

Co-sleeping in relation to sudden infant death syndrome



Health Intervention Proposal: Co-Sleeping in relation to Sudden Infant Death Syndrome

Introduction

Sudden infant death syndrome (SIDS) is defined as the unforeseen passing of any infant which cannot be explained by a thorough post-mortem examination or their life history (Beckwith, 1971; American Academy of Pediatrics et al 2006; Meadow 1999). SIDS affects children under the age of one and is assumed to be a sleep-related disorder (Fitzgerald, 1995). Thus, highlighting the importance of health interventions which aim to educate individuals about the optimal sleep location and environment for their infant. The severity of the disorder is portrayed by Fitzgerald's (1995) research which concluded that there were more than 290, 000 cases of SIDS in the Western world alone. Although the causes of SIDS remain somewhat opaque, anthropologists, with their cross-cultural and evolutionary perspectives, have started to recognise and explain the key risk factors of the disorder.

Evolutionary Perspective versus Cultural Norms

In evolutionary history, an infant who was separated from its mother faced life threatening conditions, such as starvation and predation. Therefore, natural selection began to favour babies who, once detached from their mother, moaned and cried to signal for a response. This suggests that infants ought to stay within close proximity and contact to their mother throughout the day and night (Trevathan et al, 1999). Moreover, McKenna and McDade (2005) research found that new-borns have a neurological base

that prompts co-sleeping behaviour. Proximate sleeping conditions allow the infant to closely interact with their mother's smell, movements and breathing. This, in turn, activates the neurological base which reduces crying and regulates the baby's body temperature, immune system, breathing, oxygenation and stress hormone levels (McKenna and McDade, 2005). Thus, bed sharing between mother and infant, causes one to endure a positive clinical change. Furthermore, co-sleeping is a necessity for ensuring development of the human brain. New born humans are neurologically less advanced and mature, when compared to other mammalian young, with only 25% of their adult brain volume (Konner, 1981). Consequently, post-natal brain growth in infants is rapid. This instigates active sleep behaviour and consistent patterns of night waking throughout the first several months of development (Ball, 2017). Thus, emphasizing the need for infants to maintain close maternal contact during the day and night (McKenna and McDade, 2005). Overall, early infant adaptations evidently display that health interventions must attempt to encourage co-sleeping behaviour.

Furthermore, evolutionary perspectives propose that close parent-infant contact is necessary, during the night, for the purpose of breastfeeding (Trevathan et al, 1999). Ball (2017) stated that mothers regularly breastfeed their infants to ensure nourishment as the milk is low in fat and protein. Additionally, breastmilk transfers a range of immunological agents to the infant, such as enzymes and antimicrobials (Hale and Hartmann, 2007). These immunological agents are crucial as they prevent any infection of the respiratory system and gastrointestinal tract (Hale and Hartmann, 2007). Gettler and McKenna (2010) state that bed sharing and breast-feeding are

interdependent because it allows the infant easy access and consistent suckling periods. There is various research that supports Gettler and McKenna (2010) claims finding that although co-sleeping is not necessary for breastfeeding success, nearly half of the mothers that do breastfeed in the United States and the United Kingdom regularly share the bed with their infant for at least some part of the night (Ball, 2002; Blair and Ball, 2004; Lahr, Rosenberg and Lapidus, 2005; Willinger et al 2003). Moreover, sleep disruption has been classified as the leading cause for the early termination of breastfeeding, displaying further the need for bedsharing patterns (Ball, 2017; Heinig 2010; Tarrant et al. 2011). Therefore, an evolutionary standpoint strongly supports co-sleeping as it increases breastfeeding, which is fitness enhancing for both parents and infant.

Although biological mechanisms encourage bed sharing between infant and parents, cultural influences are significant in determining sleep practices (Owen, 2004). Ball et al (1999) concluded that co-sleeping is not an attribute of traditional parenting ideology in the United States and the United Kingdom. Yet, in direct contrast, there are several cultures that do implement infant and parent bed sharing patterns. Yang and Hahn (2002) found that 73. 5% of Korean mothers applied proximate sleeping patterns with their child up until the age of 6. Similarly, in Japan, infants sleep with their parents, especially their mother (McKenna and McDade, 2005; Caudill and Weinstein, 1969;). Shimizu et al (2014) highlights that co-sleeping is a conventional Japanese childcare practice, finding that between 2008-2009 bed sharing was just as frequent as it had been in the 1960s and 1980s.

