

## Abstract

Teenage pregnancy is a worldwide problem bearing serious social and medical implications relating to maternal and child health due to deleterious socio economic environment, prenatal care, family support, nutritional status and physiological maturity of teenage pregnant mothers. The objectives of this study were to identify the risk factors associated with teenage pregnancies and assess the association between teenage pregnancies and adverse birth outcomes. A case control study was carried out in hospital settings and Medical office of Health (MOH) clinics in Jaffna. Ethnicity and parity matched, 62 teenage mothers (cases) and 86 non teenage mothers (controls) were recruited. Hospital records were used to obtain details about birth length, birth weight head circumference, gestation period and stillbirth. MOH records were used to get information about weight and height of mother at the time of first visit to the clinic (pre pregnancy BMI), pregnancy complications and weight gain during pregnancy. An interviewer administrated questionnaire was used to assess socio economic status, level of prenatal care, family support, knowledge, attitude and practices of mothers. Food consumption pattern was undertaken by a qualitative food group frequency questionnaire. Mean birth weight of infants borne to teenage pregnant mothers (2.8kg SD: 0.1) was significantly lower than that of non-teenage mothers (3.0kg SD: 0.4). Teenage mothers were significantly more likely to have inadequate knowledge (OR: 4.14, CI: 1.4-12.3) and less positive attitudes (OR: 6.08, CI: 1.7-21.8) towards pregnancy than non teenage mothers. Pregnancy in teenagers were significantly more likely to have increased risk of preterm deliveries (OR: 3.29, CI: 1.1-9.), low birth weight babies (OR: 3.39, CI: 1.4-8.5) and maternal anemia (OR: 2.87, CI: 1.2-6.8). There was no any significant difference in likelihood of having low birth length, low head circumference cesarean delivery, maternal conditions including gestational diabetes, hypertension, edema, inappropriate weight gain, and getting abortions and also there was no any stillbirth and infant mortality reported from both groups of mothers. In conclusion, inadequate knowledge and poor positive attitudes were identified as risk factors associated with teenage pregnancies. Teenage pregnancy increases the risk of preterm births, low birth weight and maternal anemia. Therefore, there is an urgent need to implement district and ethnic specific interventions to reduce occurrence and adverse outcomes of teenage pregnancy in alarmed areas.

**Key words:** Teenage pregnancy, risk factors, adverse outcomes, complications