

# SIDS and infant sleeping position: audit on the advisory campaign in Malta

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## Abstract

**Background:** The baby's sleeping position is the most important modifiable risk factor in Sudden Infant Death Syndrome (SIDS). The "back to sleep" position is safer than side or prone position.

**Objectives:** To determine what advice midwives and nurses at St Luke's Hospital give to new mothers about the baby's sleeping position; and whether the practice has changed following a series of lectures on SIDS and a focused circular issued by the Department of Health in February 2007.

**Methods:** A questionnaire-based, descriptive, and cross-sectional before-after trial.

**Results:** In 2007, 81% of midwives/nurses advised exclusive back sleeping position, compared to 38% in 2006 ( $p < 0.0001$ ).

**Conclusion:** The audit demonstrates a notable increase in the number of midwives/nurses giving correct advice to the new mothers.

## Key words

Sleeping position, SIDS, Malta

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## Introduction

Medical research in the early 1990s had shown that infants sleeping in the prone position were more likely to suffer a cot death.<sup>1</sup> As a result, educational campaigns were launched to encourage parents to place their babies to sleep either on the side or on the back. The result was dramatic: the number of cot deaths was reduced by half.<sup>2</sup> Recent studies have demonstrated that the side sleep position confers an increased risk when compared to the back.<sup>3-4</sup> This is partly due to the fact that babies sleeping on the side tend to roll to the prone position. Therefore the side sleeping position is no longer recognised as a reasonable alternative and the 'back to sleep' position should be adopted at all times.

## Objectives

The purpose of this audit was to determine what advice relating to the baby's sleeping position midwives and nurses in the maternity unit at St Luke's Hospital gave to new mothers; and whether the practice has changed following a series of lectures on SIDS and the issue of a Department of Health circular.<sup>5</sup>

## Methods

In mid November 2006, a simple questionnaire (Appendix 1) was distributed to the midwives and nurses who were present on the Labour Ward, Postnatal Ward and Special Care Baby Unit (SCBU) during four consecutive shifts. They were asked whether they considered the baby's sleeping position as an important risk factor for SIDS and what advice they give to new mothers on the sleeping position of the baby.

During late 2006 a series of lectures were given to the midwifery and nursing staff of the maternity department. In February 2007, a DH Circular, "Update: Correct Infant Sleeping Position", was issued by the Department of Health, with a clear conclusion stating: "Infants should be placed to sleep in the supine position (entirely on their back). Side sleeping is not as safe as supine sleeping and is not advised."

In August 2007, the same questionnaire was distributed to a corresponding sample of midwives and nurses in the same wards.

## Results

Sixty-five out of 68 questionnaires (96%) were returned from the 2006 study; 74 of 77 (96%) from the 2007 study. These

**Table 1: Advice given by midwives/nurses to new mothers at St Luke's Hospital**

	<b>Back</b>	<b>Side</b>	<b>Side/Back</b>	<b>Prone</b>	<b>Total</b>
2006	23 (38%)	17 (28.5%)	20 (33.5%)	0	<b>60 (100%)</b>
2007	58 (81%)	4 (5%)	10 (14%)	0	<b>72 (100%)</b>

two cohorts amounted to almost 50% of the total number of 150 midwives/nurses employed in the maternity unit during the study period.

94% of respondents in 2006 and 89% in 2007 believed that sleeping position is an important risk factor for SIDS whilst 6 % in 2006 and 11% in 2007 were unaware that sleeping position was a risk factor ( $p=0.5$ ).

The advice given by the maternity staff to new mothers is tabulated (Table 1). In both studies, none of the respondents advised parents to place their baby to sleep in the prone position. In 2006, 38% of midwives/nurses exclusively advised the back sleeping position, compared to 81% in 2007 ( $\chi^2$  (Yates corrected) =22.9,  $p<0.001$ ) (Figure 1).

## Discussion

This audit has clearly demonstrated a notable change in attitude among the nursing and midwifery staff at the maternity department of St Luke's Hospital. The number of midwives/nurses giving the correct advice to mothers has more than doubled in less than a year from 38% to 81% following a simple focused educational campaign. Whether the improvement in correct advice will result in a decrease in cot deaths is difficult to prove because the rate of SIDS is very small in Malta (there were 3 reported deaths due to SIDS over the period from 1995-2007<sup>6</sup>). The study has also shown that a small number of midwives and nurses are still unaware or unconvinced on the importance of the supine sleeping position in infants. About 20% are still advising mothers to place their baby to sleep on the side, or at least, recommending both back or side. This may pose a problem as parents are unlikely to be convinced of the best approach to adopt if they receive conflicting advice from the hospital.

Although respondents were recruited sequentially (from midwifery staff working consecutive shifts on labour ward), and not sampled randomly, any bias was offset since the size of both study cohorts amounts to half the size of the total staff population studied (the total number of midwives and nurses working in the maternity unit is 150), it was likely to be representative of the whole population.

