AMERICAN COLLEGE of NURSE-MIDWIVES
With women, for a lifetime®

POSITION STATEMENT

Prevention of Preterm Labor and Preterm Birth

The American College of Nurse-Midwives (ACNM) affirms the following:

- Spontaneous labor and birth at term provides substantial benefits to the mother, newborn, and society. Preterm birth (prior to 37 weeks) places the infant at risk of initial and long-term consequences of prematurity.
- Every woman deserves access to comprehensive, holistic, evidence-based, prenatal care that includes ongoing screening for preterm labor symptoms, timely interventions that may prevent preterm birth, and strategies and treatments that may improve outcomes for preterm infants.
- Providers of maternity care services should offer comprehensive education regarding prevention of prematurity, including symptom recognition, detection, and treatment strategies.
- Evidence-based strategies that can reduce the risk of prematurity should be disseminated and used in all settings that provide maternity care services. Research indicates that midwifery led continuity models of care reduce the rate of preterm birth.[1] Group prenatal care is a provision of care that shows promise in decreasing risk of preterm birth. On-going research continues to link this model of care with risk reduction strategies that may influence gestational age at birth.[2]
- Smoking cessation education should be initiated when indicated. Smoking during pregnancy is strongly related to preterm birth. Women who stop smoking early in pregnancy have an increased chance of carrying their pregnancy full-term.[3]
- Application of evidence-based clinical approaches to effectively screen women at potential risk for preterm birth should be accessible and available to every woman, including strategies to assess cervical length in order to implement timely prevention strategies.
- Progesterone therapy shows promise in reducing the rate of preterm birth.[4] This therapy should be accessible for selected women at risk for preterm birth. Antenatal corticosteroids significantly improve neonatal outcomes and should be administered if birth is likely within the next 7 days.[5]
- Consistent with the ACNM position statement on induction of labor,[6] in order to prevent iatrogenic prematurity, induction should be limited to evidence-based, medical indications and the use of elective inductions should be discouraged, and never offered prior to 39 weeks gestation.
- Collaborative reviews such as Fetal and Infant Mortality Reviews and/or formation of a Perinatal Quality Collaborative, are a tactical way of identifying causational trends in preterm birth in order to initiate strategies to decrease the rate of preterm birth, community, state and country wide.

Background

Preterm birth, defined as birth that occurs between 20 and 37 weeks of pregnancy, is a leading cause of neonatal morbidity and mortality in the United States.[7] Preterm labor is defined as regular contractions that result in cervical change prior to 37 weeks gestation.[5] In 2016, the preterm birth rate in the United States was 9.6%.[7] Significant disparities exist in the US with the preterm birth rate among black women being 13.3%, nearly 50% higher than that of white women.[7]

Prematurity accounts for more than 70% of neonatal deaths and is responsible for nearly half of all long term neurologic disabilities in the United States.[8] Despite advances in research and technology that improve outcomes, a newborn that is born preterm is still vulnerable to long term complications and sequelae that persist over the course of a lifetime.[8] The cost associated with prematurity is at least $26.2 billion per year.[9] In an analysis for the March of Dimes, Thomson Reuters found that the care of preterm infants and their mothers cost 4 times more than birth without complications.[10]

Midwives provide care to women from a wide range of socioeconomic backgrounds, and caring for vulnerable women remains a major focus for many midwifery practices. In a systematic review including 16 studies, midwifery led continuity models of care decreased the risk of birth prior to 37 weeks.[1] Prenatal care and education programs designed to support women, such as Centering Pregnancy, are associated with decreased rates of preterm labor and birth and are consistent with the midwifery model of care. This evidence-based approach to the provision of prenatal care services should be expanded into all maternity care settings so more women may benefit from this approach to reducing prematurity risk.

The risk factors for prematurity are numerous and varied, encompassing preexisting conditions, conditions associated with pregnancy, psychosocial stressors, and demographic factors. Psychosocial and behavioral factors may have a mediating effect on biomedical determinants and may significantly contribute to the disparities that have been noted in vulnerable populations.[7] The interaction of genomic, social, and biological risk factors and the impact on prematurity is not well understood and requires continued evaluation.[10]

Despite all that is understood about risk factors, they are not highly predictive.[5,8] All women, regardless of pre-existing risk factors, should receive information and education regarding prevention of prematurity and information regarding the symptoms of preterm labor. Evidence-based methods of identifying women at risk for premature labor, including ongoing risk assessment at each visit, screening women with preterm labor contractions using fetal fibronectin (fFN) testing, and screening using cervical length measurement techniques should be accessible in all practice settings.[5,7,8] These clinical strategies should be provided in conjunction with comprehensive education that includes prevention information, risk based assessment and symptom detection information, and resources aimed at reducing the risk of premature birth.

