Abstract

Is it safe to vape? Analysing online forums discussing e-cigarette use during pregnancy

Introduction: Electronic cigarette (e-cigarette) use, or vaping, is increasing against a backdrop of declining smoking rates. E-cigarettes contain fewer toxicants than cigarettes but their appearance and mode of use has the potential to satisfy the habitual aspects of smoking. To date, we know little about lay perceptions of the safety of using e-cigarettes in pregnancy.

Methods: We conducted a thematic discourse analysis of 13 online discussion forum threads that discussed e-cigarette use during pregnancy. We focussed on the major discursive strategies that forum posters used to debate the safety of e-cigarette use during pregnancy.

Results: We identified three distinct ways in which forum posters debated the safety of using e-cigarettes during pregnancy: (1) Quitting (nicotine) cold-turkey is unsafe; (2) vaping is the lesser of two evils; (3) vaping is not worth the risk.

Conclusion: Discussions about the safety of e-cigarettes drew on the premise that (1) immediate cessation of nicotine was potentially harmful and unsafe, (2) e-cigarettes were a harm reduction tool, or (3) vaping could be dangerous and should be avoided. While these arguments are not necessarily specific to pregnancy (beside mentions of foetal-specific risks), this analysis points to the need to educate and support women about harm reduction options.

Implications: Health professionals should be aware that some women may be currently using or considering using e-cigarettes in an effort to quit or reduce smoking. It is important health professionals are equipped to educate women with accurate up-to-date and balanced information about the risks and benefits of e-cigarette use during pregnancy.

Keywords: e-cigarettes, perceptions, pregnancy, online discussions, qualitative,
Introduction

Cigarette smoking is one of the most preventable causes of adverse pregnancy outcomes. Although pregnancy is an important time to quit smoking, a substantial minority of women smoke during pregnancy: 13.5% in Australia (Australian Institute of Health and Welfare, Li, Zeki, Hilder, & Sullivan, 2012), 12% in the UK (Health and Social Care Information Centre, 2012), 15% in Canada (Al-Sahab, Saqib, Hauser & Tamim, 2010), and 8% in the USA (Curtin & Matthews, 2016). Given the addictive nature of nicotine (US Surgeon General, 1988), pregnant women often go to great lengths to reduce their smoking either as a method of quitting or harm reduction (Graham, Flemming, Fox, Heirs, & Sowden, 2014).

Findings from qualitative research suggest that smokers view their addiction as more than simply the need for nicotine. In particular, smokers value the habit of smoking and only see certain cigarettes as satisfying their addiction (Bancroft, Wiltshire, Parry, & Amos, 2003; Author, under review). Some smokers discuss handling the cigarettes as part of their addiction (O’Loughlin, Kishchuk, DiFranza, Tremblay, & Paradis, 2002), while others emphasise the hand-to-mouth gesture (Bowker et al., 2015; Author, under review).

Electronic cigarettes (e-cigarettes) have the potential to satisfy both the habitual aspects of smoking and nicotine addiction while delivering fewer toxicants (Farsalinos & Polosa, 2014). Although e-cigarettes may assist pregnant women to quit smoking, substantial controversy exists regarding their promotion and use (Bell & Keane, 2012; Polosa, Rodu, Caponnetto, Maglia, & Raciti, 2013). On one hand, there is concern about their efficacy as cessation aids, the long-term health effects, and the possible re-normalisation of smoking through the widespread use of these products (Fairchild, Bayer, & Colgrove, 2014). At the same time, there are debates about the ethics of preventing addicted smokers access to a less harmful (nicotine) product (Hall, Gartner, & Forlini, 2015).
The regulation of e-cigarettes varies markedly between countries. For instance, in Australia, the sale, possession and use of nicotine e-cigarettes without a prescription is generally illegal (Douglas, Hall, & Gartner, 2015) whereas these products have been treated as general consumer products in the USA and UK (Gartner & Hall, 2015). Although there are regulatory differences between countries, e-cigarette use is widespread, particularly in countries with fewer restrictions. Data from 2010-2011 (Adkison et al., 2013) involving 5939 current and former smokers from Australia, Canada, the USA, and the UK indicated that 46.6% of participants were aware of e-cigarettes, 7.6% had tried them, and 3% were current users, with no differences across countries. More recent data (2010 – 2013) from this same study (Yong et al., 2015) reported that e-cigarette awareness had increased in Australia and the UK but use was more common in the UK (18%) than in Australia (6%).

