

### S1 - A Proactive Family Smoking Cessation Intervention for Parents of Children 0-18 Months: A Randomised Controlled Trial

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**Introduction and Aims:** The evidence from various interventions in helping fathers with a new-born child to quit and in reducing household secondhand smoke exposure is conflicting. The present trial examined the effectiveness of an intensive family intervention to help fathers to quit and stop smoking in the home.

**Methods:** A single-blinded randomised controlled trial was conducted from June 2008 to October 2010. 1,158 families with a smoking father, non-smoking mother and child (aged 0-18 months) were recruited in 22 Maternal and Child Health Centres (MCHCs) of Department of Health. The fathers of the intervention group (n=598) received telephone counselling by nurse counsellors based on the transtheoretical model. The mothers were motivated by the counsellors to support the fathers to quit, and to restrict smoking in the home. Both parents were invited to attend a nurse-led family session to discuss the smokefree home policy and enhance mutual understanding between the couple. The Control group (n=560) received a 2-page pamphlet on the importance of establishing smoke-free home and smoking cessation tips.

**Results:** At the 12-month follow-up, the intervention group had a higher self-reported 7-day point prevalence of abstinence (13.7% versus 8.0%; Adjusted odds ratio = 1.82, p<0.01) and 30-day continuous abstinence (13.4% versus 7.5%; Adjusted odds ratio = 1.90, p<0.01) than the Control group. In the two groups combined, father's smoking at home declined from 78.5% at baseline to 36.8% at 12-month follow-up. Smoking near the children also declined from 16.3% to 6.4%. There was no significant difference in father's smoking at home (Intervention: 36.1% versus Control: 37.6%; Adjusted odds ratio = 0.80, p=0.18), and smoking near the children (5.2% versus 7.7%; Adjusted odds ratio = 0.68, p=0.22) between the two groups.

**Conclusions:** The family smoking cessation intervention provided by nurse counsellors was effective to increase quitting in smoking fathers with a new-born child. However, it had insignificant effect on mothers to maintain a smokefree home policy. Promoting quitting and smokefree home is important to reduce secondhand smoke exposure among infants and young children. More effective family interventions and more stringent tobacco control measures are also needed.

**Impact on health policy and practice:** The findings offered some evidence to support Hospital Authority's new policy including smoking cessation services and use of drugs such as nicotine replacement therapy in the Drug Formulary. It helped Hong Kong Council on Smoking and Health to support research projects in engaging families with smoking fathers to quit smoking.