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Examining the Evidence Regarding Infant Sleeping Practices and Sudden Infant Death Syndrome

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Introduction

Sudden infant death syndrome (SIDS) continues to be a devastating form of postneonatal death in Canada. On average, in Canada, three infants die each week from SIDS.¹ While the etiology remains unknown, many risk factors have been identified and numerous education strategies, targeted at both caregivers and parents, have significantly reduced the incidence of SIDS in recent years. Yet, infants still succumb to this syndrome which leaves practitioners continually looking for ways to further reduce or even eliminate the incidence of SIDS. Research continues to identify new potential risk factors. One in particular, the practice of bed sharing and the risks/benefits associated with this practice, has been the topic for debate. This paper summarizes the current literature on the risks of SIDS related to infant sleep practices, in particular bed sharing.

Defining Sudden Infant Death Syndrome

Sudden infant death syndrome (SIDS) occurs when a sleeping, seemingly healthy infant less than one year of age, dies for no apparent reason. In 1989, the National Institute of Child Health and Human Development convened a panel of experts to develop a definition of SIDS. The accepted definition of sudden infant death syndrome, as published in 1991 by Willinger, James & Catz is:

“the sudden death of an infant under one year of age, which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history”.²

SIDS is the leading cause of infant death in developed countries.³ Despite dramatic reductions in SIDS deaths over the last decade in Canada and around the world, SIDS, according to Statistics Canada, is still the leading cause of death for Canadian infants between 28 days and one year of age.⁴ In Canada in 1999, 144 or 26% of all postneonatal deaths were caused by SIDS.⁵

There is debate regarding the potential for the misclassification of a SIDS diagnosis, as other explained infant deaths, such as suffocation or asphyxia, resemble at autopsy a SIDS death.⁶ Bed sharing at the time of infant death, whether it is explained or unexplained, further confounds the issue. As early as the 1970's, overlaying of infants when others shared the sleeping surface with an infant, was identified as a risk for suffocation deaths but was largely overshadowed by the shift in focus to sudden infant death syndrome. Research has examined suffocation deaths in infants 12 months or younger over a seventeen year period in the United States and found that only 5% of the deaths identified as accidental mechanical suffocation occurred because of overlaying or smothering when a larger person sleeps on top of an infant.⁷ Of those infants, 70% were younger than 3 months of age. While the debate may have instigated increased vigilance for death scene investigations, the argument has yet to offer any real value to reducing the number of infant deaths, either explained or unexplained. Suffocation that occurs while

young infants share a sleep surface with another person may be undistinguishable from SIDS but this only augments the need for careful examination of the risks and benefits for bed sharing with infants.

Reducing the Risk of Sudden Infant Death Syndrome

In recent years, the incidence of SIDS has declined, largely, due to an increased awareness of certain risk factors that affect SIDS rates. In 1993, the Canadian Foundation for the Study of Infant Deaths, the Canadian Institute of Child Health, the Canadian Paediatric Society, and Health Canada presented findings from many studies that found when there was a decrease in the incidence of the prone sleeping position, there was also a decrease in the incidence of SIDS. These groups released a joint statement providing recommendations to place infants to sleep on their backs, to care for infants in a smoke free environment, to dress and cover infants in a manner to avoid overheating, to discourage the use of soft mattresses, soft bedding, pillows, bumper pads, lambskins and similar products in the infant's sleeping environment, and to have infants sleep on a firm, flat bed. The positive benefits of the recommendations and subsequent "Back to Sleep" campaigns were supported by the findings in a Canadian study that looked at the trends in rates of SIDS from 1985-1998 and found that the reduction in SIDS after the release of the joint statement was significantly greater than the reduction in the postneonatal mortality rate due to other causes.⁸

Methodology

A systematic review of the literature was conducted to address the broad question of what infant sleep practices impact the rate of SIDS. A literature search conducted December 2, 2004 of CINAHL, Ovid MEDLINE(R) and PsycINFO, using the key words of **bed-sharing**, **co-sleeping**, and **sudden infant death syndrome (SIDS)** provided 18 abstracts that displayed one or more of the criteria key words. Full text for the references that met the criteria of being a case controlled or cohort study and related the issues of SIDS and infant sleeping practices were obtained.

The literature was reviewed and subsequent sources of information were gathered from the reference lists of the reviewed articles and the Canadian Pediatric Society's *Recommendations for safe sleeping environments for infants and children*⁹ and the American Academy of Pediatrics Policy Statement on the *Changing concept of sudden infant death syndrome: Diagnostic coding shifts, controversies regarding the sleeping environment, and new variables to consider in reducing risk*,¹⁰ two recent comprehensive reviews of the current literature and practices related to the topic area.

