - Information sheet
 - Consent form
 - Pre-Questionnaire
 - Handed brochure to take home
 - When they returned at next antenatal visit given 2nd (Post) Questionnaire



Pilot Findings



- 22 enrolled undertook the pre-Q
- 14 remained in the study and participated in both pre and post Q's



Awareness

- Public health strategies which increase awareness of an issue can be effective in stimulating attitude and behaviour change. (Brown & Einsiedel 1990)
- Success in the 'back to sleep campaign' (Skadberg et al 1998) in reducing the incidence of SIDS and 'Folate in pregnancy' (Chan et al 2001) campaign to reduce the incidence of neural tube defects are examples of health promotion campaigns that have successfully raised public awareness and resulted in protective behavioural change.

- The Public health promoter asks:
 - Why might the audience be motivated to do what you are asking them to do?
- In order to persuade people to do something we must first make them aware of the issue and give them facts (Brown & Einsiedel 1990)
- Facts like incidence and prevalence



Pre-study awareness

- **Awareness of term stillbirth**
 - All 22 understood the term stillbirth using descriptors such as “baby dead inside”
- **Pre –study Awareness of incidence (n=22)**
 - 3 correctly identified
 - 6 selected an incorrect option
 - 13 selected not sure
- **Post study (n=14)**
 - 12 correctly identified
 - 1 incorrect
 - 1 didn't know





Findings

Pre-Awareness of risk factors

- Background awareness of risk factors centred around knowledge of the link between lifestyle factors like alcohol and smoking
- Some were also aware of dietary factors, avoiding unpasteurised cheeses and ready to eat meats



Post-intervention awareness of risk

- Post survey most participants included information gained from the brochure like small baby, abnormal BMI, twins, maternal age, specific diet and drug risks



Ways to avoid

- Prior to reading the brochure participants made general comments like “keep fit and healthy”
- After reading the brochure these became more specific with many picking up on the importance of keeping antenatal visits and monitoring fetal movements.



Other comments



- The findings from this pilot suggest this is a successful strategy in informing pregnant women about stillbirth BUT
 - High attrition rate suggests a problem with the topic.
 - Only 2 women discussed the brochure with their partner, none sought further information
 - Some women stated “ I didn’t want to know”
 - Midwives involved in recruitment reluctant to “scare”
 - Yet one woman said “ This is important information which should be given to all pregnant women”

Production of brochure

- Comments from women
 - Didn't like colour (red) or presentation (too 'school')
 - "Just tell me what I can do to stop this happening to me"
- Comments from colleagues
 - Avoid crosses
 - Simplify message
 - Make message easy to remember

Simplifying message...SAFE

- Sleep
- Appointments
- Feeling baby move
- Expert advise

Sleep



Evidence base

- NZ research: increased risk of stillbirth if maternal sleep position in late pregnancy (night before stillbirth) was not the left position (OR=1.8 95% CI 1.1-2.8) (Stacey et al 2010)
- Low blood pressure at night may play a part (Warland et al 2008)
- The supine position in late pregnancy is associated with many hemodynamic changes caused by compression of the inferior vena cava and a resulting fall in cardiac output.
(Kaupplia et al 1980)

Sleep

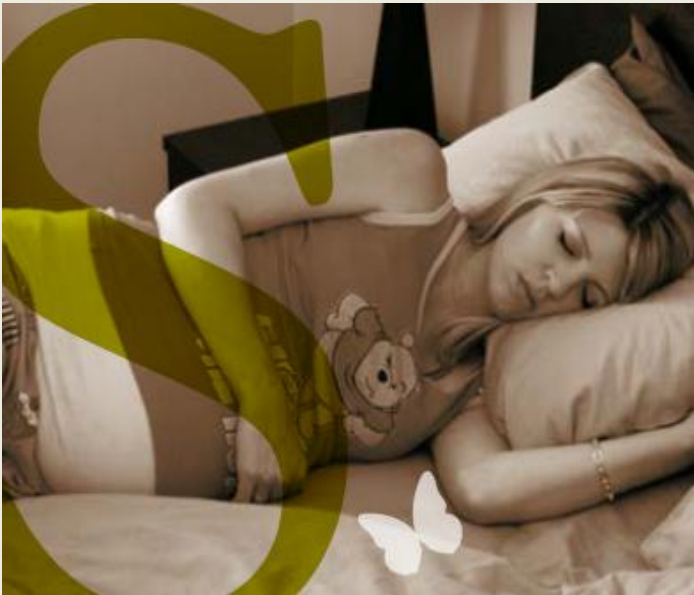
The best position for you is the left side. The left side position allows maximum blood flow to your baby and helps reduce the risk of stillbirth.

