

OBJECTIVE AND METHODS

BACKGROUND

Most people are familiar with gestational-age specific neonatal mortality RATE.

There are no data on the outcome of pregnancies comparing the mortality risk whether intra-or extra-uterine for each gestational age.

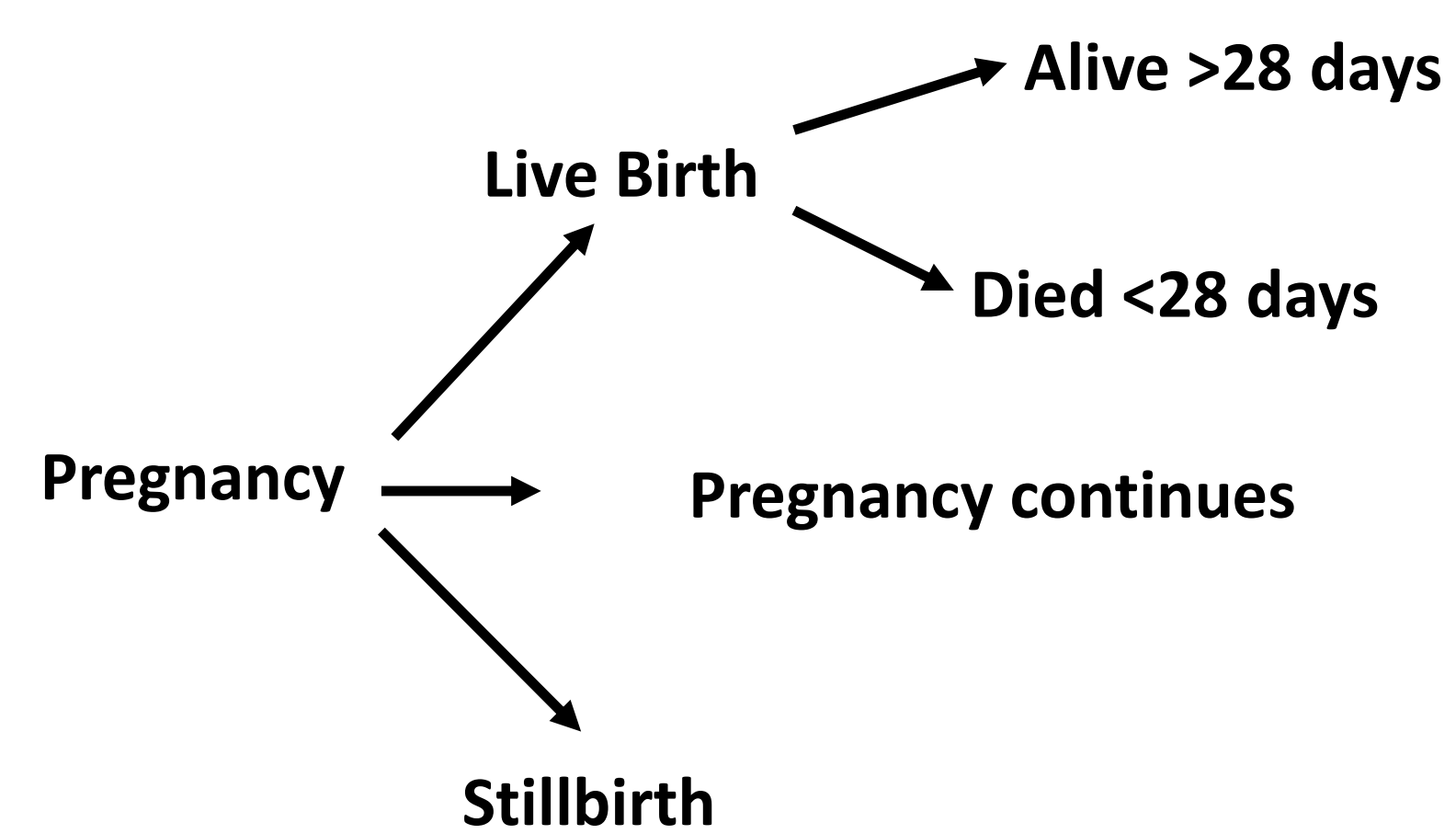
OBJECTIVE

To compare Stillbirth RISK vs Neonatal Mortality RISK per 1000 pregnancies at each gestational age from 22 - 42 weeks.