A second literature search was completed February 15, 2006 using CINAHL (1982-February 2006), Ovid MEDLINE(R) (1996-February 2006) and PsycINFO (2000-February 2006) in which 6 additional abstracts were identified. The key search words of **bed-sharing**, **co-sleeping**, and **SIDS** were repeated as well as adding the key word of **breastfeeding**, to determine if there are any protective or risk factors for SIDS associated with breastfeeding and bed sharing. Again, the full text of appropriate literature from the abstracts was obtained, as well as, from the reference lists of the reviewed articles. Additional breastfeeding and bed sharing information such as newsletters, press releases,

and websites, was also collected from professionals in the area of maternal/child health and the reference lists were used to identify any additional research.

In total 37 abstracts, 47 papers, 1 proceedings of a conference, 6 websites, 7 government documents/advisories/coroner's report, 29 newsletters/brochures/media releases/letters to the editor and 2 reports from data bases were reviewed. From this collection, 19 studies were identified for the systematic literature review. The remaining documents such as recognized professional societies' policy statements on SIDS and infant sleep practices provided background information and an insight into how the current literature is being used in practice.

Eligibility Criteria

The following criteria were used to include documents for the literature review:

- } Case-controlled or cohort studies linking SIDS and risk/protective factors in the infant sleep environment
- } Government documents/recommendations such as coroners' reports
- } Historical reviews and retrospective descriptive studies linking the concepts of SIDS and infant sleep practices.

Terminology

Terminology regarding co-sleeping, bed sharing, and room sharing, used both in the scientific literature and the popular literature, is inconsistent and potentially problematic. For the purposes of this paper the following terms and definitions will be used:

Bed sharing: a sleeping arrangement in which the baby **shares** the same sleeping surface with another person (parent, sibling).

Room sharing: a sleeping arrangement in which the infant **does not share** the same sleeping surface as a parent or sibling but sleeps in the same room within reach of the parents.

Cosleeping is a term used in the scientific and popular literature with inconsistent definitions that can be misleading and confusing. Some authors use the term to refer to the broad range of infant sleeping practices inclusive of bed sharing **and** room sharing while other authors use this term as a distinct alternative practice to bed sharing.¹¹ In reporting the findings from the literature, every effort has been made to categorize the author's terminology into bed sharing and/or room sharing, as defined above, while maintaining the integrity of the author's message.

Discussion of the Literature

Many factors influence choices families make regarding sleeping arrangements for infants and include a combination of parental values, socioeconomic factors, and cultural diversity. Parents in developed countries have generally been accustomed and encouraged to have their infants sleep in a separate room which differs from what is practiced in many non-industrialized countries due either to cultural or economic reasons.

Some advocates of breastfeeding also support the idea of bed sharing as it is believed to support both the frequency and the duration of breastfeeding.

The National Infant Sleep Position Study (NISP), completed in the United States between 1993 and 2000, conducted 8453 interviews (about 1000 each year) and found that there was an increase in infants sharing a bed for more than half the night from 5.5% to 12.8% between 1993 and 2000. Also identified was a significant increase in bed sharing among those with a maternal age over 18 years, those identifying themselves as white or Asian, for infants older than 8 weeks, and for infants who had a normal birth weight and were carried to term.¹² While this incidence of bed sharing for more than half the night still appears relatively low, it is augmented by the fact that 44.7% of all respondents stated that while their baby may not spend more than half the night on an adult bed, infants did spend some time on an adult bed. Of those that spent time on an adult bed, 91.6% of the infants slept with their parents. All of which indicates an increasing trend for parents to share their bed with their infants. Although the NISP study identified increases in bed sharing for some population groups, the strongest predictors of bed sharing were black or Asian race or ethnicity, breastfeeding, having a mother younger than 18 years of age, and low household income.

At the same time, research indicates there is a positive association between infants that bed share and the risk of SIDS. The British Columbia Coroners Service identified that from January 2003-June 2004, 63% of infant deaths occurred during sleep and of those 83% were involved in one or more unsafe sleep practices (*bed sharing with at least one person, sleeping on surface unintended for child sleep, sleeping in a prone or semi-prone position, or found sleeping with items covering the head*). In 40% of the infant deaths, 2 or more unsafe practices were evident with the most common combination being *sleep on a surface unintended for child sleep and bed sharing*.¹³ Examination of the literature will help to understand the overall risks related to SIDS, and those specifically related to infant sleep practices.

