Peer Reviewed

Clinical Pearl: The Efficacy of Teaching Postpartum Mothers Proper Infant Positioning for Breast Feeding and Skin-to-Skin

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"This SUPC-Prevention Safety Monitoring Program is comprised of staff education and maternal education reinforced by a written handout and an 8x10 colored poster in all postpartum rooms."

In Honor of Nancy Rodriguez, APN, PhD

Introduction:

Over the past seven years, we have been studying and writing about Sudden Unexpected Postnatal Collapse (SUPC) and have presented and published several presentations and papers (1-7). More recently, we have analyzed quality improvement data about Endeavor Health's copyrighted prevention program teaching mothers proper infant positioning (PIP) for breastfeeding and skin-to-skin care. - (6,7) * formerly NorthShore University HealthSystem (NSUHS)

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Methods:

We asked mothers to complete a brief anonymous survey in the postpartum unit. They were not obligated to complete the survey but were told their feedback was vital so we could assess and revise/improve the PIP Program. They were instructed to place the completed survey in the attached envelope and seal it, then drop it into a marked box at the nurse's station. The survey was available in English or Spanish.

In this study of 167 postpartum mothers at two of Endeavor Health's hospitals, we asked the mothers to rate their agreement with the following statements after their Proper Infant Positioning (PIP) training:

1. I feel confident in my ability to hold my infant properly during breastfeeding and skin-to-skin contact
2. I can demonstrate the six steps to ensure that my baby is properly positioned
3. PIP training interrupted time with my baby
4. Whoever is holding my baby (myself or others) should not be distracted by cell phone use and social media
5. I can recognize when I am fatigued and need to ask for help caring for my baby
6. PIP training encouraged me to breastfeed my baby often
7. I feel less anxious about breastfeeding or holding my baby skin-to-skin after PIP training.
8. I recommend the PIP training program
9. PIP training taught me things I did not know
10. I will remember the 10 PIP steps post-discharge

The results of each question are expressed using a Likert scale: Strongly agree, agree, undecided, disagree, strongly disagree, and no answer. Descriptive statistics are used, and a statistically significant result is $p < 0.05$.

Results:

I feel confident to hold my infant during breastfeeding and skin-to-skin:

Agree: 40/166=24%

Strongly agree: 122/166= 73%

Undecided 2/166= 1%

Disagree 1%

No Answer 1%

I can demonstrate the six steps to ensure that my baby is

properly positioned:

Agree: 59/167= 35%

Strongly agree: 75/167= 46%

Undecided: 24/167= 14%

Disagree: 5/167= 3%

No answer: 4/167= 2%

PIP training interrupted time with my baby:

Agree 0/166= 0%

Strongly agree: 9/166= 5%

Undecided: 17/166= 10%

Disagree: 69/166= 42%

Strongly disagree: 64/166= 39%

No answer: 7/166= 4%

Whoever is holding my baby (myself or others) should not be distracted by cell phone use and social media:

Agree 32/167= 19%

Strongly agree 118/167= 71%

Undecided 7/167= 4%

Disagree 3/167= 2%

No Answer 7/167= 4%

I can recognize when I am fatigued and need to ask for help caring for my baby:

Agree 28/167= 17%

Strongly agree 125/167= 75%

Undecided 3/167= 2%

Disagree 3/167= 2%

No Answer 6/167= 4%

PIP training encouraged me to breastfeed my baby often:

Agree 42/167= 25%

Strongly agree 92/167= 55%

Undecided 23/167= 14%

Disagree 4/167= 2%

Strongly disagree 1/167= 0.5%

No Answer 5/167= 3%

I feel less anxious about breastfeeding or holding my baby skin-to-skin after PIP training.

Agree 46/167= 28%

Strongly agree 96/167=59%

Undecided 17/167= 11%

Disagree 1/167= 0.6%

No answer 1/167= 0.6%

When the nurse came in to assess my baby's position, I felt it interfered with my breastfeeding or skin-to-skin session.

Agree 2/167=1%

Strongly agree 6/167=3.5%

Undecided 7/167= 4%

Disagree 66/167= 40%

Strongly disagree 80/167= 48%

No answer 6/167= 3.5%

Recommend PIP training:

Agree 45/163= 28%

Strongly agree 95/163= 58%

Undecided 14/163= 9%

Disagree 1/163= 0.6%

No Answer 8/163= 4%

PIP taught me things I did not know

Agree 55/167= 33%

Strongly agree 72/167= 43%

Undecided 25/167= 15%

Disagree 10/167= 6%

No answer 5/167= 3%

I will remember 10 PIP steps after discharge:

Agree 46/166= 28%

Strongly agree 77/166= 47%

Undecided 29/166= 17%

Disagree 5/166= 3%

Strongly disagree 2/166= 1%

No answer 7/166= 4%

Mothers were more confident in the proper positioning (97%) with skin-to-skin and breastfeeding of their newborn infants post-delivery (80%) and spent more time breastfeeding their infants (80%).

They discussed that PIP taught them things they did not know previously (76% agree/strongly agree vs. 21% undecided or disagree).

"A total of 86% of the mothers would recommend PIP training. In addition, 74% felt they would remember the 10 PIP steps post-discharge from the hospital."

