

Perinatal Complications Associated with Maternal Tobacco Use

Rahmah Faiz Alzarouq 2360

Libyan International Medical University Faculty of AMS

3rd year medical student



introduction

Tobacco Contains thousands of compounds that may have adverse effects on the human body.

Nicotine and carbon monoxide are the two most important chemicals. Nicotine penetrates the placenta and can be identified in the fetal circulation at quantities that are 15% higher than mother plasma, while nicotine concentrations in amniotic fluid are 88 percent greater than maternal plasma (1).

Smoking in pregnancy has been associated with placenta Previa , abruption placentae, premature rupture of the membranes, preterm birth, intrauterine growth restriction and sudden infant death syndrome (1,2).

The perinatal mortality rate among smokers is 150% greater than is seen in non-smokers It has been suggested that smoking is responsible for 15% of all preterm births and 20–30% of all low birthweight infants (2).

These complications have a dramatic impact on overall perinatal morbidity and mortality.



Methods

Group of Active smokers of different daily cigarette consumption (n=1646) were identified through maternal self-reporting.

The reference group comprised 19,292 nonsmoking women who delivered during the same period.

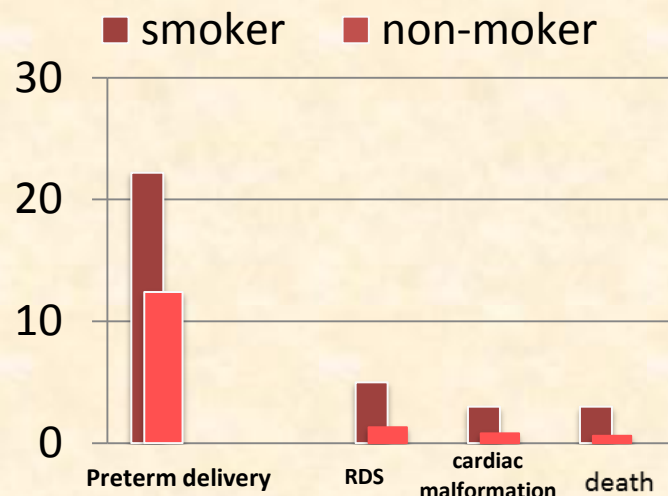
Results

The end result from this study shows that Preterm delivery rate was significantly higher in the smoking group compared with controls (22.2% vs. 12.4%)

Newborns of active smokers were more likely to weigh less.

(3150 ± 759 g vs. 3377 ± 604 g, P < 0.05),

Even they suffer from respiratory distress syndrome (2.5% vs. 1.3%) and suffer from a cardiac malformation (1.5% vs. 0.8%), and die (neonatal death 1.2% vs. 0.6%),



Discussion

According to the statistics, there is a definite and independent link between maternal smoking and serious perinatal outcomes.

Even low level of exposure of cigarette does not appear to be safe to the baby as it was significantly associated with PTD, decreased birth weight, perinatal death.

In other hand smoking shown to alter the areas of the nervous system associated with respiration and arousal may cause abnormalities leading to changes in either *in utero* or postnatal lung development or function, predisposing the infant to SIDS so Infants whose mothers smoked postnatally also had an increased risk of SIDS compared with infants of non-smokers Furthermore, the risk increased with increasing levels of maternal smoking.

Conclusions

Pregnant women who smoke have a higher risk of a lot of complication and most important and modifiable risk factors associated with adverse perinatal outcomes.

During pregnancy, women should not smoke It's been proposed that smoking is to blame for .

References

- 1-Kyerematen, G. and Vesell, E., 1991. Metabolism of Nicotine. *Drug Metabolism Reviews*, 23(1-2), pp.3-41
- 2-Guyer, B., Strobino, D., Ventura, S., MacDorman, M. and Martin, J., 1996. Annual Summary of Vital Statistics—1995. *Pediatrics*, 98(6), pp.1007-1019.