Safe Sleep Advice to Safe Sleep Action:
Pilot of the Pēpi-pod Program in Indigenous communities

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Learning Objectives

Describe an innovative strategy that aims to reduce Indigenous infant mortality by combining practical real-time support with a health promotion intervention that uses community networks used by vulnerable families.

Disclosure Statement

I, Professor Jeanine Young, employee of the University of the Sunshine Coast, declare that I have no conflict of interest, nor relationship through sponsorship or commercial support, with any financial organisation regarding material discussed in this presentation.
Background: Infant Mortality Trend in Australia
The last 20% ......

- SUDI: 97% have ≥1 preventable risk factors
- SUDI rate 3-4x higher for Indigenous infants
- Infant mortality 2x higher for rural / remote
- LBW, premature
- Smoking/ drugs/ alcohol
- Not breastfeeding
- Shared sleeping in unsafe environments (36-46% of deaths in co-sleeping environment)
- Sofa sharing

2012: Sleep Safe, My Baby: 6 ways to reduce risk of SUDI

- Sleep **baby on the back** from birth, not on tummy or side
- Sleep baby with **head and face uncovered**
- Keep baby **smoke free** before birth and after
- Provide a **safe sleeping environment** night & day
- Sleep baby in their **own safe sleeping place** in the **same room as adult care-giver** for the first 6-12mths
- **Breastfeed** baby


Identification of the Problem

- Indigenous SUDI rate 3-4 times higher
- Co-sleeping: cultural norm in Indigenous communities
- Risk factors associated with co-sleeping that increase SUDI risk are more common in Indigenous populations
- Successful trials of safe sleep enablers in NZ Maori communities

Need

- culturally acceptable strategies to promote safe sleeping environments in Indigenous communities

http://www.creativespirits.info/aboriginalculture/health/aboriginal-mothers-and-children#toc0
Photo: k-girl, Flickr
Aim
To determine acceptability of the Pēpi-pod Program, a portable infant sleep space, embedded within safe sleep health promotion, within a sample of Aboriginal and Torres Strait Islander families.

Design
Exploratory descriptive design to report parent experiences of using the Pēpi-pod Program.
Ethical, Site Specific & Elder Approval

The Values and Ethics: Guidance for Ethical Conduct in Aboriginal and Torres Strait Islander Health Research (2003)

Statement on Ethical Conduct in Human Research (2007), Updated March 2014

Ethical approval from each participating Queensland government health service Site Specific Approval and collaborative agreements from each participating site

Consultation with Community Council was sought to gain support and approval for the project in communities

www.nfsa.gov.au
Population & Sample

**Purposive selection:** 4 Indigenous antenatal & maternity care services (metro/rural/remote)

**Eligibility Criteria:**
Parents of baby (ideally <1 month) with ≥ 1 SUDI risk factors
- Aboriginal and/or Torres Strait Islander
- Maternal smoking: antenatal/postnatal
- Intention to bedshare
- Recent drug use (including prescription)
- Alcohol use
- Preterm (≤ 36 weeks)
- Low Birth Weight (< 2500 grams)

**Recruitment:** Pēpi-pod trained local service provider or research team member
Pēpi-pod Program: Intervention

3 interlinked components

Safe Space
General purpose box transformed into an infant bed through fabric cover, tight fitting mattress and bedding

Safe Care
Parent education about safe sleeping and ‘Rules of Protection’

Role of the Family
Commitment to spread what they have learned about protecting babies as they sleep

RULES OF PROTECTION
for babies in pēpi-pods

On the back, face clear, only baby in here, every sleep, everywhere, always breathing smoke free air, drugs and drinking nowhere near, own space, best care.
Health Professional Education and Support

- Study protocol and eligibility criteria
- Family information and consent
- Tailored recruitment process for specific service: use existing networks, & current visiting schedule with families
- Family information & consent
- Infant settling strategies
- Potential role of Pēpi-pod
- ABC responsibilities of distributors:
  - Assemble the Pēpi-pod
  - Brief parent on safe use of Pēpi-pod
  - Complete the paperwork
- Briefing information checklist: safety briefing and ‘rules of protection’
Data Collection

- Family Detail Form at Recruitment
- 2 week check – check acceptability of Pēpi-pod
- Monthly Surveys
  (phone or face-to-face: 4, 8, 12, 16, 20 wks or until pod use ceases)
  - Knowledge of SUDI risk factors
  - Strategies to enhance safety
  - Circumstances of pod utilisation
  - Usual baby care ‘yesterday’ & ‘last night’
  - Infant care enhanced by pod use
  - Limitations/adverse events associated with pod
### Demographic Characteristics of Pilot Families