DESIGN/METHODS

1. NCHS linked birth and death files for 1999-2000 were used.
2. Variables used in the analysis were clinical gestational age, live births, neonatal death (ND) at less than 28 days of death, and stillbirth (SB) more than and equal to 20 weeks.
3. SB risk (SBR) was calculated as SB for each gestational age per 1000 total births (TB) (total live births and total stillbirths) at risk.
4. The neonatal mortality risk (NMR) was calculated as ND per 1000 TB at risk.

At each gestational week, every pregnancy has several potential outcomes:



FOR EACH GESTATIONAL WEEK OF PREGNANCY

$$\text{Neonatal Mortality Risk} = \frac{\text{Neonatal Death <28 days} \times 1000}{\text{Pregnancies}}$$

$$\text{Stillbirth Risk} = \frac{\text{Stillbirth} \times 1000}{\text{Pregnancies}}$$

$$\text{Relative Risk} = \frac{\text{Stillbirth}}{\text{Neonatal Death <28 days}}$$

RESULTS

RESULTS

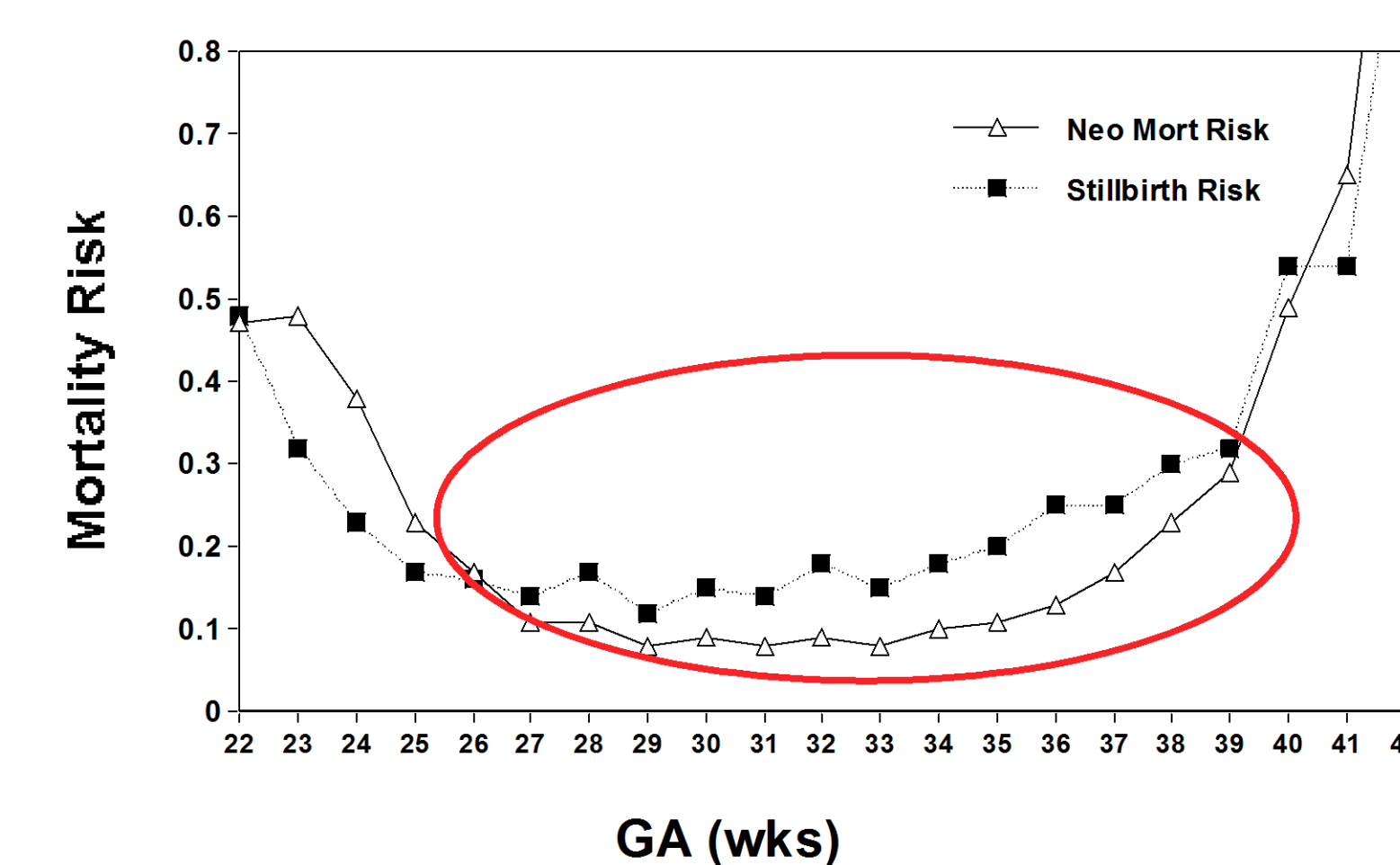
1. During 1999-2000 total pregnancies at risk were 8,076,923 comprising 8,025,028 live births and 51,895 stillbirths for GA 20-46 weeks.
2. SBR was higher than NMR for every GA except for 23-25 weeks.
3. There was no difference for mortality in GA 41-43 weeks; however, at 44 wks SBR becomes significantly higher.
4. Analysis for GA>44 was not possible due to very small numbers

