

14 September 2012

From: Dr. Martin McCaffrey

To: CFTF

Subj: Proposal to Inform Women of Child Bearing Age of the Association of TOP and Preterm Birth

## **Problem**

Induced abortion or termination of pregnancy (TOP), has been unequivocally associated with future preterm births. The challenge and opportunity for those concerned with perinatal public health is to communicate this risk to women of child bearing age. Premature birth is an enormous public health problem in North Carolina and nationally. Infant mortality in North Carolina is largely driven by exceedingly high rates of premature birth. In 2010 premature birth was the primary etiology for 24% of North Carolina infant mortality.<sup>1</sup> In addition to mortality, premature birth results in multiple medical morbidities for surviving infants, including cerebral palsy.

The association of TOP with prematurity, especially extremely premature birth (<32 weeks), has been reported extensively in over 125 publications.<sup>2</sup> Dr. Jay Iams, IOM Preterm Birth Committee member has stated, "Contrary to common belief, population-based studies have found that elective pregnancy terminations in the first and second trimesters are associated with a very small but apparently real increase in the risk of subsequent spontaneous preterm birth."<sup>3</sup> Klemetti et al recently published an extensive analysis from Finland which demonstrated a significant and dose dependent response of very preterm birth to prior TOPs.<sup>4</sup> Over the last three years two meta-analyses have reported not only an association of prematurity with one TOP, but a dose-dependent Swingle et al. reviewed 21 studies and reported an increased risk of 64% for very preterm birth after one TOP.<sup>5</sup> Shah et al. reviewed 37 studies and reported an increased risk for future preterm birth of 36% after 1 TOP. Two TOPs increased the risk for a preterm birth by 93%.<sup>6</sup> There are no meta analyses or significant studies which dispute this association.

Once an abortion has occurred it might remain an immutable risk factor for future prematurity. The association of TOP with prematurity, as an "immutable risk factor", was reported in the 2006 Institute of Medicine (IOM) report Preterm Birth: Causes, Consequences, and Prevention.<sup>7</sup> The impact of TOP on prematurity, however, could be similar to the risk of lung cancer developing as a result of smoking. If the behavior or exposure ends, over time the risk for an unwanted morbidity (preterm birth or lung cancer) wanes. While it is uncertain whether abortion is a lifelong immutable and unchangeable risk factor for future preterm birth, it is indisputable that measures which reduce an initial or subsequent TOP will reduce the likelihood of a woman having a future preterm birth.

## **Magnitude of the Problem in North Carolina**

An analysis of the impact of TOP on preterm birth and its morbidities in North Carolina was performed in 2008 by the Fiscal Research Division of the North Carolina General Assembly. The basis for this analysis was the methodology published by Calhoun et al in 2005.<sup>8</sup> In this article the authors concluded that 35.1% of US preterm births may be associated with a history of a prior TOP. The analysis performed reported that annually in North Carolina TOP is associated with 745 early preterm births, 379 preterm

deliveries resulting in death, 119 preterm infant deaths and 32 cases of very low birth weight infants suffering cerebral palsy. These estimates, using inflationary data to update fiscal impact to reflect 2012 dollars, were revised in a September 2012 Fiscal Research Division report. The attributable cost-consequence contribution of TOP to initial neonatal hospital costs resulting from preterm birth is now estimated to be \$46,683,899. The total TOP attributable cost consequence cost estimate for cerebral palsy cases is now estimated at \$52,174,795. The total induced abortion attributable cost consequence cost estimate annually in North Carolina is \$98,858,694. (Fiscal Reports available for review)

The association of TOP and prematurity potentially impacts all North Carolinians, but African American women use a disproportionate amount of abortion services. Based on the NC State Center for Health Statistics (NCSCHS) for 2010, African American women have a TOP rate that is three times that of whites. This dramatically elevates the risk for prematurity, especially very premature births, in the black population. NCSCHS 2010 data reports a rate of black very preterm birth that is 2.5 times the white very preterm birth rate. This is not to presume that the sole reason for the disparity in prematurity rates between blacks and whites is a history of prior TOP. The prevalence of abortion in the black community is, however, an undeniable factor in the disparity that exists in very preterm births.

We employ multiple interventions as a state to reduce preterm birth rates. The CFTF has advocated the use of 17P, which while a very worthy intervention, will impact only a small percentage of the population at risk for prematurity. Several programs aimed at smoking prevention for pregnant mothers have been supported by the CFTF. Amongst the reasons we cite for expectant mothers to quit smoking is the risk for prematurity. We should continue to encourage these efforts but the literature demonstrates and the IOM Report states that the relationship of cigarette smoking to preterm birth is “rather modest and not entirely consistent.” As we continue to advise against smoking during pregnancy, our commitment to public health requires we fully inform and educate women of child bearing age regarding the increased risk of preterm birth after one TOP, and the escalating risk that results from multiple TOPs.

