產婦年齡與新生兒早產及低體重之相關性探討

Adverse Birth Outcomes of Maternal Youths

中文摘要

我國內政部統計 2002 年的 24 萬名新生兒中，有一萬多名是由 15-19 歲的青少女所生；United Nations Statistics Division 於 2006 年的統計，發現台灣青少年生育率居亞洲之冠。國內外許多研究指出，青少女懷孕生育的新生兒發生低體重、早產及先天性疾病的機率較一般育齡母親高；然而有部分研究卻發現，青少女產婦並沒有較高之生產風險與不良新生兒健康結果。青少年懷孕生產是否較易有不良的生產結果以及是否較可能產下不健康的胎兒，是優生保健及公共衛生重要的議題之一。

本研究使用內政部 2001 年至 2003 年之出生登記檔中，新生兒母親年齡小於 30 歲者作爲研究對象，剔除多胞胎新生兒後，共得樣本數 445,044 人。本研究之依變項爲新生兒之出生體重與出生週數，自變項爲產婦年齡（15-17 歲產婦組、18-19 歲產婦組、20-24 歲產婦組、25-29 歲產婦組），控制變項爲產婦與配偶的人口社經特質及新生兒特徵。本研究首先以頻率（百分比）及平均值（標準差）描述樣本特性，其次再透過雙變項分析(bivariate analysis)與多變項分析(multivariate analysis)，探討不同年齡組別的產婦生下低體重與早產兒的機率的差異。

本研究結果發現，在控制產婦人口社經特徵、配偶人口社經特徵與新生兒特徵後，產婦年齡越低，早產兒發生率越高。此外，產婦教育程度越高以及與配偶年齡差距越大者，發生早產兒的比例相對較低。配偶的教育程度也顯示較高教育水準的父親不容易生下早產兒。出生身份方面，男寶寶比女寶寶是早產兒的機率爲高。相對於出生次序是第二胎的新生兒，頭胎的寶寶有較高的機率是早產兒。相對於非婚生的新生兒，婚生子的新生兒中是早產兒的比例也有相對較低的現象。

低體重兒的分析結果發現，在控制其他變項後，產婦年齡是影響低體重兒發生率的顯著危險因子。產婦年齡越低，發生低體重兒的機率越高。相對於國中以下的教育程度的產婦，高中職與大專（學）以上的兩組產婦有較低的低體重兒發生率，且達到統計上的顯著意義。產婦與配偶的年齡差距越大的組別發生低體重兒的機率顯著較低。越高教育程度的配偶生下低體重兒的機率顯著的下降。女寶寶比男寶寶有較高的機率發生低體重兒；此外，相對於出生身份是婚生的新生兒，非婚生組別的新生兒有顯著較高的機率是低體重兒。

足夠的性知識與正確的避孕方式將可有效改善青少年懷孕生子的問題。青少年生育率若能有所下降，早產兒與低體重兒的發生情形也能有所改善，對提升社會人口素質更會有很大的助益。著手規劃性教育推廣活動或座談會，並鼓勵家長從開放的態度引導與青少年共同討論兩性問題。相信不久的將來，台灣會是下一個像荷蘭一樣性教育成功的國家之一。

英文摘要

Background:

According to the statistics released by the Ministry of the Interior in Taiwan, more than ten thousand out of 240,000 babies born in 2002 were delivered by adolescents aged 15-19 years. Some of the previous studies have found infants born by adolescents were associated with increased risk of adverse birth outcomes, but other studies did not find the similar results. This study aimed to estimate the differences in the likelihood of having low birth weight babies and preterm babies among mothers of different age groups.

Methods:

This is a retrospective study comparing the birth weights and gestational weeks of 6,973 mothers aged 15-17 years, 22,129 mothers aged 18-19 years, 158,800 mothers aged 20-24 years, and 257,142 mothers aged 25-29 years for single live births using birth certificate data during 2001-2003 in Taiwan. Descriptive analysis and logistic regression analysis were performed to estimate the likelihood of low birthweight and preterm among mothers of different age groups.

Results:

Compared with mothers aged 25-29 years, adjusted risks of having a preterm baby was significantly ($P< 0.0001$) higher as the maternal age decreased. The adjusted odds ratios were 1.59 for mothers aged 15-17 years, 1.29 for mothers aged 18-19 years, and 1.10 for mothers aged 20-24 years. Similarly, the adjusted risks of having a low birth weight baby were significantly higher as maternal age decreased. The odds ratios were 1.63 for mothers aged 15-17 years, 1.44 for mothers aged 18-19 years, and 1.20 for mothers aged 20-24 years. Moreover, maternal education, babies' sex, babies' parity, and the identity of newborn were found to be associated with the risk of preterm and low birth weight.

Conclusion:

It moght be effectively decreased the adolescents pregnancy and delivery by sufficient sexual knowledge and correct contraceptive way. Low teenagers fertility rate will lead the less preterm or low birthweight babies. Furthermore, It might also give a big hand to promote the population quality. We can encourage parents and teenagers to discuss the sextual issues with positive attitude together by holding sex education activities or symposiums. In the future, the sex education of Taiwan will be as successful as Netherlands