As in previous studies, some of the respondents expressed concern about the possible increased risk of regurgitation and choking if the baby is put to sleep in the supine position.<sup>7</sup> This fear is unfounded - indeed, there is no evidence that the supine position is associated with increased risk of choking. Moreover, since mothers tend to copy the practices that they observe in hospital, at home, it is imperative that newborns in the nursery are placed to sleep on their back.

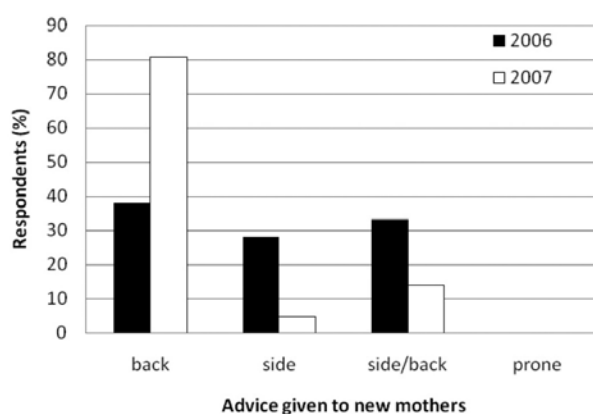
Similarly, it behooves health care professionals involved in the care of the newborn to dispel other concerns relating to the supine sleeping position such as the flattening of the head (positional plagiocephaly). This is a benign and temporary phenomenon; it can also be prevented by (i) encouraging "tummy time" when the baby is awake and observed; (ii), altering the head position during sleep (e.g. one week on the right side, followed by a week on the left); and (iii) avoiding excessive time in car seats, carriers and bouncers.

## Conclusion

Hospital staff should instruct parents who, in turn, must emphasise to secondary care-givers (grandparents, babysitters) that the baby must always be placed to sleep on the back and never on the tummy, since prone sleep increases the risk of SIDS by as much as 18-fold.<sup>8</sup>

**Table 2: Reducing the risk of SIDS; advice to parents <sup>9,10</sup>**

1. Always place your baby on the back to sleep
2. Do not smoke during pregnancy
3. Do not allow smoking around your baby
4. Place your baby on a firm sleep surface
5. Keep the baby's head uncovered
6. Keep soft objects, toys, and loose bedding out of your baby's sleep area
7. Place the baby to sleep in the cot; not in the parents' bed
8. Do not let your baby overheat during sleep

**Figure 1: Advice given by nurses/midwives to new mothers at Karin Grech Hospital in 2006 and 2007**

The midwives and nurses in the maternity department are in a key position to educate parents on safe sleeping practices (Table 2) and should continue to stress the key message: 'Back to Sleep.'

## Acknowledgements

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### Appendix 1

#### SUDDEN INFANT DEATH SYNDROME

##### QUESTIONNAIRE

- |   |   |
|---|---|
| <p>1. What is your professional status?</p> <p><input type="checkbox"/> nurse</p> <p><input type="checkbox"/> midwife</p> <p><input type="checkbox"/> other (specify)</p> <p>.....</p>  | <p>6. If your answer to question (5) is yes, what advice did you give about the baby's sleeping position?</p> <p><input type="checkbox"/> supine (on back)</p> <p><input type="checkbox"/> prone (on tummy)</p> <p><input type="checkbox"/> on side</p> <p><input type="checkbox"/> on side or back</p> |
| <p>2. Where do you work?</p> <p><input type="checkbox"/> nursery</p> <p><input type="checkbox"/> labour ward</p> <p><input type="checkbox"/> scbu</p> <p><input type="checkbox"/> other (specify)</p> <p>.....</p>  | <p>6. Do you think that bed-sharing (baby sleeps with his parents in the same bed) is a risk factor for SIDS?</p> <p><input type="checkbox"/> yes</p> <p><input type="checkbox"/> no</p> <p><input type="checkbox"/> don't know</p>   |
| <p>3. Do you think that baby's sleeping position is an important risk factor for SIDS (cot death)?</p> <p><input type="checkbox"/> yes</p> <p><input type="checkbox"/> no</p> <p><input type="checkbox"/> don't know</p>                                  | <p>7. Do you think that smoking (during pregnancy) is a risk factor for SIDS?</p> <p><input type="checkbox"/> yes</p> <p><input type="checkbox"/> no</p> <p><input type="checkbox"/> don't know</p>   |
| <p>4. What is the safest position to put the baby to sleep?</p> <p><input type="checkbox"/> supine (on back)</p> <p><input type="checkbox"/> prone (on tummy)</p> <p><input type="checkbox"/> on side</p> <p><input type="checkbox"/> on side or back</p> | <p>8. Do you think that home apnoea monitors are effective in preventing SIDS?</p> <p><input type="checkbox"/> yes</p> <p><input type="checkbox"/> no</p> <p><input type="checkbox"/> don't know</p>  |
| <p>5. Have you ever advised mothers on the baby's sleeping position?</p> <p><input type="checkbox"/> yes</p> <p><input type="checkbox"/> no</p> <p><input type="checkbox"/> don't know</p>  | <p>9. Any comments?</p> <p>.....</p> <p>.....</p> <p>.....</p>  |

Thanks!