RESULTS

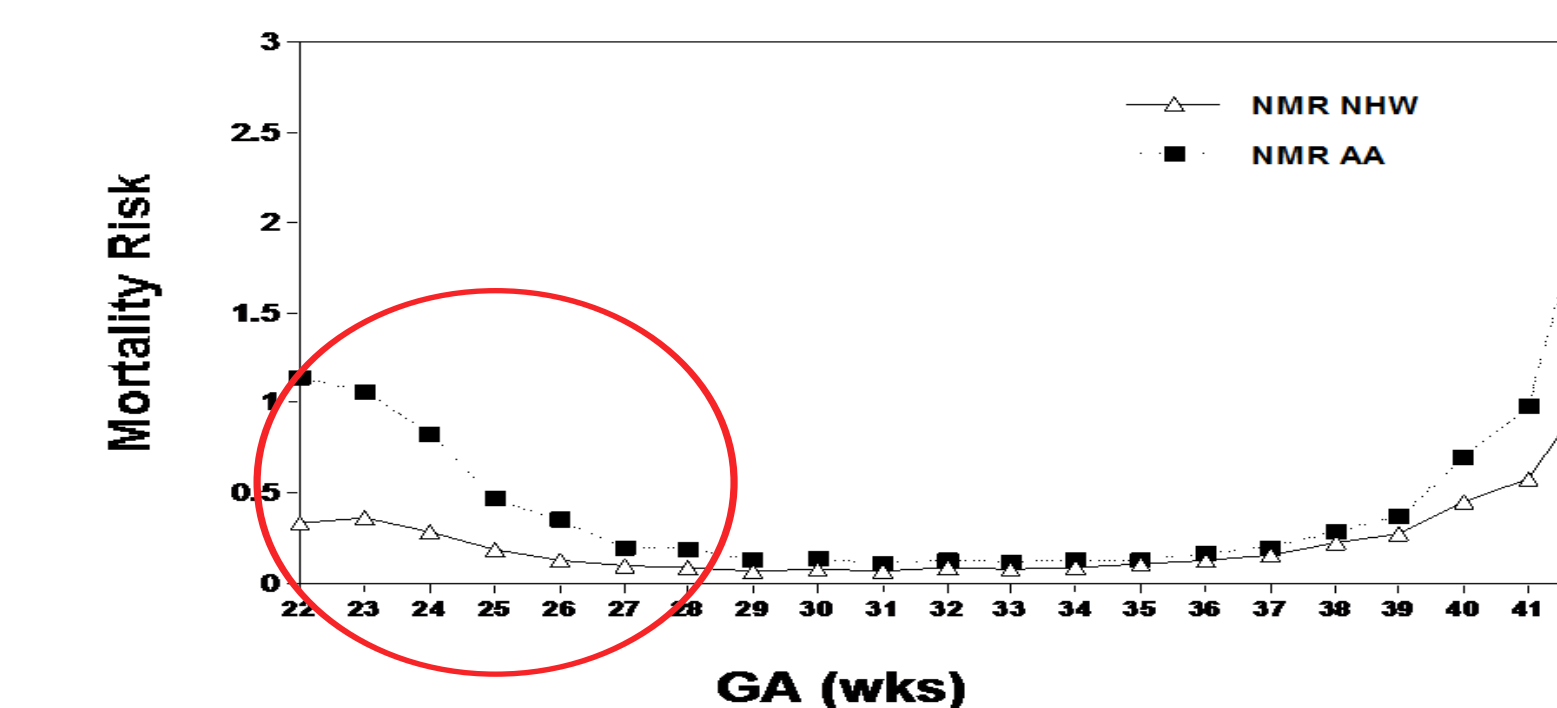
There were 8,076,923 pregnancies > 19 wks gestation in the period 1999-2000. Of these, data linking pregnancy/birth/death were available for 6,902,552.