The use of 17 hydroxy-progesterone has been documented in some, but not all studies, to be effective in decreasing the rate of recurrent preterm birth.[11,12] In addition, several studies have demonstrated that the use of vaginal progesterone gel in varying concentrations has been effective in decreasing preterm birth rates.[5,10,11] In February 2011 the Food and Drug

Administration (FDA) approved the injectable form of progesterone for the prevention of preterm birth. Progesterone gel continues to be studied and may be as, or more effective than injectable[12], but to date, has not been approved by the Food and Drug Administration. Progesterone for prevention of preterm birth should be available to women for whom there is an indication, regardless of their insurer.

Reduction in rates of preterm birth reduces suffering and costs related to health care, education, and social services. Continued comprehensive research is needed to identify effective strategies to reduce preterm birth that include identifying risk factors that are inclusive of the social determinants of health. Midwifery care continues to be associated with lower preterm birth rates and a realization of health care cost savings.

REFERENCES

1. Sandall, J., Soltani, J., Gate, S., Shennan, A., Devane, D. (2013). Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database of Systematic Reviews, Issue 8, Art. No.: CD004667.
2. Catling, C.J., Medley, N., Foureur, M., Ryan, C., Leap, N., Teate, A., Homer, C.S.E. Group versus conventional antenatal care for women (Review). Cochrane Database of Systematic Reviews 2015, Issue 2. Art. No.: CD007622. DOI: 10.1002/14651858.CD007622.pub3.
3. McCowan L.M., Dekker, G.A, Chane, E., et al: Scope consortium, Spontaneous preterm birth and small for gestational age infants in women who stop smoking early in pregnancy: Prospective cohort study. BMJ. 2009;338;1081,Erratum in BMJ.2009.338:b1558
4. Dodd, J.M., Jones, L., Flenady, V., Cincotta, R., Crowther, C.A. Prenatal administration of progesterone for preventing preterm birth in women considered to be at risk of preterm birth in women considered to be at risk of preterm birth (Review). Cochrane Database of Systematic Reviews 2013, Issue 7. Art. No.: CD004947. DOI: 10.1002/14651858. CD004947.pub3.
5. American College of Obstetricians and Gynecologists. Management of preterm labor. Practice Bulletin No. 171. Obstet Gynecol 2016; 128:e155–64.
6. American College of Nurse-Midwives. Induction of labor. Position statement. Revised September, 2016. Accessed December 6, 2017. At http://www.midwife.org/ACNM/files/ACNMLibraryData/UPLOADFILENAME/000000000235/Induction-of-Labor-2016.pdf
7. March of Dimes. Peristats. http://www.marchofdimes.com/peristats. Accessed June 6, 2017.
8. Howson CP, Kinney MV, McDougall L, Lawn JE. Born Too Soon: Preterm birth matters. *Reproductive Health*. 2013;10(Suppl 1):S1. doi:10.1186/1742-4755-10-S1-S1.
9. The impact of premature birth on society. http://www.marchofdimes.org/mission/the-economic-and-societal-costs.aspx. Updated October 2015. Accessed July 18, 2017.
10. March of Dimes Prematurity Collaborative. Retrieved from http://www.marchofdimes.org/professionals/prematurity-campaign-collaborative.aspx. Accessed July 18, 2017.
11. O'Brien J, Lewis D. Prevention of preterm birth with vaginal progesterone or 17-alpha-hydroxyprogesterone caproate: a critical examination of efficacy and safety. Am J Obstet Gynecol, 2016 214 (1) 45-56, ISSN 0002-9378, https://doi.org/10.1016/j.ajog.2015.10.934.

12. Nelson D, McIntire D, McDonald J, Gard J,Turrichi P, Leveno K. 17-alpha Hydroxyprogesterone caproate did not reduce the rate of recurrent preterm birth in a prospective cohort study, Am J Obstet Gynecol, 2017, 216 (6) 600.e1-600.e9, ISSN 0002-9378, https://doi.org/10.1016/j.ajog.2017.02.025.

Source: Division of Standards and Practice Clinical Standards and Documents Section
Approved by the ACNM Board of Directors: June 2012
Reviewed & Updated March 2018