The state has a duty to inform regarding public health threats and we have done so in the past to counter a dangerous albeit less prevalent concern. We identified the abandonment of an unwanted infant as a danger to the public welfare and the NC General Assembly in 2001 passed the Safe Surrender Law. This law allows a mother to surrender a newborn to a responsible adult without fear of criminal prosecution. Legislation in 2007 enacted laws to require local boards of education to have policies to ensure that students in grades nine through twelve receive information each year on the procedure for lawfully abandoning a newborn baby. The demonstrated association of TOP with prematurity mandates similar decisive action.

## **Proposal**

The education of the public regarding the association of preterm birth and TOP should be mandated in a number of venues. The Woman’s Right to Know Act mandates that abortion providers disclose the risks for an abortion, including the risk for a future preterm birth. Spreading knowledge regarding this risk to women of child bearing age *before* they engage in risky sexual behavior, and then choose to seek an abortion, might influence the choices they make.

The State of North Carolina has rightfully determined it is in its best interests that we fully educate high school students regarding behaviors which will adversely affect their reproductive health. The North Carolina Essential Standards Health Education High School curriculum should require instruction regarding the risks of TOP and prematurity. Student clinics at Universities in the North Carolina Higher Education system should be required to provide notify students of the TOP and prematurity association. Department of Public Health Clinics and Medicaid Pregnancy Medical Home Clinics should be required to disclose to clients the link between TOP and future preterm births.

It is requested that the CFTF support the development of legislation which mandates the dissemination of information regarding the risk for a future preterm birth after a TOP, and the further elevation of that risk after multiple TOPs. These efforts should be conducted in the noted settings and other appropriate settings as they are identified.

### **Proposed Solution and Barriers**

The proposed solution is legislative. There should be no barriers to instituting this solution. While the evidence for the abortion and prematurity link has existed for decades, meta-analyses published over the last 3 years have confirmed this association. Resistance might come from pro-abortion groups but the science is clear. TOP is associated with prematurity. As Time Magazine reported in 2007, ““Women need to be informed about these risks.”<sup>9</sup>

### **Evidence Supporting This Solution**

The Woman’s Right to Know Act which mandates that abortion providers disclose the health risks for TOP, including the increased risk for a future preterm birth. Informing women of this risk at the time they are considering abortion is an ethical obligation, but this knowledge might influence sexual choices if it was known that TOP increases the risk for a future preterm birth. In North Carolina we have conducted numerous campaigns to decrease maternal smoking. The Women and Tobacco Coalition for Health (WATCH), along with other organizations, has continuously pursued the public health obligation to inform North Carolina women of the modest risk smoking may pose for preterm birth. The magnitude of the perinatal public health impact of the abortion prematurity link demands similar educational efforts.

### **Who Supports or Opposes This Approach**

This from Shah et al., authors of the critical meta-analysis on this topic “Induced termination of pregnancy and low birthweight and preterm birth: a systematic review and meta-analyses”:

“This information is important from public and health practitioners’ point of view. Estimates in the 1970s indicated that more than a million abortions are performed in the US per year. Of these, more than 75% of women wish or get pregnant again. These women should know the risks associated with I-TOP not only for their health but also for their future reproductive potential. A properly obtained consent legally mandates explanation of these risks to women and ensuring their understanding. Potential areas for knowledge transfer include education of girls and women enrolled at schools or colleges, during routine visits to family doctors or specialists and finally when counseling women seeking abortion.”<sup>6</sup>

American College of Obstetrics and Gynecology (ACOG) has issued no recent statements on long term complications of TOP. The ACOG standing statement, issued in an amicus brief in 2006, reports that there are “no long term risks for future pregnancies, future medical problems, or future psychological problems after an induced abortion.” Of note an ACOG patient brochure on FAQ regarding the risk for future pregnancies after a TOP states, “Most experts agree that one abortion does not affect future pregnancies.”<sup>10</sup>

The American Association of Prolife Obstetricians and Gynecologists (AAPLOG) recognizes the association of TOP and prematurity. AAPLOG recommends full disclosure of this risk to women and a public health education program alerting women to the impact of induced abortion on a future pregnancy. Their statement follows:

“AAPLOG calls upon the involved medical disciplines, in particular perinatologists (MFMs) and neonatologists, to recognize this reality, and to act in the best interest of the women and babies who would be at risk. Public education and adequate informed consent are an essential place to start. But all physicians caring for women must be cognizant of this preventable risk factor, and educate their vulnerable patients accordingly. Simply ignoring induced abortion as a risk factor for subsequent premature birth is not an acceptable standard of care.”

It is possible that Planned Parenthood and other TOP service providers would oppose such widespread education of women regarding the risk for future preterm birth after a TOP.

### **Why Now?**

Prematurity is epidemic in North Carolina. The potentially avoidable annual death of 119 infants and development of 32 new cases of cerebral palsy in North Carolina requires that we act now to begin informing women of child bearing age about this association.

### **Presenters**

Dr. John Thorp, Dr. Watson Bowes and Dr. Marty McCaffrey

### **Interested Groups**

March of Dimes and LEARN (Life Education and Resource Network)

## References

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