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10.1136/jech.2011.143586.11

Objective To determine whether an integrated approach, involving staff training in brief intervention using Motivational Interviewing techniques in a standardised way, was sufficient to affect change in smoking status or intensity in low-income pregnant and postpartum women.

Setting A large city centre Dublin maternity hospital

Participants 1000 women who were smokers at time of pregnancy

Design The study used a historical cohort design. 500 consecutive smokers were recruited at first ante-natal visit. Following staff training, 500 more were recruited (intervention group). Data were recorded at 28–32 weeks gestation, after birth, at 3–4 and 7–9 months postpartum. Smoking status was also categorised according to the number of cigarettes smoked into the following categories, None (0), Light (1–5), Medium (6–10), Heavy (11–15), Very heavy (16+).

Main outcome measures The primary outcome measure was self-reported smoking cessation verified by urinary cotinine. Fluctuations in smoking intensity between baseline and 28–32 weeks pregnancy and between baseline and 3–4 months postpartum were also investigated.

Results There was no significant difference between cases and controls in the proportion quitting at 28–32 weeks pregnancy (14.8% vs 13.1%, $p=0.44$), after birth (13.5% vs 16.6%, $p=0.26$), 3–4 months postpartum (7.6% vs 7.2%, $p=0.84$) or 7–9 months postpartum (8.8% vs 7.5%, $p=0.59$). Cases who had stopped smoking at baseline showed least variation in smoking intensity and were more likely to stay stopped than controls with 26% reporting some smoking in late pregnancy compared to 42% for controls. More cases who were light smokers at baseline 19/89 (21.3%) were non-smoking in late pregnancy compared to 15/95 controls (15.8%). Fewer cases also moved to a heavier smoking category (19.1% vs 24.2%). The picture postpartum showed that the greater efforts made by the stopped and light smokers in late pregnancy were reversed postpartum with higher relapse rates among cases. Fewer cases (8% vs 18.9%) remained stopped. Fewer cases who were light smokers at baseline stopped (2.1% vs 5%) and equal proportions moved to a heavier smoking category (28.9% vs 28%). However more cases than controls who smoked 5–15 cigarettes per day moved to a lower intensity smoking category (18.1% vs 15.5%) and fewer shifted to a higher intensity group (13.4% vs 21%).

Conclusion The brief intervention offered in this study did not affect quit rates. However favourable shifts towards lighter smoking occurred in late pregnancy and at 3–4 months postpartum for medium and heavy smokers which would have been missed if quit rates were the only outcome measure used.

OP11

EFFECTIVENESS OF TRAINING IN MOTIVATIONAL INTERVIEWING IN INFLUENCING SMOKING CESSATION IN PREGNANT AND POSTPARTUM WOMEN IN LOWER SOCIO-ECONOMIC GROUPS

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