Safe Sleep:
Wahakura and Pēpi-pod

Babies need beds of their own.
When you've fed baby, put him back in his bed beside yours.

Tamariki Ora
26.03.14
50-60 SUDI deaths

- NZ: highest rate 1.1/1000 in the West
- Huge disparities
  - Maori 2.3/1000
  - Pacific 1.3/1000
  - Other 0.5/1000
- Preventable
Risk factors

- NZ Cot Death Study (late 1980’s)
- Prone sleeping
- Lack of breast feeding
- Maternal smoking
- Bedsharing
Risk factors

- Prone/side sleeping position
- Lack of breast feeding
- Maternal smoking
- Bedsharing

Largely eliminated but still relevant at SUDI death scene
Risk factors

- Prone sleeping
- Lack of breast feeding
- Maternal smoking
- Bedsharing

Important behaviour but low SUDI protection
Risk factors

- Prone sleeping
- Lack of breast feeding
- Maternal smoking
- Bedsharing

Maternal smoking in pregnancy
Risk factors

- NZ Cot Death Study (late 1980’s)
- Prone sleeping
- Lack of breast feeding
- Maternal smoking
- Bedsharing
- Disparate outcomes
Risk factors

- Prone sleeping
- Lack of breast feeding
- Maternal smoking

Bedsharing

Bedsharing where there was smoking in pregnancy
Risk factors

- Prone sleeping + breast feeding
- Bedsharing where there was smoking in pregnancy
Mechanisms of SUDI

- Decreased respiratory drive: smoking
- Airways obstruction: sleep position
- Suffocation: person, couch
- Suffocation: pillows, blankets
- Overheating: person, pillows, blankets
- Entrapment: sleeping device (cots)
By 2005

Reduction in Māori SUDI stopped

New role for suffocation

No reduction of smoking in pregnancy

Modification of interacting risks
By 2005

Sleeping environment

What might appeal to Māori Mums?

Traditional practice
Wahakura

The safer sleeping environment

Nanny Whaipooti

Rakai
Wahakura

32x 74 cm woven flax basket

designed for ‘safer’ bedsharing
Wahakura

- Designed for ‘bedsharing’

Separate sleeping surface
Wahakura

- Wahakura ‘rules’

On the back
Thin mattress and no pillows
No toys or loose blankets
Smoke free environment
Back to wahakura after feeding
Wahakura for all sleeps and with all caregivers
Wahakura

- Wahakura: safe sleep environment

Gisborne project
SIDS Team Wānanga Wahakura
Tumeke PHO project

<table>
<thead>
<tr>
<th>Maori</th>
<th>Non-Maori</th>
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<tbody>
<tr>
<td>53% smoke in pregnancy</td>
<td>8%</td>
</tr>
<tr>
<td>65% bed-share for some period</td>
<td>27%</td>
</tr>
<tr>
<td>21% smoke and bedshare</td>
<td>1%</td>
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</table>
Unsafe sleeping


- Sleeping prone
- Blankets over head
- Pillows/bumpers
- Car seats and sofas
- Co-sleeping compromised adults or with siblings
- Non return to SSE after feeding
- Change of routine - sleeping place or caregiver
Loved by mothers, grandmothers and Māori midwives

BUT

Hard to procure with no funds

Alternatives
Alternatives

The Pēpi-pod

Wahakura sized plastic box with an attractive cover ... designed for ‘safer’ bedsharing
Alternatives

The waikawa

Wahakura sized but different weave
Using PP for high risk group

Six key Safe Sleep messages

✧ Face up
✧ Face clear
✧ Smoke Free
✧ Breastfed
✧ Close to a parent
✧ Handle gently
Found the target high risk population (2/3 Smoker 1/2 BS and 85% M/PI)

Seems to be mostly ‘used’

Most often used in a shared bed (70%)

High levels of acceptability
“Portability”, “safety” and “closeness”

Away from home use frequent
Summary: Safe Sleep

1/2 mothers recalled SS messages

✧ Safe Sleep practices prevailed
✧ (ie face up and limited BS)
✧ Majority shared their SS messages
✧ Mostly moved onto a cot after the PP
Research

Kahungunu Infant Safe Sleep (KISS Study)

RCT of sleep environment

Wahakura Qualitative Study
A historical tradition of woven sleeping spaces

Practical and spiritual qualities

Used flexibly inside & outside the home, often in otherwise risky situations
Wahakura Qualitative study

Safe sleep rules appear easy

Safe sleep knowledge

Useful to engage Māori mothers

Actively engaging older female
What happened?

Infant Mortality (numbers) 2012
Source: Statistics NZ

- Infant deaths: 290–256
- Non-Maori babies: 167–174
- Maori babies: 123–82
- Neonatal (Maori): 56–39
- Post neonatal (Maori): 67–43
- Pepipod/wahakura: 150–112
- No safe sleep programme: 140–144
What happened?

New Zealand Infant mortality rate per 1000 live births - 1996-2012

Source: Statistics NZ
Māori
Safe Sleep
Devices messages
Wahakura Waikawa and Pēpi-pod
Evidence
DHB support
Research