Infant Sleep Practices and Risk Factors for Sudden Infant Death Syndrome

Several case controlled studies have identified the primary risk factors for SIDS. Often the studies were initiated to analyze particular trends in SIDS rates, such as in the New Zealand Cot Death Study,^{14 15} the European Concerted Action on SIDS (ECAS),¹⁶ the Confidential Enquiry into Stillbirths and Deaths in Infancy (CESDI),^{17 18} and the Chicago Infant Mortality study.¹⁹ The research has begun to develop a compelling case for certain risk factors such as infants sleeping in a prone sleep position, young maternal age, low socioeconomic status, male gendered infants, low birthweight, maternal drug use such as smoking, bed sharing, and for some potentially protective factors such as room sharing and pacifier use. The literature has also examined the impact of various parenting practices such as breastfeeding on the incidence of SIDS.

Prone sleep position

As early as the 1940's, the back or side position were recommended for infant sleep until a sudden shift in recommendations during the mid-1950's that promoted a prone sleep position. This became the common practice even within an environment of increasing

SIDS rates.²⁰ A decline in the incidence of SIDS only began to occur following the “Back to Sleep” campaigns which produced 50-70% reductions in some countries, accompanied by a decrease in the prone sleep position for infants.²⁰ Recent research has confirmed that the prone sleep position is the most modifiable risk factor for SIDS.¹⁹ Lateral or side sleeping increased the risk by 2.0 times and prone sleeping 6.0 times when compared to supine sleeping.¹⁴ The Alaska Maternal-Infant Mortality Review found that SIDS deaths among infants who slept in an infant crib occurred almost exclusively in association with a prone sleep position.²¹

Maternal age and Socioeconomic Status

In many cases, risk factors for SIDS appear in combination with other risk factors. That is the case with younger maternal age and low socioeconomic status. SIDS mothers are more likely to be younger, have no partner and more children, are more likely to consume alcohol and smoke during pregnancy, are less likely to attend prenatal classes and engage in prenatal care later than the control mothers, and are generally poorer compared to the rest of the community.²² Some of the research identifies that these factors are also true for “explained” infant deaths so it may be difficult to distinguish causal factors related to SIDS. The risk factors for both SIDS (unexplained) and explained infant deaths may just be an indication of the deprived circumstances in which SIDS families and other families live.^{22 23}

Infant Characteristics

Infants most at risk for SIDS are generally male, more likely to be premature, are low birthweight, and are more likely to be admitted to the neonatal unit.^{14 23} **Error! Bookmark not defined.** The age of death from SIDS peaks at 3 months of age.^{14 23 24} In recent years, it has been identified that the prevalence of SIDS in pre-term infants has tripled with over 33% of all SIDS infants now being pre-term when only 5% of all infants are born pre-term.²⁴ Findings from the Alaskan Maternal-Infant Morbidity Review also identify that SIDS deaths frequently occurred in association with infant physiological abnormalities.²¹

Bedding/Soft covers/Bumper Pads/Pillows

The Chicago Infant Mortality Study, conducted between 1993 and 1996, investigated socio-demographic, behavioral, and medical characteristics of the family and infant, characteristics of the home environment, factors related to the sleep environment, and the circumstances of the death. A soft sleep surface where the infant’s head would sink more than an inch into the surface posed 5 times the risk for SIDS and the use of a pillow or covering the head or face with bedding posed 3 times the risk.¹⁹ Thermal stress or hyperthermia has been examined in various studies and was identified as a small risk factor in the European data (CESDI) while total covering by the bedding emerged as a potent risk factor.¹⁷

Smoking/Alcohol/Drug Use

Smoking appears to be highly correlated with SIDS and is a substantial risk if one or both parents smoke before, during, or after birth.^{16 19 23} On first analysis of the data from the New Zealand Cot Death Study, it was identified that the more a mother smoked the more risk there was to the infant.¹⁴ Subsequent analysis found that the risk did not vary with

the number of cigarettes smoked but was significant for bed sharing infants when the mother was the smoker rather than when the father was the smoker.¹⁵

Conflicting results have been identified regarding parental alcohol and drug use. Alcohol and drug use have been implicated as confounding factors in SIDS, especially related to bed sharing as they are hypothesized to contribute to increased roll-overs and overlaying of the infant due to impaired parental responses. Early analysis of the New Zealand Cot Study indicated a contrary finding where maternal alcohol consumption by itself or as it interacted with bed sharing was not identified as a risk factor for SIDS.¹⁵ Subsequent findings from another data source found that recent alcohol consumption was only a risk factor if accompanied by bed sharing.¹⁷