These differences exhibited in the United States, United Kingdom, Korea and

Japan are due to a variety of cultural principles. The United Kingdom and the United States societal attitudes focus on autonomy and independence, whereas Japan and Korea value communalism (Hofstede 1980). Morelli et al (1992) claims that Mayan mother were horrified at American practices of sleep, such as separate bedrooms, understanding this to undermine collectivism and avoiding their parental obligations of creating a close bond with their children. Whereas, in Western cultures, an infant crying during the night is perceived negatively as it indicates a lack of independence. From an evolutionary perspective, Trevathan et al (1999) argues that allowing an infant to sleep through the night is biologically incorrect. Thus, Trevathan et al (1999) exhibits that medical professionals and health interventions must attempt to increase proximate sleeping patterns.

Alternatively, situational factors play a crucial role in determining the occurrence of co-sleeping behaviour. Lozoff et al (1984) found that in the United States, bedsharing was implemented due to high levels of stress, less parental pediatric care education, and lower socio-economic status. Furthermore, Schachter et al (1989) found that, in Hispanic families, being a single parent increased one's likelihood of proximate sleeping with their newborn. Lozoff et al (1994) and Schachter et al (1989) results display that in some cases an infant's sleep location is determined by circumstantial influences, rather than the parents own choice. In these cases, co-sleeping has not been adopted because of informed choices, thus, such behaviour has the potential to cause greater risks and increase the probability of SIDS.

Schluter et al (2007) supports the anthropological viewpoint that co-sleeping offers an evolutionary secure and adaptive environment (McKenna, 1996; <https://assignbuster.com/co-sleeping-in-relation-to-sudden-infant-death-syndrome/>

McKenna et al (2007). Schluter et al (2007) study, with Pacific Islander families, concluded that proximate sleeping patterns protect rather than jeopardise an infant's wellbeing. However, Pasquale Styles et al (2007) state that obstruction to the nose, mouth and face, by bedding, induces extreme dangers for infants. Furthermore, thermal stresses pose increased threats for newborns, such as many layers of clothing and soft bedding (McGarvey et al, 2006; Iyasu et al, 2002; Ruys et al 2007). In fact, Kemkes (2009) claims that in 1995 bedding, blankets and pillows were classified as the ultimate reason for suffocation in babies under the age of one. Thus, such research suggests that bed sharing, between infants and parents, is not a contributor for SIDS, but rather the cultural norms that exist in regards to safe and comfortable sleeping environments (Kemkes, 2009).

Similarly, the importance of the optimal sleep location for a newborn, in the present cultural environment, is highlighted by the relationship between SIDS and behaviours such as smoking, drinking alcohol and substance abuse. Singer (2004) stated that co-sleeping between an infant and parent, who has been regularly smoking, elevated the likelihood of SIDS. Gordon et al (2002) research exhibited that smoking increases the possibility of SIDS because it leads to greater susceptibility to viral and bacterial infections. Furthermore, in general, alcohol worsens judgement and impairs one's ability to provide pediatric care (Cherpitel, 2006; Haggard-Grann, 2005). Blair et al (2009) concluded that alcohol is a serious risk factor when parents and infants are bed sharing. Phillips, Brewer and Wadensweiler (2010) support Blair et al (2009) with their research finding a 33% increase of SIDS cases occurring on New Year's Day, which they correlated with the higher level of alcohol

consumption from the night before. Moreover, Phillips, Brewer and Wadensweiler (2010) found a smaller, but nonetheless obvious, increase in the number of SIDS incidents happening on the weekends, compared to weekdays, due to greater levels of heavy drinking. Additionally, infants born to parents who are substance abusers were found to have a far greater risk of dying of SIDS in comparison to the general population (Mark and Claire, 1991). Whilst evolutionary history displays great benefits of co-sleeping, it clearly must not be advised if a parent smokes, drinks or uses drugs. Thus, interventions for SIDS must focus on educating individuals on the dangers of such actions and aim to reduce smoking, drinking and drug habits of new or expecting parents.