You should lie down to sleep on your left each night in the last 3 months of pregnancy. Do not worry about shifting positions once you have fallen asleep, as this is a natural part of sleeping. However, if you wake up or get up in the night then return to the left side position before you go back to sleep.

Getting up in the night is good for your baby as it stimulates blood flow.

Avoid sleeping on your back: because the baby's weight presses on the main vein that returns blood from the lower body to the heart. It also puts full weight on your back and intestines, which can cause you discomfort and increase the risk of you developing backaches, and indigestion.

Tucking a pillow behind your back, may help you if you are afraid of lying on your back when you are asleep. Some women find it helpful to place a small pillow or cushion between their knees when lying on their side.



Attend all antenatal appointments



Evidence base

- Regular attendance assists in detection of problems such as IUGR, gestational diabetes and hypertension in pregnancy which if left unchecked may result in increased risk of stillbirth (Gilbert 2011)
- Reduced antenatal attendance ($n < 8$) increases risk of perinatal mortality (Dowswell et al 2010)
- Continuity of care provider (such as midwifery group practice) facilitates women centered care, increases satisfaction and results in woman is more likely to discuss any concerns (Fereday et al 2009)

Always keep antenatal appointments



Keep all your antenatal appointments. Keeping appointments means that your midwife or obstetrician will be able to monitor you and your baby's health to ensure, as far as possible, that you and your baby remain healthy.

Keeping these appointments also gives you the chance to build trust with your midwife or doctor and talk through any worries you may have and ask questions.

Feeling baby move



Evidence base

- Fetal movements do not normally decrease close to term. In fact decreased fetal movement at or near term places the pregnancy at substantial increased risk (Tviet et al 2006, O'Sullivan et al 2009)
- New clinical practice guideline for the management of women who report decreased fetal movements. (Preston et al 2010)

Summary of Recommendations regarding decreased fetal movement (DFM)(Preston et al 2010 p16-17)

Recommendation 1	Evidence level
All Pregnant women should be routinely provided with verbal and written information regarding normal fetal movements during the antenatal period.	111-3
Recommendation 2	
All women should be advised to contact their health care provider if they have any concern about decreased or absent fetal movements and be advised not to wait until the next day to report DFM.	111-3
Recommendation 3	
After discussion , women who remain unsure whether movements are decreased should be given guidance on counting. However, maternal concern of DFM overrides any definition of DFM based on numbers of kicks	111-3

Feeling baby move

Once you're feeling kicks regularly, pay attention to them and get to know when your baby moves.

How often should my baby move?

Every baby has their own pattern of activity, and there's no correct one. It is not necessary to try to count movements but to simply tune into and become aware of your individual baby's normal sleep and wake cycle. It is common for babies to gradually become less vigorous with their kicks closer to the birth, due to less space. However, if your baby is moving less than they normally do then you should ring your midwife or doctor right away.

Avoid self monitoring the fetal heart at home:

Listening to your baby's heart rate on a fetal monitor at home should not be substituted for seeing your midwife or doctor. If you are concerned about your baby's movements don't delay seeing your midwife or obstetrician.



Early expert advice



Evidence base

- Many women intuitively know their baby was in trouble, before their death (Malm et al 2010)
- Some sadly couldn't convince their health care provider to act before it was too late. (O'Leary et al in press)
- Identifying S&S for women to self monitor and immediately report i.e itchiness (cholestasis), headaches and visual disturbances (hypertension) should help . (Logic 101 ☺)

Early expert advice



Women who have experienced a stillbirth often say they felt there was something wrong but, for some reason, didn't contact their doctor or midwife until it was too late.

Between your appointments you should immediately contact your Midwife or Obstetrician if you are:

- spotting or bleeding,
- leaking fluid,
- swelling in your fingers or ankles,
- having headaches, blurry vision or seeing spots,
- feeling nauseous or vomiting (once morning sickness is over)
- having a lot more back or stomach ache than is usual for you
- excessively itchy
- feeling unwell in any way
- feeling there is something wrong even if you don't quite know what it is. Trust your maternal instincts and quickly arrange to see your midwife or obstetrician

WHAT IS STILLBIRTH?

Stillbirth is when a baby is born with no signs of life because it has died in the womb. This can happen anytime from the middle to the end of pregnancy.

WHAT ARE MY RISKS?

In Australia stillbirth occurs every 1 in 140 births. This means that there are around 2,000 stillbirths each year or about 6 stillbirths every day. This number is many more than the numbers killed in road accidents each year.

