

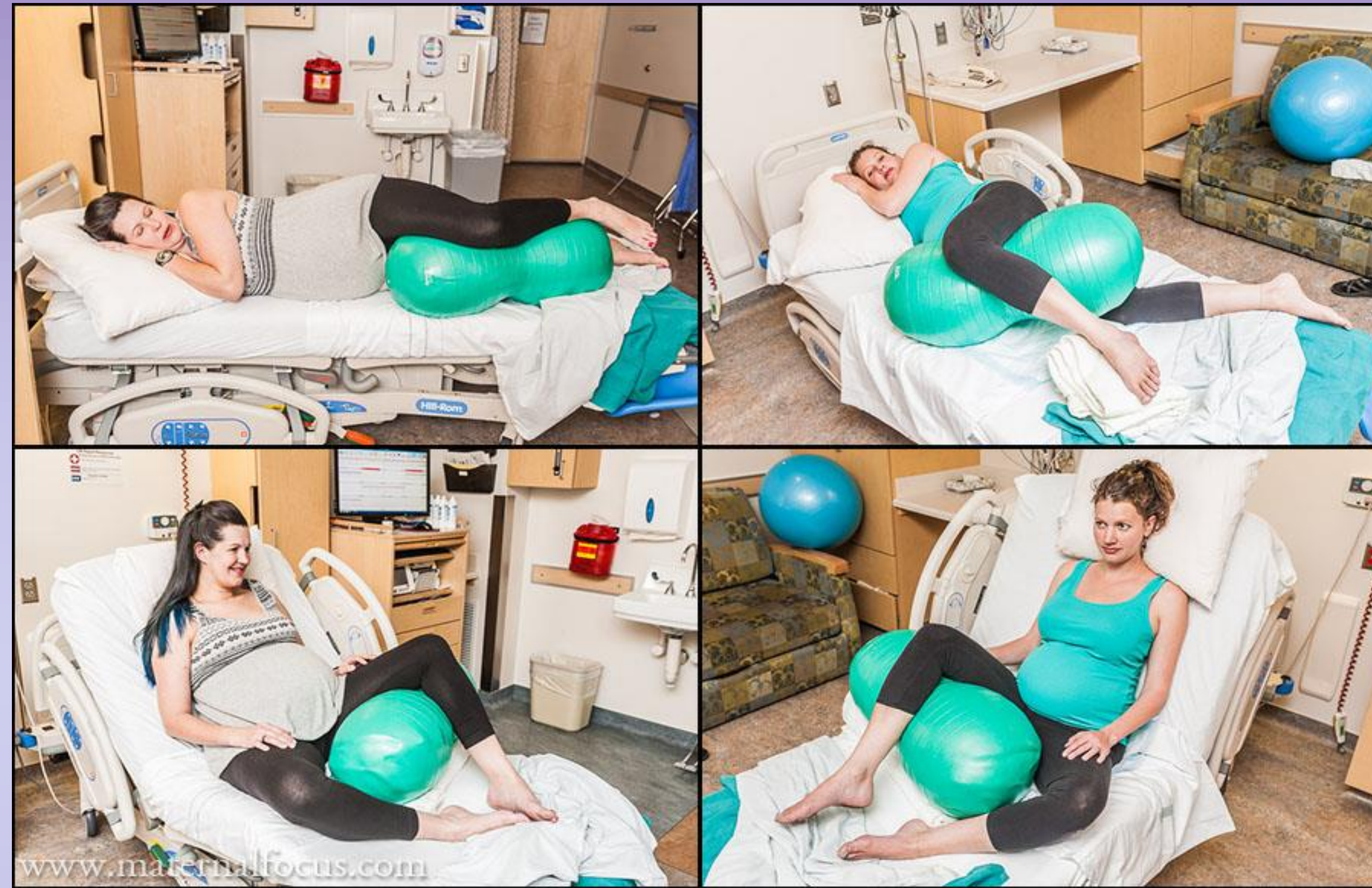
# Nurse Driven Peanut Ball Intervention: Reducing Primary Cesarean Birth Rates