Data on e-cigarette use during pregnancy are limited. A survey conducted in the USA with 316 pregnant women reported that 13% of women had ever used an e-cigarette and only two women were using e-cigarettes daily; ever-users were typically older and current smokers (Mark, Farquhar, Chisolm, Coleman-Cowger, & Terplan, 2015). Evidence regarding the efficacy of e-cigarettes as a cessation device for pregnant women is absent, because trials typically exclude pregnant women (Bryce & Robson, 2015). We also know little about public perceptions of e-cigarette use by pregnant women.

To date, three small-scale studies have examined lay perceptions of the safety of e-cigarette use during pregnancy (Baeza-Loya et al., 2014; Fallin, Miller, Assef, & Ashford, 2016; Kahr et al., 2015; Mark et al., 2015). These studies have found that participants (many of whom were pregnant) viewed e-cigarette use during pregnancy as less harmful than smoking. However, a recent interview study (Bowker et al., 2015) with 14 British women who tried using nicotine replacement therapy (NRT) during pregnancy found most were reluctant to use e-cigarettes because of safety concerns.
Many e-cigarettes are not labelled with any warnings against use in pregnancy. While there is ongoing debate about the safety of e-cigarettes for pregnant women (Buonocore, Marques Gomes, Nabhani-Gebara, Barton, & Calabrese, 2016), relatively little is known about lay perceptions of e-cigarette use (also known as ‘vaping’) and the perceived safety during pregnancy.

We examined online forum conversations that discussed the safety of vaping during pregnancy. Increasingly, health discussions and information seeking take place online (Fox & Duggan, 2013). Online forums – in which people view, post and respond to (topic) threads within a virtual community – provide a unique opportunity for researchers to access naturalistic data on controversial and sensitive topics without being influenced by the researchers’ agenda (Jowett, 2015). Accordingly, online forums offer a new medium to explore public discussions about smoking cessation and harm reduction (e.g. Burri, Baujard, & Etter, 2006).

We analysed 13 online forums discussing vaping during pregnancy, with an interest in how forum posters debated the safety of e-cigarette use during pregnancy. Without attempting to generalise these findings, we seek to provide an exploratory analysis of online forums targeting an emerging, yet under-researched, health issue.

**Method**

**Data collection**

The first author conducted a search via Google (8th October 2015) using the key terms “vaping during pregnancy” that revealed 207 000 results. Forums were subject to analysis if they included discussions about e-cigarette use during pregnancy. There were no restrictions regarding the type of forum analysed (e.g. pregnancy, parenting, smoking, and e-cigarette forums). However, news articles, blogs, health information websites, promotional or product websites, and government websites were excluded from the analysis. We also excluded forum
threads that were not specific to e-cigarette use during pregnancy and those that discussed vaping marijuana during pregnancy. Beyond the sixth page of Google the search results lacked relevance and were not included in this analysis. The first author identified and selected 13 forum threads that met the inclusion criteria for analysis (see Table 1).

--- Insert Table 1 here ---

Most of the 13 forums were e-cigarette or pregnancy forums. One online forum included comments from members in response to an editorial written by a panel of health writers about the safety of e-cigarettes during pregnancy; however, only the comments provided by forum members were analysed. Two forum threads were started by e-cigarette vendors asking whether they should sell to pregnant women. Forums varied in terms of activity: one forum had closed shortly after opening, some were open but inactive, and others were still open and active at the time of analysis.

Although some forums were based in Australia, the UK, or the USA, it was not possible to identify the host country for other websites (see Table 1). Our analysis was not restricted to specific countries because we were interested in representing views across different regulatory contexts. Additionally, a person who writes a comment on the forum (a ‘poster’) does not have to be living in a particular country to join, or access, a forum and will not always provide a country of residence (Burri et al., 2006).

**Ethical issues**

Informed by discussions about the ethical use of online data (Roberts, 2015), formal ethical clearance was not sought for this study. Forum data were publicly accessible at the time of data collection and did not require forum registration to view. It was also assumed that posters were aware of the public availability of their posts. Although we provide the title of the forums in Table 1, names and details of the individual posters have been omitted to
maintain anonymity for posters. Further, we did not participate in any of the forum discussions.

**Data analysis**

Data were extracted from online forums and each forum discussion thread was copied into a separate Microsoft Word file. The first author read each data file to ensure familiarity with the content. Taking an inductive approach to thematically code the data (Braun & Clarke, 2006), the first author focussed on the articulation of the safety (or lack thereof) of vaping during pregnancy and how posters defended their views (Wood & Kroger, 2000). The first author examined the common features, content and structure of posters’ comments, paying attention to how they formulated their accounts of safety and who was drawn on for legitimacy.

