

# Nurses' Knowledge of Deformational Plagiocephaly and Discharge Instructions for Its Prevention

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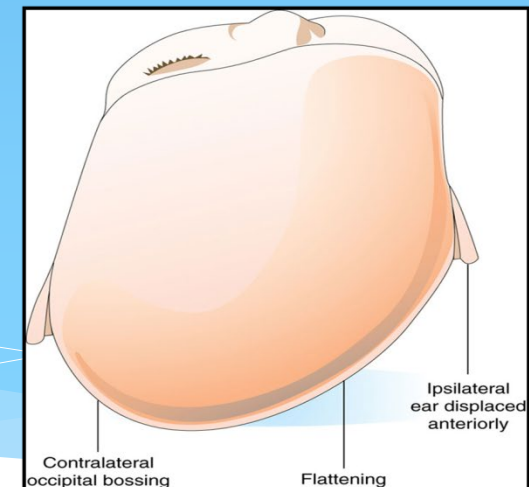
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# Background

- Deformational plagiocephaly (DP) is the most common head shape abnormality in infants.
- Since the “Back to Sleep” campaign in 1992, DP has become more prevalent and the incidence of DP has significantly increased.
- Current prevalence of DP is reported between 37.8% and 46%.



# Background

- Previous study of 115 parents showed:
  - Only 74% of the parents had received information about sleep positioning
  - Only 26% received information about starting TT on the first day after they return home, when infant is awake and supervised to prevent DP.

# Background

- Previous study of 115 parents showed:
  - 74% of parents reported
    - no information on TT
    - being told could begin TT at 2 weeks or  $\geq$  2 months
  - only 26% reported healthcare professional as source of their information

# Purpose

- To explore nurses' self-reported knowledge of
  - DP – what it is, its causes
  - How to use sleep position to prevent DP
  - The role of TT in prevention of deformity
- To determine if nurses are educating parents before discharge

# Methods

- A cross-sectional descriptive study design
- Study sample: 309 Obstetrical, neonatal and pediatric nurses who work at a 801-bed tertiary-care hospital in Dallas, TX.
- The data were collected over a 6-wk period
- 40-item investigator designed and Internet-based questionnaire were used.



# Methods

- 93% of nurses held BSN or MSN degree.
- Average of 12 years nursing experience
  - 10 yrs in current specialty

# Results

- A total of 122 surveys were analyzed (39.4% response rate)
- Most of nurses answered the questions about DP & TT correctly.
- 95% of nurses believe prevention for DP is important for all infants.

# Results (Cont.)

17. At what age should parents begin tummy time for their infants according to the AAP's parental guidance at [www.healthychildren.org](http://www.healthychildren.org)?

	Response Percent
a. On a first day home from the hospital	45%
b. Approximately 2 weeks of age	19%
c. 1 month of age	15%
d. 2 months of age or older	20%

**! Only 45% of nurses knew correct answer !**

# Results (Cont.)

21. How often do you routinely practice the following topics on your unit?

	Always	Often	Sometimes	Rarely	Never
Infants under 1 year of age are positioned supine for sleep	61%	23%	12%	1%	4%
Infants who has not yet started to roll over or crawl are placed prone (tummy time) while awake and supervised	17	32	35	9	7
Teaching parents/or caregivers about DP for infants under 6 months of age prior to discharge	16	16	31	27	10
When discharging patients, how often do you recommend parents or caregivers to place preterm and term infants under the age of 1 year in the supine position for sleep?	73	5	10	8	5

# Results (Cont.)

23. How often do you routinely discuss the following topics during discharge teaching with parents and/or care givers of infants ( $\leq 1$  year of age)? (Please select all that apply)

	Always	Often	Sometimes	Rarely	Never
Placing babies on their back to sleep.	71%	10%	10%	7%	2%
Tummy time should start on their first day home from the hospital while infants are awake and supervised.	23%	11%	25%	25%	16%
Infants should have tummy time 2 to 3 times/day for 3 to 5 minutes each time, and the amount of time should be gradually increased as the infant shows he/she enjoys the activity.	19%	23%	29%	18%	11%

Only 34% knew when to start and 42% knew how often



# Results (Cont.)

**24. How often do you discuss the following activities to parent (s) to help the babies to enjoy tummy time and to reduce the risk of DP?**

	<b>Always</b>	<b>Often</b>	<b>Sometimes</b>	<b>Rarely</b>	<b>Never</b>
Alternate direction of infant's face when placed to sleep.	<b>34%</b>	<b>25%</b>	<b>20%</b>	<b>14%</b>	<b>7%</b>
Alternate which end of the crib you place the baby's feet.	<b>16</b>	<b>19</b>	<b>22</b>	<b>23</b>	<b>21</b>
Place yourself or a toy just out of the baby's reach during playtime to get him to reach for you or the toy.	<b>15</b>	<b>27</b>	<b>29</b>	<b>18</b>	<b>10</b>
Encourage spending time holding the baby upright in parent's or caregiver arms as well as watching her play on the floor, both on her tummy and on her back.	<b>24</b>	<b>32</b>	<b>25</b>	<b>12</b>	<b>7</b>
Encourage breastfeeding; if the baby is bottle-fed, switch the side that she feeds on during feeding (Encourage feeding from opposite site).	<b>38</b>	<b>25</b>	<b>19</b>	<b>14</b>	<b>5</b>
Discourage extended time in freestanding swings, bouncy chairs, stroller and car seats.	<b>19</b>	<b>23</b>	<b>30</b>	<b>21</b>	<b>7</b>

## Results (Cont.)

- Nurses' self-reported general knowledge of DP seemed to be adequate.
- Nurses had inadequate knowledge on preventive measures.
- Nurses were less knowledgeable about when to start TT and strategies for prevention.

# Discussion

- $\geq 55\%$  of the nurses had inadequate knowledge about when to start TT for prevention of DP.
- Only 21 % of the nurses routinely provide discharge instructions that promote TT at home to prevent this condition.
- Nursing discharge teaching on practices to prevent DP are inadequate and inconsistent with the AAP's recommendations.



# Conclusion

- While the nurses believe that preventing DP is important; their self-reported knowledge of DP prevention is inadequate.
- Only 21 % of the nurses routinely advise or provide discharge instructions to parents on how to prevent DP.

## Conclusion (Cont.)

- Parents/caregivers need to be advised when to start TT and strategies for prevention of DP prior to discharge home. This information needs to be reinforced to parent/caregivers before the two-month well-baby clinic.

## Conclusion (Cont.)

- The study results suggest that nursing self-reports of discharge teaching practices to prevent DP are inconsistent, and in some cases in direct conflict with the AAP's recommendations.

## Conclusion (Cont.)

- The results of this study can provide useful information for nurse leaders/educators to plan for nursing education to ensure nurses are able to teach and provide appropriate education for parents to reduce the risk of DP for their infants.

# Questions

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