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addition, 74% felt they would remember the 10 PIP steps post-discharge from the hospital. (Table 1)

Proper Infant Positioning (PIP) Training Program:	
Ten steps to keep your baby pink and positioned for *distraction-free* breastfeeding and skin-to-skin contact	
1.	My breast tissue does not cover my baby's nostrils
2.	My baby's head is turned to one side during skin-to-skin contact or directly facing my breast if I am breastfeeding, so I can easily see my baby's mouth and nostrils
3.	My baby's chin is not tucked down into his/her chest, the neck is straight and not bent
4.	My baby's shoulders and chest face me
5.	My baby's lips are pink
6.	If I cover my baby with a blanket, my baby's head is not covered so that I can always see his/her face and nose
7.	If I am holding my baby, I will make sure not to get distracted by texting or posting social media updates, talking on the phone, reading, watching TV, or eating a meal. I will ask someone else to hold my baby or place him/her in the crib if I need to do any of these things.
8.	I know that it is normal to feel fatigued after giving birth, and will make sure to ask the nurse for help if needed
9.	I will use the fatigue scale to determine how tired I feel

Table 1: 10 PIP steps

10.	If I feel very fatigued (***score of 3 or higher on the fatigue scale***) and am alone, I will call my nurse for assistance to place my baby back in the crib, positioned on his/her back, baby's safest position for sleep

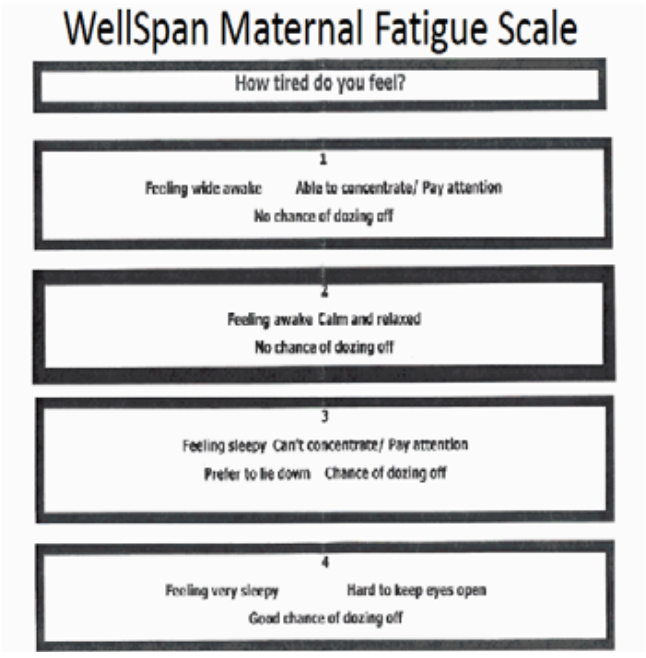

Table 2: Maternal Fatigue Scale

Another important concept was that mothers would ask for relief when they felt fatigued when holding or feeding their baby (92%) (TABLE 2: Fatigue scale WellSpan). However, "nursing noted that not many - if any - patients specifically referred to the Fatigue Scale" when asking for relief (Y.Vovchak, personal communication, June 5, 2024).

"In addition, 90% felt it was important not to be distracted when holding or feeding their babies."

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Discussion:

In general, the postpartum mothers felt that they benefited significantly from the education they received from their nurses, utilizing the PIP handout.

"The nursing staff is trained using the PIP training module devised by Dr. Nancy Rodriguez. This educational module is mandatory yearly for staff so everyone involved with the care of the newborn infant is educated in proper infant positioning and prevention of SUPC (1-7) and methods of maternal education. We are also summarizing our data about the efficacy of the educational module for staff for PIP and SUPC prevention."

The nursing staff is trained using the PIP training module devised by Dr. Nancy Rodriguez. This educational module is mandatory yearly for staff so everyone involved with the care of the newborn infant is educated in proper infant positioning and prevention of SUPC (1-7) and methods of maternal education. We are also summarizing our data about the efficacy of the educational module for staff for PIP and SUPC prevention.

Lessons Learned:

While these findings were encouraging, there were potential missed opportunities for fewer "undecided" responses.

1. More strongly agree or agree responses could have been encouraged with slight revisions of some of the statements in the Mother's Survey. Statements 2 (demonstrate the six steps) and 11 (remember the Ten PIP steps) in the Mother's Survey had some of the highest percentages of "undecided" responses (14% and 17%, respectively). The tone of these statements might have been understood as requiring memorization and recitation of the six and Ten Steps. Similarly, statement 6 (breastfeed my baby often) also had 14% "undecided." PIP education does not directly encourage breastfeeding but rather confidence in the proper positioning of infants during breastfeeding and skin-to-skin holding. Asking pa-

tients to make this connection might have been too far-reaching. Patients might have been more inclined to respond positively if the statements had been worded differently.

2. The opportunity to continue to educate about PIP may have happened more frequently on one site as the mother moves floors from labor and delivery to postpartum. It may have been overlooked at other hospitals where patients do not change rooms/units. Moms do not necessarily get "re-oriented" once they deliver their baby. The workflow is quite different, which may have accounted for some of the "undecided" responses to the survey.

"Finally, simplifying the "Proper Infant Positioning (PIP) Training Program: Ten Steps" handout by eliminating points 9 and 10 (the underutilized Fatigue Scale) could make the material easier to digest for new parents who are already being exposed to so much new information, often in the uncomfortable setting of labor pain."

Perhaps having the survey translated into other native languages may have captured even more data.

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Disclosures: The authors have no disclosures

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