WHAT CAN I DO TO KEEP MY BABY SAFE?

Stillbirth often can't be predicted or avoided. However, there are a number of things that you can do to lower your risk. This pamphlet gives you some current information on the main things you can do.



* Dept of Infrastructure, Transport, Regional Development and Local Government 2009 and Journal of Consumers Health Forum of Australia, 2009.

HOW DO I FIND OUT MORE INFORMATION?

These websites provide more information about keeping healthy in pregnancy and birth choices:

Better Health Channel

Search for 'fact sheets' on diet and exercise in pregnancy and antenatal care.
www.betterhealth.vic.gov.au

SA Health

SA pregnancy record site provides useful information about the range of antenatal care providers and place of birth choice available in SA.
www.health.sa.gov.au/PEH-G/pregnancy-record/pregnancy-choices.htm

These websites are specifically aimed at increasing public awareness about stillbirth:

Stillbirth Foundation

www.stillbirthfoundation.org.au

International Stillbirth Alliance

www.stillbirthalliance.org

These organisations offer support after a stillbirth:

Sids and Kids

www.sidsandkids.org

SANDS Australia

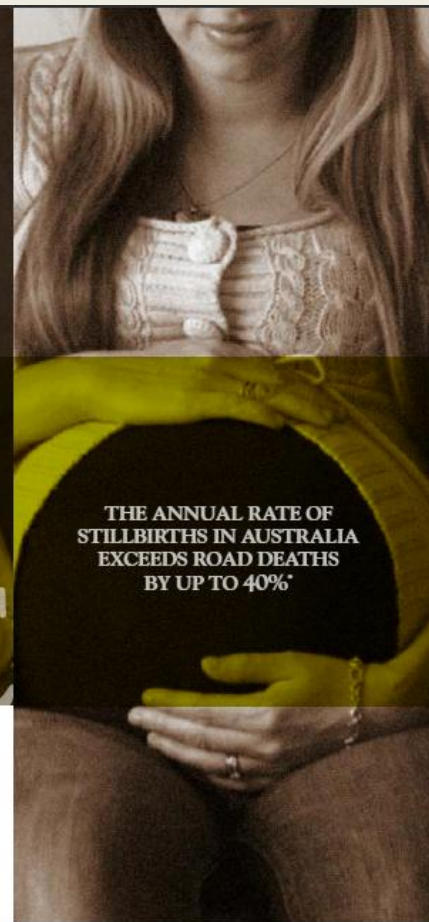
www.sands.org.au

TLC Pregnancy and Infant Loss Support Australia

www.teddyloveclub.org.au

This brochure was funded by a **community enterprise foundation**™ grant from the Bendigo Bank and produced in collaboration with SIDS and Kids SA and UnISA.
Content Developed by Dr Jane Warland Lecturer in Nursing and Midwifery at UnISA.

Photography by 



KEEPING BABY
SAFE IN
PREGNANCY.



 Bendigo Bank 



SLEEP ON YOUR LEFT

The best sleeping position for you is the left side. The left side position allows maximum blood flow to your baby and helps reduce the risk of stillbirth.

You should lie down to sleep on your left each night in the last 3 months of pregnancy. Do not worry about shifting positions once you have fallen asleep, as this is a natural part of sleeping. However, if you wake up or get up in the night then return to the left side position before you go back to sleep.

Getting up in the night is good for your baby as it stimulates blood flow.

Avoid sleeping on your back because the baby's weight presses on the main vein that returns blood from the lower body to the heart. It also puts full weight on your back and intestines, which can cause you discomfort and increase the risk of you developing backaches, and indigestion.

Tucking a pillow behind your back may help you if you are afraid of lying on your back when you are asleep. Some women find it helpful to place a small pillow or cushion between their knees when lying on their side.

ALWAYS KEEP APPOINTMENTS

Keep all your antenatal appointments. Keeping appointments means that your midwife or obstetrician will be able to monitor you and your baby's health to ensure, as far as possible, that you and your baby remain healthy.

Keeping these appointments also gives you the chance to build trust with your midwife or doctor and talk through any worries you may have and ask questions.



IT IS ALSO IMPORTANT TO DISCUSS YOUR INDIVIDUAL SITUATION WITH YOUR MIDWIFE OR OBSTETRICIAN.

FEELING BABY MOVE

Once you're feeling kicks regularly, pay attention to them and get to know when your baby moves.

How often should my baby move?

Every baby has their own pattern of activity, and there's no correct one. It is not necessary to try to count movements but to simply tune into and become aware of your individual baby's normal sleep and wake cycle. It is common for babies to gradually become less vigorous with their kicks closer to the birth, due to less space. However, if your baby is moving less than they normally do then you should ring your midwife or doctor right away.

