



Effectiveness of Non-Pharmacologic Strategies for Parental Smoking Cessation to Protect Children: A Meta-Analytic Review

Jose H. Caduhada, MD; Stefanie Nichole Tan, RN, MD; Ma Teresa Tricia G. Bautista, MD
Department of Family Medicine, University of Santo Tomas Hospital, Manila Philippines

Email: joecaduds@gmail.com/stefanienicholetan@gmail.com/jtbautistamd@yahoo.com

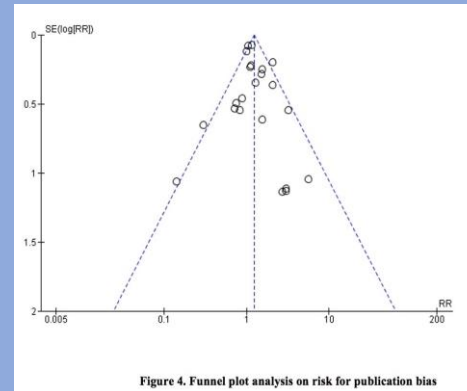
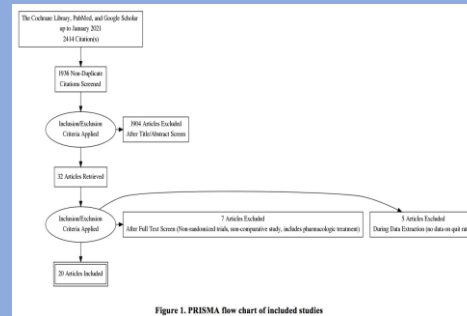


Aims: This meta-analysis aims to synthesize available evidence from published studies on the effectiveness of parental non-pharmacologic smoking cessation programs which aim to reduce children's exposure to secondhand smoke.

Methodology: A database search using The Cochrane Library, PubMed®, Medline, Embase, and Google Scholar, was done by the investigators. This study included 20 randomized controlled trials published up to 2020. Pooled estimates of risk ratio (RR) for quit rates were computed using the random effects model.

Results: Overall, the quit rate among those who underwent parental smoking cessation was 13.4% while the quit rate for controls was 11.9%. The pooled RR demonstrated that the parental smoking cessation program was significantly associated with higher quit rates ($RR=1.22$, $95\%CI=1.01$ to 1.46 , $p\text{-value}=0.04$). The studies demonstrated moderate heterogeneity only ($I^2=54\%$). Among studies published prior to year 2000, no significant difference was observed between parental smoking cessation program and control ($RR=1.02$, $95\%CI=0.62$ to 1.70 , $p\text{-value}=0.93$). On the other hand, the pooled RR demonstrated that among studies published after 2020, parental smoking cessation program was significantly associated with higher quit rates ($RR=1.27$, $95\%CI=1.03$ to 1.56 , $p\text{-value}<0.0001$). Among studies with self-help interventions, parental smoking cessation program has no additional benefit on quit rates ($RR=1.20$, $95\%CI=0.94$ to 1.58 , $p\text{-value}=0.14$). Among studies with biofeedback intervention also, no significant difference was observed ($RR=1.27$, $95\%CI=0.86$ to 1.89 , $p\text{-value}=0.23$).

Conclusions: This meta-analysis demonstrated sufficient evidence that non-pharmacologic interventions for parental smoking cessation are effective



ESMO GOOD SCIENCE BETTER MEDICINE BEST PRACTICE

Jose Caduhada
Last DOI update: March 1, 2022
I confirm that I have no interests to declare