The first author led the coding of the data and the third author cross-checked the coded data. Obstacles encountered during the analysis were discussed and coding disagreements were resolved by the first and third authors. The coding schedule was continually refined to reflect a shared agreement and understanding of the patterns within the data. Further refinement and interpretation of the data continued during the initial write up of the analysis. All authors contributed to conceptual discussions that involved refining the conceptual structure and presentation of the analysis.

Data were examined to identify the *discursive strategies* used to articulate the safety of vaping. Discursive strategies are culturally shared expressions or statements that serve particular conversational functions for speakers. Although each strategy reflects a different way of talking about the topic, these strategies are not mutually exclusive and speakers can draw on multiple strategies. Consistent with a discursive perspective (Wood & Kroger, 2000), our analysis focuses on how these ways of speaking (discursive strategies) are
substantiated and articulated (e.g., language, phrases, metaphors). Therefore our analysis is not concerned with defining the speaker (who has articulated these strategies) or quantifying the use of these strategies.

Results

We identified three common ways of speaking (discursive strategies) about the safety of e-cigarettes during pregnancy: quitting (nicotine) cold-turkey is unsafe; vaping is the lesser of two evils; and vaping is not worth the risk. These three discursive strategies, along with example extracts, are summarised in Table 2 and were found to be represented across most of the forums (Table 3).

----- Insert Table 2 here -----

The safety of e-cigarettes, relative to cigarettes, was articulated through the use of two different strategies: 1) emphasising the potential harm of stopping nicotine use and 2) identifying the harms of smoking. In particular, physical and psychological harm of nicotine withdrawal for the mother and baby was emphasised (Quitting \([\text{nicotine}]\) cold-turkey is unsafe). An alternative approach was to focus on the product (rather than the ‘persons’) to position vaping as safer than smoking (Vaping is the lesser of two evils). Here, posters also spoke about the benefits of (stopping) cigarettes, rather than the potential harms of vaping. However, posters who viewed e-cigarettes as harmful described the significant ‘risk’ of vaping during pregnancy and the lack of evidence regarding the safety of e-cigarettes (Vaping is not worth the risk).

Happy mum, healthy baby: Quitting (nicotine) cold-turkey is unsafe

Within this discursive strategy, discussions positioned quitting nicotine ‘cold-turkey’ as stressful and unsafe during pregnancy. Posters emphasised the symptoms of nicotine withdrawal, including the stress for the woman and baby and the perceived health
consequences (e.g. high blood pressure, anxiety). Stress was positioned as a real and severe consequence of immediate unassisted cessation, and health professionals were described as endorsing the dangers of stress for the pregnancy, thereby reinforcing the view that abrupt cessation is unsafe.

This discursive strategy was used to discuss nicotine consumption in general, so while some posts discussed the use of cigarettes or e-cigarettes during pregnancy, others spoke generally about nicotine use. Through this strategy, posters challenged the assumptions that any nicotine is unquestionably bad for babies and that abrupt cessation is the best option. Rather, abstaining from nicotine was positioned as ‘unsafe’ or ‘unhealthy’ and was described as having significant risks to women and their babies. As a result, posters with this view recommended a harm reduction approach to avoid the stress/harm of quitting while working towards reducing nicotine in some way (NRT, e-cigarettes, or reduced smoking).

Vaping is the lesser of two evils

Posters also emphasised the safety of vaping while pregnant by directly comparing the product (e-cigarettes) to cigarettes. Rather than downplaying the harmful effects of nicotine, the harmful chemical composition of cigarettes was described to position vaping as a safer alternative. Speaking in this way constructed a story that emphasised ‘safe vaping’. Vaping was positioned as a harm minimisation approach that, with the appropriate level of control, could manage the intake of nicotine and lead to eventual cessation. ‘Safe vaping’ was described by posters as vaping without nicotine, referred to as “0nic” and with minimal flavourings (ideally unflavoured). A ‘safe vaper’ was also described as someone who thoroughly researched the quality of products and e-liquids, with some posters recommending particular websites or vendors.
Posters also spoke of the ‘known’ toxicology of cigarette smoking to argue the harm reduction potential of vaping. For example, a number of posters argued that vaping was equivalent to NRT by describing the similarities in these products. To strengthen this position, posters drew on positive personal experiences to substantiate their safety claims. Medical practitioners were commonly described as supportive of vaping (e.g. “the doctor said…”). Other posters also compared the birth outcomes (e.g. birth weight or baby’s health) of pregnancies through which they smoked to pregnancies through which they vaped to support their claims that ‘vaping is safer’. Many posters qualified their claims on the basis of personal views (“I think”, “In my opinion”, “I guess”) or clarified that they were not a medical doctor. Some posters mentioned the “ridiculousness” of discussing the safety of vaping online with other vapers or mothers without the necessary medical expertise to (legitimately) comment.