Live births	6,868,672
Stillbirths	33,880
Total	6,902,552
Neonatal deaths	28,129

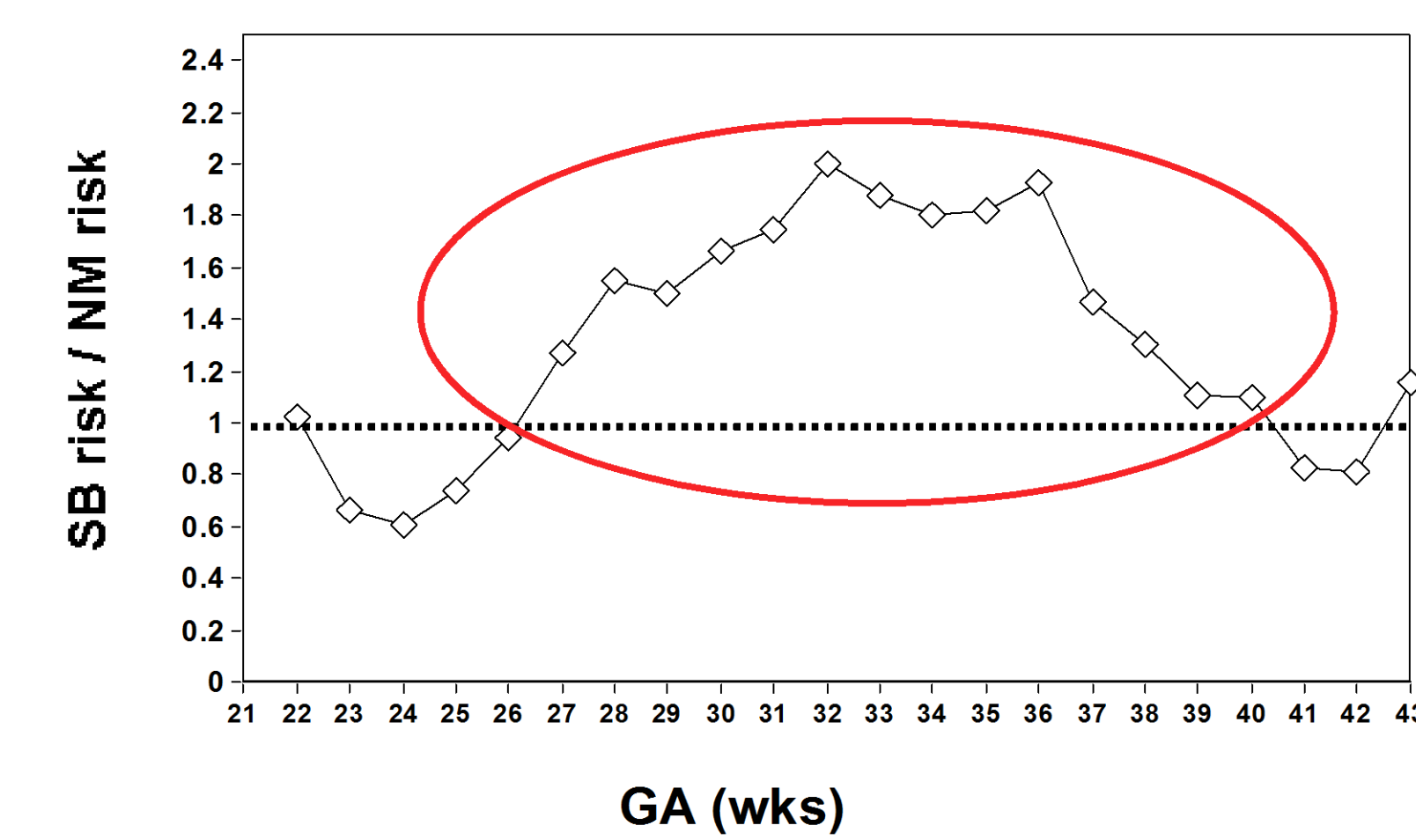
Neonatal Mortality Risk vs Stillbirth Risk



