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

Professor Jeanine Young  PhD BSc (Hons) Nursing  RGN RM Neonatal Nurse
School of Nursing & Midwifery, University of the Sunshine Coast

Leanne Craigie  BSc  Grad Dip Ed  Grad Dip Indigenous Health Promotion
Children’s Health Queensland Hospital & Health Service

Dr Lauren Kearney  PhD  IBCLC  B Nursing
School of Nursing & Midwifery, USC

Stephanie Cowan  MEd  BSc (Chemistry)  Dip Teach
Change for our Children Inc., New Zealand

Karen Watson  PhD Candidate  RN  MSc
School of Nursing & Midwifery, USC
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.
Background: Infant Mortality Trend in Australia

Infant deaths per 100,000 live births

Year


Introduction of SIDS education campaign

Boys

Girls

Children
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

Need

- Support breastfeeding (BF & co-sleeping are linked)
- Culturally acceptable strategies to promote safe sleeping environments in Indigenous communities

We Know

- Successful trials of safe sleep enablers in NZ Maori communities

http://www.creativespirits.info/aboriginal
culture/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 <1month) 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 • Crowded living conditions • Many siblings • Intended to bedshare</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</td>
<td>Pépi-pod used</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• No safe sleeping place when visiting family (pram used) • Portacot at home</td>
<td></td>
</tr>
<tr>
<td>Family 3</td>
<td>Early 30s</td>
<td>Single</td>
<td>14 days</td>
<td>Aboriginal</td>
<td>• Premature, LBW • Regular household smoking • No baby bed: only pram or</td>
<td>Pépi-pod used</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>bedsharing</td>
<td></td>
</tr>
<tr>
<td>Family 4</td>
<td>19</td>
<td>Partner</td>
<td>1wk 1 day</td>
<td>Maori (Mum)</td>
<td>• No baby bed • Intention to bedshare</td>
<td>Pépi-pod used</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Aboriginal (Dad)</td>
<td></td>
<td></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 • Regular alcohol use • Have cot, regularly</td>
<td>Pépi-pod used</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>bedshare with mum only</td>
<td></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)
Portability

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

- Acceptability: Pépi-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

Safe Sleep Advice to Safe Sleep Action
Acknowledgements

University of the Sunshine Coast
Children’s Health Queensland Hospital & Health Service
SIDS and Kids
Office of the State Coroner
Commission for Children and Young People and Child Guardian
Office of Fair Trading Department of Product Safety

The families

Ngarrama Antenatal and Birthing Project: Caboolture Hospital
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