Avoid self monitoring the fetal heart at home:

Listening to your baby's heart rate on a fetal monitor at home should not be substituted for seeing your midwife or doctor. If you are concerned about your baby's movements don't delay seeing your midwife or obstetrician.

EARLY EXPERT ADVISE



Women who have experienced a stillbirth often say they felt there was something wrong but, for some reason, didn't contact their doctor or midwife until it was too late.

Between your appointments you should immediately contact your Midwife or Obstetrician if you are:

- spotting or bleeding.
- leaking fluid,
- swelling in your fingers or ankles,
- having headaches, blurry vision or seeing spots,
- feeling nauseous or vomiting (once morning sickness is over)
- having a lot more back or stomach ache than is usual for you
- excessively itchy
- feeling unwell in any way
- feeling there is something wrong even if you don't quite know what it is. Trust your maternal instincts and quickly arrange to see your midwife or obstetrician

What next?

- Media release
- Launch
- Distribution of brochure
- Further research

Invitation to Launch



KEEPING BABY
SAFE IN
PREGNANCY.



UniSA



Bendigo Bank



You're invited:

Where: C4-17

When: International midwives day 5th May

Commencing at 3.30

Wine and cheese!

announcing the inaugural
SHE Seminar
Social • Health • Economics

Focus on Stillbirth

Wednesday 25th May 2011

0830 to 1600

BioSA Incubator (40-46 West Thebarton Road, Thebarton)

\$125 incl GST (includes morning, afternoon tea and light lunch)

Statistics, autopsies, creating memories, the impact on and care of families, cultural and spiritual beliefs, reducing the risks and resourcing health professionals

Limited numbers – register your interest now

thereseroberts@sidsandkids.org

6 CPD points



References

- Chan A, Pickering J, Haan E, Netting M, Burford A, Johnson A, Keane R, 2001 Folate before pregnancy: the impact on women and health professionals of a population-based health promotion campaign in South Australia, *The Medical Journal of Australia*, 174 (12) 631-636.
- Dowswell T, Carroli G, Duley L, Gates S, Gülmezoglu AM, Khan-Neelofur D, Piaggio GGP. Alternative versus standard packages of antenatal care for low-risk pregnancy. *Cochrane Database of Systematic Reviews 2010, Issue 10. Art. No.: CD000934. DOI:10.1002/14651858.CD000934.pub2.*
- Fereday J, Collins C, Turnbull D, Pincombe J, Oster C (2009) An evaluation of midwifery group practice : Part 11: Womens's satisfaction *Women and Birth* 22(1) 11-16
- Gilbert E (2011) *Manual of high risk pregnancy and delivery* 5th Edition Mosby St Lois
- Kauppila A et al (1980) Decreased intervillous and unchanged myometrial blood flow in supine recumbency *Obstetrics and gynecology* 55 (2) 203-205
- Malm M-C, Lindgren H, Radestad I Losing contact with ones unborn baby – mothers experiences prior to receiving news that their baby had died in utero *Journal of Paediatrics and Child Health* 46 (supp 3) p.17
- O'Leary J, Warland J, Parker L, Prenatal Parenthood *Journal of Perinatal Education (under review)*
- O'Sullivan O, Stephen G, Martindale E, Heazell A 2009 Predicting poor perinatal outcome in women who present with decreased fetal movements 29: (8) 705-710 *journal of obstetrics and Gynaecology*
- Preston S, Mahomed K, Chandha Y, Flenady V, Gardener G, MacPhail J, Conway L, Koopmans L, Stacey T, Heazell A, Fretts R, Froen F for the Fetal Movement Study Group and the international FEMINA collaboration. Clinical practice guideline for the management of women who report decreased fetal movements. Brisbane, March 2010
- Skadberg BT, Morild I, Markestad T, 1998 Abandoning prone sleeping: effect on the risk of sudden infant death syndrome. *J Pediatr* 132: 340-343
- Stacey T , et.al , (2010) Maternal Sleep position T: A potential modifiable risk factor for third trimester stillbirth. *Journal of Paediatrics and Child Health* 46 (supp 3) p.3
- Tviet JV, Saastad E, Bordahl P Stray-Pedersen B, Froen JF 2006 The epidemiology of decreased fetal movements. Annual conference of the Norwegian Perinatal Society. Oslo , Norway ;
- Warland J, McCutcheon H, Baghurst P, (2008) Maternal blood pressure in pregnancy and third trimester stillbirth: A case-control study. *American Journal of Perinatology* 25(5):311-7.