Of note are the findings from the Alaskan Maternal-Infant Morbidity Review where SIDS deaths frequently occurred in association with parental drug use. This data came from a population where parental drug use was very common. Overall, 68% of infants that died from SIDS, had a parent, most commonly the mother, with a documented history of drug use which could include cigarette smoking and the use of alcohol and/or illicit substances. For the Alaska Natives, 94% of SIDS deaths occurred in association with parental drug use.²¹

Pacifiers

Some of the research has indicated a protective factor when using pacifiers.^{17 19} While there is no particular hypothesis to explain the mechanism, the protective factor was related to pacifier use during the last or reference sleep where the control infants had a significantly higher use than those that died.^{3 21} In addition, for those infants that regularly used a soother while sleeping, they were found at significantly increased risk of SIDS if the soother was missing during the last sleep period. Consensus from all the research indicates that further study is required and these findings should not be used to claim that pacifiers prevent SIDS but that it may not be prudent for health care professionals to categorically discourage the use of pacifiers, especially for those who are already using pacifiers and for those who are not breastfeeding.^{3 17}

Thermal Resistance

Thermal resistance, the ability of material to resist the flow of heat, appeared evident as a risk factor for SIDS when infants who died from SIDS were more heavily wrapped than the controls in the CESDI study.¹⁷ It was a small independent risk factor that was linked to the prone sleep position because it was more common for infants to be heavily wrapped in the prone sleep position. It is hypothesized that as this sleep position is rapidly declining, so will the impact of thermal resistance.¹⁷ Other research analyzed the impact of thermal resistance from a broader perspective and looked at the thermal resistance from the infant's clothing and bedding as well as from bed sharing but found no significant interaction to increase the risk of SIDS.¹⁵

Room sharing

In trying to identify what risk and protective factors might be present when an infant shares a bed with an adult or shares a room with an adult, researchers have identified that

infants who share a room to sleep with one or more adults have a lower risk of SIDS than infants who do not room share. This effect is separate from and opposite to the effects of bed sharing. A reduced risk for prone sleeping was also observed when the infant room shared with a parent. The same protective effects were not evident when the infant shared a room with another child. There was a lower risk of SIDS even when maternal smoking was combined with room sharing.²⁵

Some research has focused on identifying the arousal periods observed in infants that shared a bed and those that slept in a separate room. The researchers found that bed sharing increases infant arousals at night²⁶ and propose that bed sharing may provide a sleep environment that stimulates the infant, reducing the risk of the infant succumbing to SIDS. While the researchers recognize that any protective factor for SIDS related to bed sharing is, at this point in time, only theoretical,²⁷ they do support the benefit of infants sharing a room with parents to facilitate parents monitoring their babies.²⁸ The protective factor of sharing a room with an adult was very specific and only observed when infants shared with their parents but not when infants shared with another child.²⁵

Of note are the results from the Chicago Infant Morality Study where researchers did not find a reduced risk of SIDS when parents and infants room shared. They identified a strong correlation between bed sharing and room sharing for the families in the study resulting in few families sharing a room without sharing a bed, therefore making it difficult to separate the two issues.¹⁹

Bed sharing

Some forms of sharing a sleep surface, such as sofas, waterbeds, couches, or day beds have been accepted as posing an increased risk for SIDS.¹⁸ The controversy regarding the risks or benefits of bed sharing focuses on the sharing of the parental bed and, at times, has polarized both the professional and the lay communities. Most of the research has identified a relationship between bed sharing and an increased risk of SIDS but there is still a belief in some circles, that bed sharing may provide a protective effect against SIDS. Even researchers that have focused their energies on providing some insight into the protective relationship between bed sharing and SIDS recognize that the evidence to date is indirect and circumstantial.²⁶

Bed sharing is a practice chosen by parents and is selected for various reasons. Some share beds because of lack of room and some share out of custom or choice. The practice of bed sharing may also be accompanied by other modifiable risk factors for SIDS such as low socioeconomic status.¹⁵ It has been noted that countries with the highest awareness of SIDS have lower rates of bed sharing.⁶ Recent studies have found that SIDS infants are largely members of deprived families and almost half occur during bed sharing.²⁴

