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Vitamin C against the harmful effects of prenatal passive smoking: when all other options fail?

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Vitamin C administration to severely addicted pregnant smokers may induce a small improvement in lung function of their offspring compared to controls. To assess any clinical relevance, replicate and long-term follow-up studies are needed. <https://bit.ly/2DZoVRT>

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The mortality and morbidity due to cigarette smoking are gigantic. Worldwide, about 7 million people die every year (800 per hour!) due to a smoking-related illness and the morbidity is estimated to be about 30 times as high [1]. And though we all agree that tobacco companies making a product that eventually kills about 50% of its customers should be shut down and the product be banned, producing or selling cigarettes is not illegal yet. The tobacco industry even actively seduces “replacement smokers” to compensate for the loss of customers who died using their products [2] and the youngest, most vulnerable generation is the target of that strategy, including women who become pregnant. Apparently, cigarettes are made so addictive that worldwide about 50% of women who smoke daily even continue to smoke during pregnancy, ranging from about 30% in the European Region to about 80% in the Western Pacific Region [3]. Antenatal exposure to products of tobacco smoke during pregnancy is the most common preventable cause of infant morbidity and mortality [4]. Although exposure comes from many individuals, the most important exposure is maternal smoking. Well known complications associated with antenatal exposure to smoking include prematurity, stillbirth, antenatal growth failure [4], low birth weight [5], congenital anomalies [6] and sudden infant death syndrome [7]. Maternal prenatal smoking has a durable effect on her offspring's wellbeing, and is associated with increased risk for many noncommunicable diseases including asthma [8], increased body mass index [9] and metabolic syndrome [10], reduced lung function [11], serious conduct disorders [12, 13], and according to animal studies, a predisposition to nicotine addiction [14, 15].