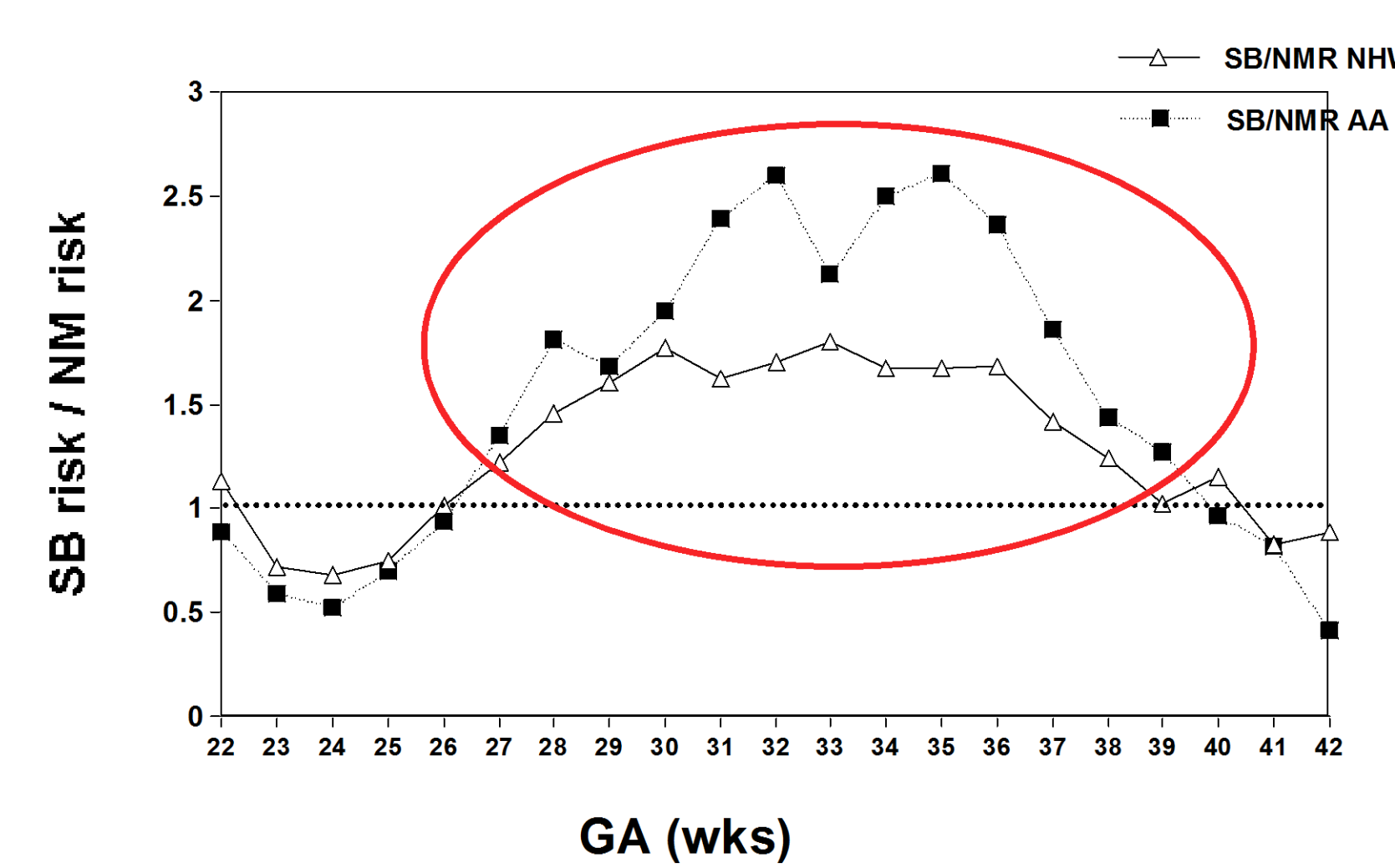
Neonatal Mortality Risk: NHW vs AA