The initial concern regarding the risk of bed sharing was identified in the New Zealand Cot Study where it was determined the risk of SIDS for infants who shared a bed ranged from 2.7 times¹⁴ to 9 times the risk from those that did not. In the Alaskan Maternal-Infant Mortality Review, of the 115 SIDS deaths that occurred between 1992 and 1997,

113 of the deaths were to infants who slept outside an infant crib, in the prone position or with another person.²¹ The Chicago Infant Mortality Study only identified a risk for bed sharing when the infant was bed sharing with combinations that included other children, with or without a parent.¹⁹ There appeared to be no relative risk related to the number of parents that shared the bed, only if one or both parents smoked.¹⁵

Bed sharing and the potential risk of SIDS are difficult to separate from other known modifiable risk factors such as soft bedding. Recommendations on how to make the sleep environment safer when bed sharing with an infant, including discouraging the use of pillows and comforters and not allowing the baby to go under the covers or into the pillow,²⁹ may not necessarily make the infant sleep environment any safer. Research has identified that infants who bed share are 2.9 times more likely to sleep beneath 2 or more bed covers and are almost twice as likely to be covered by a quilt and to use a pillow.

Bed sharing appears to be of high risk for younger infants. The European Union Concerted Action on SIDS (ECAS) identified an increased risk of SIDS when bed sharing for infants less than 8 weeks of age, regardless of whether the mother smoked.¹⁶ Other research extends the age with the most risk from bed sharing from 11 weeks of age³⁰ up to 20 weeks of age.^{3 15} As infants age, there is evidence to support that the risk of SIDS related to bed sharing diminishes. Older infants, from 14 weeks¹⁸ to 25 weeks of age¹⁵ had little to no additional risk identified when bed sharing.

The length of time that an infant spends bed sharing in the parental bed impacts the risk of SIDS. An association has been identified between the level of risk and the number of hours the infant shared a bed, with the highest risk for infants who usually bed shared for more than 5 hours in a 24 hour period.¹⁵ Other research has not quantified the length of time of bed sharing and the relative risk but identify that bed sharing all night long is a significant risk factor,²⁴ especially if the mother smoked.¹⁷ There is some suggestion that there could be a cumulative effect rather than an acute effect of bringing an infant into the parental bed as infants who shared in the last two weeks but not necessarily on the last sleep had a greater risk of SIDS.¹⁵ There was no identifiable risk found when infants were taken to the parental bed for breastfeeding or comforting but returned to the crib or cot. The risk only occurs when mothers fall asleep and keep the baby in the parental bed all night long.^{17 24}

As previously stated, other modifiable risk factors are associated with the risk of bed sharing. Infants that have a higher risk of SIDS often bed share with mothers that were less than 20 years of age.¹⁵ There is also substantial support for an increased risk of SIDS between bed sharing and maternal smoking.^{15 17} The Alaskan Maternal-Infant Mortality Review, using a broader definition of drug use to include smoking, alcohol, and illicit substances, found a strong correlation between parental bed sharing, SIDS, and drug use. Of the 40 infants who died of SIDS and slept with their parents, 93 % had a parent with a documented history of drug use.²¹

Adult beds

The risk of suffocation for infants who slept in cribs, in adult beds, and on sofas was compared and it was found that the risk for suffocation among infants in adult beds was 40 times higher than the risk for suffocation in cribs. The risk is high even when correction for underreporting of bed sharing is addressed and deaths from overlaying are removed from the analysis.³¹ Adult beds are not designed for use by infants and it is difficult to control the potential hazardous arrangements that could cause suffocation, entrapment, or strangulation. In a study examining mechanical suffocation of infants in the United States over a period from 1980-1997, adult beds were identified to be hazardous because of their location near a wall, the presence of pillows or soft bedding, or because of bed sharing.⁷ In contrast, mandatory crib standards that include requirements for side height, slat spacing, labeling, corner post height, and mattress fit have reduced crib-related suffocation deaths since the 1980s and have prompted government recommendations for infants to sleep only in a crib (made after 1986) or cradle with a firm and tight fitting mattress that meets current safety standards.³²

Relationship between Breastfeeding and SIDS and Bed Sharing

The discussion about the benefits of breastfeeding in general does not seem an arguable point. The advantages of initiating and maintaining breastfeeding for the benefit of the baby and the family are irrefutable and well documented, even if breastfeeding does not prove to provide a specific protective factor against SIDS. There is some consensus that breastfeeding in itself does not provide a protective factor against SIDS but may be an indication of other factors such as socioeconomic status, maternal age, and other lifestyle factors known to impact SIDS rates.