**Table 1: Demographic characteristics of families using the Pépi-pod**

<table>
<thead>
<tr>
<th>Family</th>
<th>Maternal Age (yrs)</th>
<th>Marital Status</th>
<th>Pod use commenced baby age (wks)</th>
<th>Ethnicity</th>
<th>Risk Factors</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family 1</td>
<td>Early 30s</td>
<td>Single</td>
<td>8wks</td>
<td>Aboriginal</td>
<td>• LBW baby&lt;br&gt;• Crowded living conditions&lt;br&gt;• Many siblings&lt;br&gt;• Intended to bedshare&lt;br&gt;• No baby bed/cot</td>
<td>Did not use pod; didn’t trust baby in pod with other children around</td>
</tr>
<tr>
<td>Family 2</td>
<td>Mid 20s</td>
<td>Married</td>
<td>8wks 6 days</td>
<td>Aboriginal</td>
<td>• Concerned about nighttime feeds &amp; falling asleep in bed and husband rolling&lt;br&gt;• No safe sleeping place when visiting family (pram used)&lt;br&gt;• Portacot at home</td>
<td>Pépi-pod used</td>
</tr>
<tr>
<td>Family 3</td>
<td>Early 30s</td>
<td>Single</td>
<td>14 days</td>
<td>Aboriginal</td>
<td>• Premature, LBW&lt;br&gt;• Regular household smoking&lt;br&gt;• No baby bed: only pram or bedsharing</td>
<td>Pépi-pod used</td>
</tr>
<tr>
<td>Family 4</td>
<td>19</td>
<td>Partner</td>
<td>1wk 1 day</td>
<td>Maori (Mum)&lt;br&gt;Aboriginal (Dad)</td>
<td>• No baby bed&lt;br&gt;• Intention to bedshare</td>
<td>Pépi-pod used</td>
</tr>
<tr>
<td>Family 5</td>
<td>27</td>
<td>Partner</td>
<td>8wks 3 days</td>
<td>Aboriginal</td>
<td>• Regular household smoking&lt;br&gt;• Regular alcohol use&lt;br&gt;• Have cot, regularly bedshare with mum only</td>
<td>Pépi-pod used</td>
</tr>
</tbody>
</table>
Results

Safety

Convenience

Portability
Safety

“Can have it (the Pēpi-pod with baby) in the bed and not worry”

(mother of baby 8 week 3 days)

“Safety wise it’s awesome. Sometime, you just flake out, you’re exhausted. You know that baby’s there and I know she is safe. I am aware of the box but I know I’m not going to roll on her”

(mother of baby 9 weeks 4 days)
Convenience

“The pod is very convenient to use. I keep him with me, no matter where I am in the house.” (mother of baby 9 weeks)

“Baby can be in the Pēpi-pod on the couch until he falls asleep. I find this convenient – don’t have to disturb him”. “…don’t have to touch him.” “..father can carry him into bedroom without waking him.” (mother of baby 8 weeks)

“When I visit my parents, because I had the Pēpi-pod, I didn’t have to take a lot of stuff with me. I took it (pēpi-pod) to my parents and used it as a bath as well.” (mother of baby 9 weeks 4 days)
“Can take to (grandmother’s) mother’s house.”
“Especially good when we go out to friends BBQ (for example) – they live out of town a bit”
(mother of baby 8 weeks 6 days)

“Pēpi-pods are light, easy to carry, and don’t take up much space. I can settle her in the pod on my lap while I’m watching TV”
(mother of baby 4 weeks)
“Parents used the pods at the evacuation centre when we had the Cyclone in the Cape. We didn’t have space for cots”
(Indigenous Health Worker & Community Elder)

“The pépi-pod fit in the car when the other stuff didn’t (prams, cots) when parents had to evacuate from their houses”
(Indigenous Health Worker)

Hopevale Community Centre
11 April 2014 Cyclone Ita
Acceptability: Pēpi-pod Program was a culturally acceptable portable sleep space and intervention.

Themes:
- safety
- convenience
- portability

Used appropriately by parents.

Feasibility: integrated into some health services.

Pilot results have informed larger trial n=300 across 7 Queensland communities.
Acknowledgements

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The families

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Townsville-Mackay Medicare Local – New Directions: Bubba’s Business
Woorabinda Multi-Purpose Health Service
Logan Aboriginal & Torres Strait Islander Community Health Service (ATSICHS) Mums & Bubs Clinic