To conclude, evolutionary history evidently suggests that medical authorities ought to promote co-sleeping patterns as it encourages necessary close maternal contact for the infant (American Academy of Pediatrics, 2005; Ball, 2017). The benefits of such actions are an increase in breastfeeding, conformation of successful brain development, regulation of bodily functions and a reduction in crying. However, cultural norms and expectations heavily influence parental choices of bedsharing patterns. Due to social factors such as suffocation, drinking, smoking, substance abuse, co-sleeping continues to be a risk factor for SIDS. Therefore, until the true cause of SIDS is discovered, no sleep environment is completely risk-free (Pediatric Child Health, 2004). However, much can be done to educate parents on the provision of safer sleeping environments and location for their infants (Pediatric Child Health, 2004).

Intervention Design

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'Is Co-Sleeping for you?' is a poster (Appendix 1) outlining the benefits of bed sharing, from an evolutionary perspective, and aims to aid individuals who are deciding on the optimal sleeping environment for both themselves and their infant (Ball, 2017). It educates people about the dangers of smoking, alcohol and substance abuse whilst proximate sleeping with an infant and encourages termination of such behaviours (Moon, Hauck and Colson, 2016). The poster informs individuals about cessation programmes and focus group sessions available to stop such actions (Moon, Hauck and Colson, 2016). Furthermore, health professionals involved in the intervention are prompted to personally direct those, who they deem suitable, to such schemes (Hamadneh, 2014). Additionally, there is a section of the poster which enlightens new parents about the hazardous relationship between infant suffocation and many layers of clothing, soft bedding and pillows (Hamadneh, 2014). The poster will include directions to suitable sleep apparatus that avoids the risk of suffocation. Examples of such devices include the newly developed side- cars, which still allows for close parent-infant contact throughout the night. Moreover, the poster includes a telephone number and website where individuals, can access further information and enquire about SIDS, especially in relation to co-sleeping, suffocation, smoking, alcohol and substance abuse.

The design of the 'Is Co-Sleeping for you?' poster is engaging, displaying solely necessary and relevant information (Grol, 2004). The content of the poster is simple and easy to read so it understood by the wide target audience (Grol, 2004). The colour scheme is blue because it aligns with the

NHS, who are implementing the health intervention. Images, such as diseased lungs and an ill baby, will be shown as an attempt to shock and frighten parents into terminating smoking, drinking and substance abuse (Montazeri and McEwen, 1997). Similar pictures will be exhibited of bedding and suffocation to cause comparable results (Montazeri and McEwen, 1997).

The health intervention is intended for both mothers and fathers that are either planning, expecting or have a new born child. The ultimate target audience is the UK population, yet, initially only parents, infants, health professionals and institutions in Middlesbrough, England. However, if the intervention is successful it may be translated and implemented into other countries. The Middlesbrough programme will be conducted for three to four years. The motivation behind a preliminary small and focused set up is to properly assess the intervention and ensure it is achieving a reduction in SIDS. Middlesbrough was chosen to be the original region that 'Is Co-Sleeping for you?' was used in as it is a low income area with a high number of mothers and fathers who smoke, drink, use substances and are less educated about pediatric care (English Indices of Deprivation, 2015). Therefore, Middlesbrough is evidently an extremely appropriate area to implement the health intervention originally, as it allows an in-depth evaluation of whether 'Is Co-Sleeping for you?' reduces SIDS in relation to such risk factors.

Allocation of 'Is Co-Sleeping for you?'

Initially, the 'Is Co-Sleeping for you?' poster will only be accessible to all health services in Middlesbrough that interact with potential, expecting and

new parents. Some example institutions include hospitals, GPs, prenatal and postpartum clinics. However, after confirmation that the intervention is successful, the poster will be made available to such establishments across the entirety of the United Kingdom. The poster will be positioned on the general walls and waiting room boards of GPs, pregnancy related clinics and hospitals. Health care professionals will be encouraged to deliver and discuss the poster with individuals where they consider it to be beneficial. The format of the poster permits easy conversion of the material, allowing it to be displayed through different platforms such as relevant magazines, TV adverts and social media websites (Stead and Hasting, 1997). Therefore, 'Is Co-Sleeping for you?' will influence a large audience as it is fast and easy for parents to access reliable information, displaying an extremely effective choice of division (Stead and Hastings, 1997).