The protective aspects of breastfeeding are complicated by the interrelated philosophy that the promotion of breastfeeding implies some form of bed sharing and the assumption that successful breastfeeding can not be maintained without bed sharing. Bed sharing has been specifically recommended to promote breastfeeding by some organizations.^{11 29} The evidence to support this premise is contradictory. In support of bed sharing to promote breastfeeding, one study observed 20 routinely bed sharing and 15 routinely solitary sleeping Latino mother-infant dyads at 3-4 months of age. The bed sharing infants breast fed three times longer and the number of episodes was doubled.³³ In contrast, when breastfeeding, SIDS, and bed sharing were examined, no difference in the rate of breastfeeding between infants that bed shared and those that did not was identified and no association was found between bed sharing and encouraging breastfeeding.^{3 16} There is a fear that when infants do not share the parental bed, it will reduce the likelihood of maintaining breastfeeding but research has found that sharing the parental bed and breastfeeding are independent of one another and, therefore, does not support this concern.¹⁴

It is recognized, even among breastfeeding advocates, that there is insufficient evidence to show a causal link between breastfeeding and SIDS prevention.^{11 28} There was some initial indication from the New Zealand Cot Study that breastfeeding might provide a protective factor as infants that died from SIDS were breastfed significantly less often and weaned earlier than infants in the control group.¹⁴ Subsequent to the New Zealand

Cot Study, research has found a decrease in breastfeeding rates and the impact on SIDS was only significant in deprived families.²⁴ The data from the CESDI Study and the Chicago Infant Mortality Study also does not support an independent protective factor from breastfeeding and the risk of SIDS because when breastfeeding was adjusted for socioeconomic status, the protective effect became not-significant.^{17 19} In fact, some research found an associated risk for bed sharing infants who were breastfed and cautioned against bed sharing as a method to facilitate breastfeeding.

It is possible that factors associated with breastfeeding, rather than breastfeeding itself, are protective factors against SIDS and perhaps breastfeeding is a marker for socioeconomic status, education status, or other lifestyle factors that may provide a protective factor against SIDS. For example, bottle feeding, and not breastfeeding, has been strongly associated with lower socioeconomic status and with smoking, two accepted risk factors for SIDS.^{3 17} The fact that breastfeeding may not be a protective factor but is linked to other lifestyle factors that are protective is also supported by the frequently cited low rates of SIDS in Hong Kong where breastfeeding is extremely low.¹² Research in Hong Kong between 1993 and 2000 has shown that at 2, 4, and 6 months of age, the most vulnerable age for SIDS, breastfeeding rates are 9%, 4% and 3%. If breastfeeding did not contribute to the low incidence of SIDS, other factors such as living in overcrowded living conditions where infants are rarely left alone, a tradition of laying infants supine to sleep for fear of suffocation, and a lower proportion of premature births were hypothesized to provide the protective effect in this population.¹²

Summary

The profile of the infant dying from SIDS has dramatically changed in the last decade. The previous practice of prone or side sleep positions have been demonstrated to be one of the most modifiable risk factors for SIDS and have resulted in dramatic reductions in SIDS rates. Most infants who die of SIDS today are now found supine, come from poor families, and many are found bed sharing.²⁴ Further understanding potential risk and protective factors including those that are part of the infant sleep environment is important to produce further reductions in the prevalence of SIDS.

As highlighted by the Canadian Pediatric Society (2004), large population-based studies in several different countries have come to very similar conclusions concerning risk factors for SIDS, including unsafe sleeping environments. There is consensus that sleeping in a position other than supine, the presence of soft bedding or pillows, low socioeconomic class, maternal smoking, young maternal age, male gender, prematurity and bed sharing are risk factors for SIDS. Adult beds also are a risk filled environment for infants and do not adhere to the standards set for infant cribs, cradles and bassinets

While the mechanisms have yet to be explained, room sharing with a parent has been identified as a protective factor, especially with infants up to six months of age. Pacifier use has also been identified as a potential protective factor although further study has been recommended to more fully understand the beneficial effect. There were no identifiable protective factors presented by bed sharing to off-set the risk factors found with bed sharing, particularly in young infants. Although breastfeeding was not found to

be a protective factor against SIDS, many other benefits have been identified from breastfeeding and it should still be encouraged. It is the responsibility of all practitioners to support and provide viable options and strategies to the mother to successfully breastfeed throughout the day and night while encouraging a safe sleep environment for her infant.

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