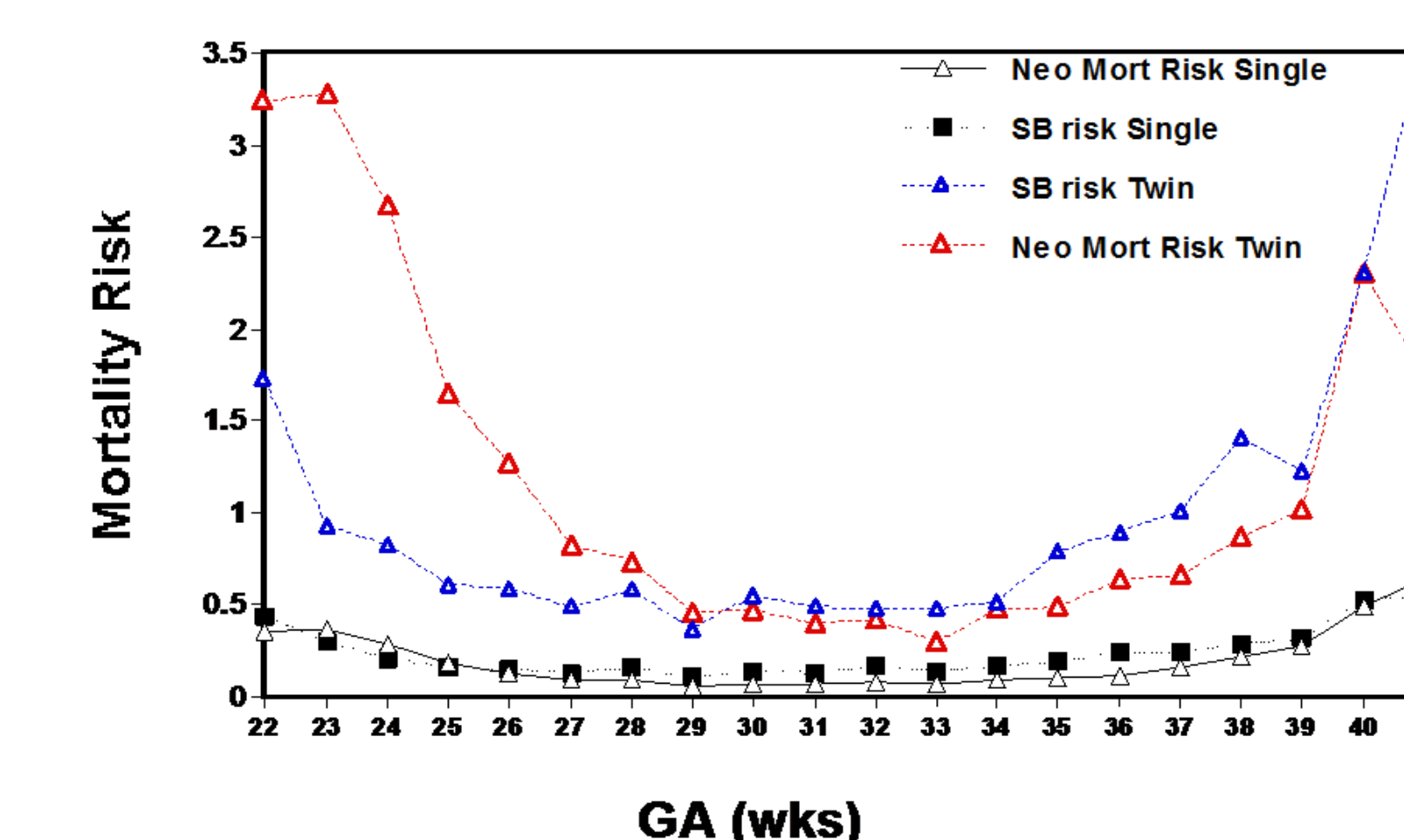
Ratio of Stillborn Risk to Neonatal Mortality Risk



