EXECUTIVE SUMMARY

FINAL REPORT: INFANT CARE PRACTICES RELATED TO SUDDEN INFANT DEATH SYNDROME IN QUEENSLAND 2002

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1.0 PROJECT DETAILS

TITLE
Infant care practices related to Sudden Infant Death Syndrome in Queensland.

RESEARCH TEAM

INVESTIGATORS
Dr Jeanine Young, Nursing Director – Research, Education & Research Centre, Royal Children’s Hospital & Health Service District; Associate Professor (Adjunct), School of Nursing, Queensland University of Technology; Senior Lecturer, School of Population Health, University of Queensland.

Dr Diana Battistutta, Biostatistician, Senior Lecturer, School of Public Health, Queensland University of Technology.

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RESEARCH ASSISTANTS
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PARTICIPATING CENTRES
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Perinatal Data Collection Unit, Health Information Centre, Queensland Health
School of Population Health, University of Queensland, Queensland, Australia
School of Public Health, Queensland University of Technology
Office of the Chief Health Officer, Queensland Health

PROJECT TIMELINES
Project commencement date: 1st June 2002 Project completion date: 1st June 2005

NB: The project commenced in July 2002 with distribution of the infant care practice surveys to Queensland parents. Data collection closed in November 2002. Perinatal Data Collection (PDC) information made available in December 2002. Dr Philip Schluter withdrew from research project in February 2003 prior to data analyses. Gazettal of Dr Diana Battistutta to access PDC (to replace Dr Schluter) successful in May 2003. Data cleaning and analyses suspended while Dr Young (Chief Investigator and Project Manager) was on maternity leave (June 2003-March 2004); resumption of research duties part-time. Analysis of dataset ongoing.

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2.0 EXECUTIVE SUMMARY

Background

Sudden Infant Death Syndrome (SIDS) remains the leading cause of death in infants aged one week to one year in Australia. Since 1991, Queensland’s SIDS mortality rate has been persistently higher than the national average. Infant care practices are the most important set of factors for reducing the risk of an infant from dying of SIDS, yet the prevalence of these practices and risk factors had remained unknown in Queensland. A pilot study (n=36) conducted in a Queensland metropolitan area during October 2001 suggested serious deficiencies in parental practices related to infant care associated with a reduced risk of SIDS. A larger and more representative state-wide prevalence study was undertaken to substantiate these findings.

Purpose

The purpose of this statewide study was to benchmark the prevalence of infant care practices associated with SIDS mortality in Queensland primary caregivers with infants of approximately 3 months of age. The 3-month age threshold was chosen to coincide with the age that infants are most vulnerable to succumbing from SIDS (Fleming et al., 2000).

Study Population

The target population included all primary caregivers with live infants aged approximately 3 months who were born in Queensland during April 2002 (n=4172). Cross-checking was conducted with the Queensland Registry of Births, Deaths and Marriages to exclude all parents of infants who were stillborn or who had died during the period between birth in April 2002 and survey distribution in July 2002 (n=67). Surveys were distributed to 3952 eligible parents with infants approximately 3 months of age.

Methodology

The study used a cross-sectional survey design. Using Queensland Health’s Perinatal Data Collection (PDC), a cohort of 3952 mothers giving birth to infants within Queensland during April 2002 was identified. When infants were approximately three months of age, mothers were mailed a 10-15 minute self-administered questionnaire. The survey tool was specifically developed by the investigators following critical analysis and synthesis of four tools previously used to measure risk factors associated with SIDS. Survey questions included infant and maternal demographics, practices related to the ‘Reduce the Risk’ recommendations, and factors associated at some time (in literature and/or media) as being a risk factor for SIDS. A postal reminder was issued to non-responders 4 weeks after the first mail-out. Participating parents returned their survey using a prepaid envelope.
2.0 EXECUTIVE SUMMARY continued…

Summary of main results

Completed surveys were returned by 2534 (64%) primary caregivers, including 67 (3%) who indicated they were of Aboriginal or Torres Strait Islander descent. Routinely, 302 (12%) infants were placed prone and 558 (22%) were placed on their side to sleep. Maternal smoking was reported by 1248 (51%) respondents, although only 507 (20%) reported smoking during pregnancy and 546 (22%) post-partum. Of 2126 (84%) infants sleeping in a cot, 1153 (54%) were not placed with feet to foot of the cot. Bedsharing was common practice for 1136 (45%) infants and 278 (25%) of these infants bed-shared with a mother who smoked. A considerable number of infants used a pillow for their head or whole body (354, 14%); slept on a sheepskin (495, 20%); or slept with a cot bumper (376, 15%) or soft toys (193, 8%) in the immediate bedding environment.

Uptake of RTR recommendations in the care of infants remains relatively poor in Queensland. The prevalence of risk factors was 38.5% for non-supine sleep positions (usual practice in the last 2 weeks); 60.6% of infants were not placed feet to foot if placed to sleep in a cot; 21.8% of mothers reported smoking currently, while 40.1% were no longer giving the infant any breast milk. Only 23.3% of the sample practiced the RTR messages, while only 14.9% practiced the RTR recommendations and breastfeeding. Factors commonly associated with not complying with RTR messages in multivariable analyses were young maternal age, living in rural or remote areas, single mothers, being a public patient, and an increasing number of previous pregnancies.

Conclusions

Results indicate that substantial proportions of caregivers in Queensland are employing suboptimal infant care practices in greater numbers than their non-Queensland counterparts that may place their infant at an increased risk of SIDS. Despite continued public campaigns promoting reducing the risk factors associated with sudden infant death, the “hard to get to” population remain the most under exposed to these public health messages. New methodologies need to be developed in the public health system to educate parents, present and future, of the risks associated with sudden infant death. These findings have important implications for parental education by all health professionals caring for families of young infants.

Recommendations

Study results will be disseminated to inform Queensland Health and SIDS support organisations, including SIDS&KIDS Queensland, SIDS&KIDS Australia, and SIDS&KIDS National Scientific Advisory Group. These results identify differences between primary caregivers’ practices and the ‘Reduce the Risk’ messages in Queensland. These results will be used to inform future public health promotion strategies and health professional development programs to target identified practice deficits and ensure that the ‘Reduce the Risk’ messages are appropriately disseminated to
all caregivers of young infants. Education is required that specifically targets changing practices related to infant sleep position, infant placement in cots; appropriate infant bedding environments; and smoking in proximity to young infants.

**Implications for paediatric health**

Effective, accessible and culturally sensitive educational programs relating to SIDS, SIDS risk factors and the ‘Reduce the Risk’ messages that effectively target identified knowledge deficits and successfully change the practice of infant care caregivers will ultimately reduce the number of infants who die suddenly and unexpectedly each year in Queensland.