Janna Liston, BSN Nursing Student and Teresa Allen, MSN, RN Instructor  
*Saint Anthony College of Nursing*

## Peanut Ball Utilization During Labor

### Description of Problem

- The American College of Obstetricians and Gynecologists (2014) defined “Labor dystocia as the latent stage of labor lasting longer than 20 hours in nulliparous women and 14 hours in multiparous women” (pp.4).
- National cesarean birth rate was 32.7% of which 26.9% were primary cesarean deliveries (PCD), the leading indication of PCD is labor dystocia. (Osterman, 2014)
- Epidural analgesia is an effective intervention for pain relief during labor, however shown to slow labor progression by 40-90 minutes (Tussey, Botsios, Gerkin, Kelly, Gamez, Mensik, 2015).
- Currently there is a lack of effective interventions in identified cases of labor dystocia.



### Purpose and Rationale

- Identify and utilize a non-invasive, non-pharmacological nursing intervention that will decrease primary cesarean delivery rates when labor dystocia is identified.
- Identify an effective nursing intervention that can be utilized after epidural analgesia has been administered.
- “The Healthy People 2020 cesarean birth rate target is 23.9% for low-risk full-term women with a singleton, vertex presentation” (Tulley et. al., 2015).

### Synthesis of the Evidence

- Use of a peanut ball in laboring women receiving epidural analgesia reduced the length of the first and second stages of labor and decreased the number of cesarean births.
- Peanut ball use as compared with standard nursing intervention, did significantly reduce the length of labor, without adverse neonatal outcomes
- Women with peanut balls placed between their legs experienced increased pelvic diameter and, in turn, had more room for the fetus to descend.
- Peanut ball is a low-risk, low-cost nursing intervention that is becoming more and more widely available promotes positive labor outcomes and reduces the duration of the delivery process
- Babies in an occiput posterior (OP) position can increase the length of the second stage of labor and the rate of operative delivery; studies have shown use of the peanut ball have enhanced rotation of fetus into optimal birthing position (Lieberman, 2013; Caseldine, 2013).

### Proposed Change in Practice

- Use the peanut ball intervention in identified cases of labor dystocia, unless contraindicated.
- Transform the labor nurse’s perception of intervention
- Provide education towards the identification of labor dystocia and use of peanut ball
- Teaching this technique in childbirth class can empower women to discuss with care providers and birth places the use of peanut ball in birth plan

### Evaluation

- Peanut ball use documented in the patient’s electronic medical record.
- Chart review to assess if the peanut ball was utilized in identified labor dystocia.
- Rate of vaginal versus cesarean delivery when peanut ball used
- Continuous monitoring of primary cesarean rate

### References

1. Carseldine, W. J., Phipps, H., Zawada, S. F., Campbell, N. T., Ludlow, J. P., Krishnan, S. Y. and De Vries, B. S. (2013), Does occiput posterior position in the second stage of labour increase the operative delivery rate?. *Australian and New Zealand Journal of Obstetrics and Gynaecology*, 53: 265–270. doi: 10.1111/ajog.12041
2. Osterman, J.K., Martin, J.A. (2014). Trends in low-risk cesarean delivery in the United States, 1990-2013. *National Vital Statistics Reports*, 63(6), 1-16.
3. The American College of Obstetricians and Gynecologists, The Society for Maternal-Fetal Medicine. (2014). Obstetric care consensus number 1: Safe prevention of the primary cesarean delivery. Retrieved from [www.acog.org/Resources-And-Publications/Obstetric-Care-Consensus-Series/Safe-Prevention-of-the-Primary-Cesarean-Delivery](http://www.acog.org/Resources-And-Publications/Obstetric-Care-Consensus-Series/Safe-Prevention-of-the-Primary-Cesarean-Delivery)
4. Tussey, C.M., Botsios, E., Gerkin, R.D., Kelly, L.A., Gamez, J., & Mensik, J. (2015). Reducing length of labor and cesarean surgery rate using a peanut ball for women. *Laboring with an epidural. The Journal of Perinatal Education*, 24(1), 16–24.