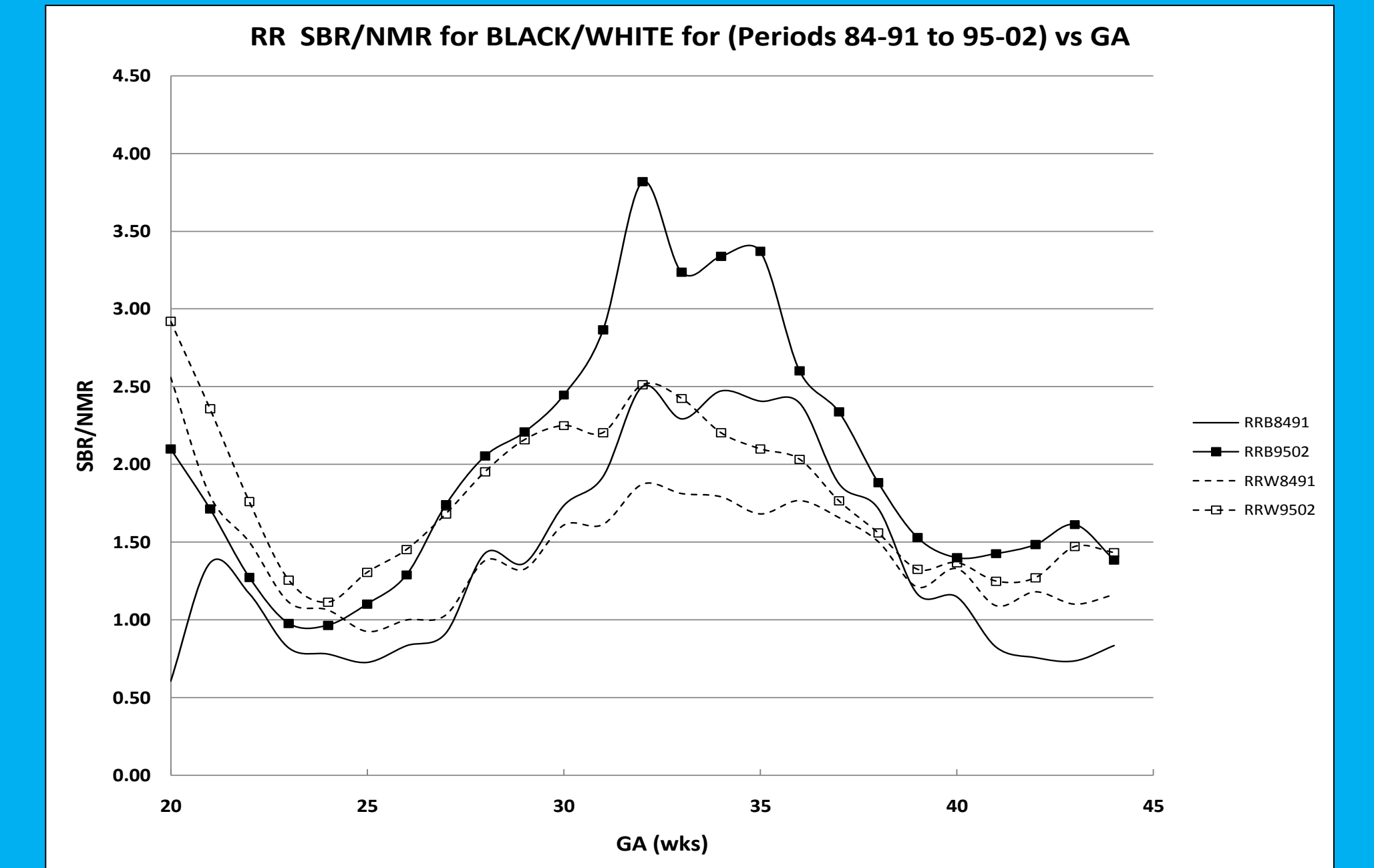
SB risk / NM Risk AA vs NHW



Neo Mort Risk vs SB risk for Singletons vs Twins



RESULTS



CONCLUSIONS

This is the first study we are aware of that compares the risk of delivering a stillbirth with neonatal death using a common denominator of prevailing pregnancies at each gestational age.

1. Fetal life *is* riskier than newborn life:
 - Stillbirth risk is higher than Neonatal Mortality Risk for every gestational age between 22 - 44 wks, except 23-25 wks.
2. Compared to NHW, AA have a higher:
 - a. Stillbirth risk
 - b. Neonatal Mortality risk
 - c. Stillbirth risk / Neonatal Mortality risk
3. Twins have a much higher Neonatal Mortality Risk than do singletons, due to the increased rate of prematurity in twins.

4. NMR for W significantly improved during (95to02).
5. The ratio of SBR/NMR increased for both W and B during 95to02 period due to improvement in NMR.
6. GREATER EMPHASIZES SHOULD BE ON PRENATAL CARE AND REDUCING STILLBIRTHS.
7. CONTINUE THE PREGNANCY TO THE NEXT WEEK.