

Eggs or rubber balls?

Identifying babies most vulnerable to sudden infant death

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Take an egg and press its shell. It will be firm to your press. On the other hand, take a rubber ball and press it and it will be soft to your press. When an egg and a rubber ball are dropped together onto concrete, quite the reverse will happen. The firm-feeling egg will be crushed, destroyed, and the soft-feeling ball will bounce back unharmed. This is a good analogy for vulnerability and resilience that may be useful in your antenatal classes.

SUDI and development

Sudden unexpected death in infancy (SUDI) is a developmental condition. It could be argued that all babies are born vulnerable to SUDI; some more so than others, because all babies must pass through infancy. Their resilience builds as they transition through the critical first months of development. Like eggs, vulnerability can be masked until a challenge comes along, such as meeting concrete from a height. For example, a strong-seeming neck, high head lifts and bonny looking baby may mask a weakened arousal response that would need a hypoxic challenge and critical timing in order for the vulnerability to show. Development being a changing state, every sleep needs to be considered vulnerable to SUDI until a baby is six months old.

It matters where you grow

While all babies may need to be considered vulnerable as their vital systems mature, some have a more resilient start than others. The essence of resilience is nurtured during pregnancy. Where you grow makes a difference to how you turn out; how big or small, strong or weak you become. If you were a child wanting the best start in life, what whenua (or placenta) would you choose to nourish and protect you as you develop in your mother's womb? A smokefree one with a rich blood supply, plenty of oxygen and nutrients, and enough resources to support you for forty weeks. Or a smoking one that restricts your food and oxygen, delivers you toxins and is so overworked it may give up on you weeks before you are ready to be born?

Where a child starts to grow will make a difference to how their organs and systems develop, to how their heart, lungs and brain will function, to their internal monitors and settings for staying alive. Smoke-exposed babies are most vulnerable to SUDI yet they may seem just like all the other babies when they are born. The pregnancy care team that includes childbirth educators needs to ensure every baby has the opportunity for a smokefree pregnancy, assisted by nicotine replacement (NRT) or not. NRT-assisted support is cheap and available for women and we need to be sure they have access to it and understand its importance to their baby's survival.

Voice, choice and time

Clearly babies, born and unborn, have no choice about the conditions in which they grow. Childbirth educators, other professionals and informed parents go some way towards giving babies a voice. But what is most compelling is that **babies do not have time**. Opportunities for best care lost or gained in pregnancy and infancy, last a lifetime and that lifetime can be short. Resilience can be built into babies as they develop through optimum pregnancy and infancy care, and childbirth educators can make a difference here that lasts.

Easy to identify

Babies most vulnerable to SUDI are easy to identify. They have mothers who smoke or smoked in pregnancy, or people in their families who smoke. These babies need their very own 'baby bed' every time and place they sleep for their first 1,000 sleeps. There are about 20,000 such babies born each year in New Zealand. These babies must be identified, their families alerted to their increased vulnerability, and a conversation had about ways to protect them in the sleeping environment. In some cases, more than talk will be needed to enable families to take protective action. They may also need to be supplied with a wahakura, bassinette, cot or other 'baby bed' type container to hold the safety of their baby as they sleep.

Summary

Babies most vulnerable to SUDI are smoke-exposed and sharing beds with others when they sleep. While 'face-up + face clear + smokefree' will protect more resilient babies (rubber balls), the fourth principle 'always in own baby bed' is needed to ensure that extra protection for more vulnerable babies (eggs).