Expectations of 'Is Co-Sleeping for you?'

Overall, the introduction of 'Is Co-Sleeping for you?' is expected to cause an increase in bed sharing patterns between parents and infant. Health care professionals are predicted to experience more discussions about suitable sleep locations and appropriate apparatus with individuals. Simultaneously, the health intervention is projected to reduce smoking, drinking alcohol, substance abuse in new and expecting fathers and mothers. Additionally, medical specialists are expected to refer a greater number of individuals to cessation programmes and experience more people enquiring on how to attend such schemes. However, the utmost prediction to come from 'Is Co-Sleeping for you?' is a great decrease in the number of SIDS cases.

Limitations of 'Is Co-Sleeping for you?'

The ultimate concern of the intervention is the lack of assurance that the intended target audience will see the 'Is Co-Sleeping for you?' poster within such health care institutions. As an attempt to overcome such issues, the poster has been designed to be bright, colorful and eye catching (Grol, 2004). As discussed, the 'Is Co-Sleeping for you?' poster has been constructed to be adaptable and will be accessible on a range of different platforms including social media websites, magazines and TV advertising (Stead and Hastings, 1997). Another limitation is that, for certain individuals, cultural norms and expectations will continue to override the efforts of intervention (Moon, Hauck and Colson, 2016). Such opinions may cause new parents to feel apprehensive about discussing the option of co-sleeping with health care professionals. Furthermore, the high-level of cultural diversity that exists within both Middlesbrough and the entirety of the United Kingdom pose additional limits. This is an issue because the health intervention will only tackle some individual's beliefs but not others, thus is not universally applicable (Moon, Hauck and Colson, 2016). Therefore, to overcome such barriers, health professionals, whilst discussing 'Is Co-Sleeping for you?', should try to amend the intervention to the individual's personal belief and needs as much as possible.

Evaluation

An evaluation of 'Is Co-Sleeping for you?' is crucial for assessing the success of the health intervention and to attain support from the organisation that introduced it. The initial set up in Middlesbrough will allow for an in-depth

evaluation. Firstly, feedback forms will be given to both medical specialists and parents, to gain a brief overview about how individuals felt about 'Is Co-Sleeping for you?' and gauge whether they enjoyed the process. However, further research methods must be implemented as the feedback forms alone will not measure the impact that 'Is Co-Sleeping for you?' has on behaviour. Those leading the intervention will interview parents involved to gain a thorough understanding of the success of 'Is Co-Sleeping for you?'. Ultimately, it is crucial to assess the number of parents who adopted bed sharing patterns because of the intervention. Such statistics will display whether the parents are adopting the advice given. It is imperative for health professionals to verbally report their opinions of 'Is Co-Sleeping for you?' and to demonstrate the effects of the intervention. These professionals will have the greatest insight into whether the poster caused an increase in the referral to cessation programmes, and furthermore, a reduction of such behaviours from new and expecting mothers and fathers. Verbal feedback from medical authorities is extremely necessary as they can convey behavioural changes and professionally critique the intervention to improve it. Such feedback will indicate whether 'Is Co-Sleeping for you?' is in fact working in a positive manner. Determining whether the health intervention is successful is imperative, and if it is not, it is important to understand why.

Conclusion

To conclude, the health intervention 'Is Co-Sleeping for you?' attempts to inspire a change in newborn sleep-related practices based upon evolutionary history. Such programmes are essential to ensure and enhance, child safety, increasing their wellbeing, and ultimately reducing SIDS. The 'Is Co-Sleeping

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for you? poster is a simple method used to advise new and expecting parents about co-sleeping, and provide them with the relevant information that is necessary to facilitate informed decision making. The contributions that the 'Is Co-Sleeping for you?' poster have on the reduction of smoking, drinking and substance abuse are crucial for both parent's and infant's health. Without 'Is Co-Sleeping for you?', individuals may not realise their different options for their child's sleep location, and what environments are appropriate and non-hazardous.

Words: 2, 943

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