**Vaping is not worth the risk**

Recognising that vaping could be less harmful than smoking, some posters focused on the “unknown” risks associated with vaping. This strategy challenged the safety of vaping while pregnant by drawing on evidence suggesting that any amount of nicotine was unsafe for babies, vaping nicotine-free e-liquids could also be unsafe, and that there was no scientific evidence to support vaping (e.g., “no good research”). Several posters also argued that women should exert better control over the health of their babies. For example, immediate and medically assisted cessation (i.e. NRT) was described as a logical and realistic option for women considering vaping during pregnancy. Other posters, particularly women posters in pregnancy forums, shared their own cessation stories as evidence that quitting cold-turkey was achievable and worth the struggle. These discussions prioritised the significant risk of vaping and described safety as only achievable through complete abstinence.
Discussion

Three discursive strategies were used within online communities to debate the topic of vaping while pregnant. Forum posters emphasised the safety of vaping by describing the potential ‘harms’ of immediate nicotine cessation (*quitting [nicotine] cold-turkey is unsafe*) or emphasising the increased toxicants in cigarette smoke relative to e-cigarette vapour (*vaping is the lesser of two evils*). Similar perceptions have been identified both within, and outside, of the context of pregnancy. For example, women who smoke during pregnancy have described ‘quitting’ as more harmful to their babies than ‘reducing’ smoking (Author, 2014) and cite health professionals as supporting this view (Graham et al. (2014). More generally, adult smokers have also emphasised dangers of cessation and the perceived health benefits of smoking (Gough, Fry, Grogan, & Conner, 2009) and have positioned smoking as having an equal, or lesser, risk to other substances (Heikkinen, Patja, & Jallinoja, 2010). Despite the concerns expressed by forum participants about abrupt cessation, there is no empirical evidence to support the notion that cessation of nicotine use is unsafe. Although the health benefits of smoking cessation are well established (United States Public Health Services, 1990), nicotine withdrawal symptoms can be difficult to manage and often lead to relapse.

The efficacy of e-cigarettes as a smoking cessation aid has not yet been established. While one systematic review concluded that e-cigarettes inhibit smoking cessation (Kalkhoran & Glantz, 2016), four other reviews suggest that e-cigarettes facilitate smoking reduction and cessation, although larger quality trials are needed (McRobbie, Bullen, Hartmann-Boyce & Hajek, 2014; Rahman et al, 2015; Khoudigian, S., Devji, T., Lytvyn, L. et al. 2016).

Current clinical evidence suggests that e-cigarette use is safer than smoking (Hajek, Etter, Benowitz, Eissenberg, & McRobbie, 2014; McNeill et al., 2015; Royal College of Physicians, 2016); however, there are concerns about e-cigarettes’ long-term effects on foetal
development (Spindel & McEvoy, 2016; Suter, Mastrobattista, Sachs, & Aagaard, 2015). Similar concerns about vaping were also expressed by participants in the online communities. These discussions framed vaping as an avoidable risk and women were urged to seek medical support and avoid vaping. This is similar to accounts of British women who stopped using e-cigarettes during pregnancy following discussions about safety concerns with their friends or smoking cessation advisor (Bowker et al., 2015). However, in our analysis, we also found that pregnant women who vaped received very negative personal attacks. Some forum posters described their behaviour as ‘selfish’ and irresponsible, which reflects cultural expectations of mothers as child-centred and self-sacrificing (Hays, 1996).

This analysis offers new and important information about how the safety of vaping during pregnancy is negotiated and debated in online public forums. However, these discursive strategies are not unique to the context of pregnancy and are frequently used to support or discourage smoking behaviour and practices more generally. The pervasiveness of these strategies points to the need for further research that explores the implications of these perceptions. This analysis also highlights the usefulness of qualitative research as a method for uncovering controversial views and the need for continued qualitative inquiries. Interview-based studies, for example, allow an in-depth examination of vapers’ views about safety, addiction and the harm reduction potential of e-cigarettes. Interview studies also provide opportunities to follow-up and clarify issues with participants, while online analyses (such as ours) cannot.

Of note, some of the discussion threads on e-cigarette use in pregnancy were started by cigarette vendors. These discussions focused on whether it was appropriate to sell to pregnant women, suggesting that the distribution of e-cigarettes depends on the individual vendor’s judgement. Consumers may rely on the advice of online vaping communities and be misinformed about the potential risks. Credible online information about the risks associated
with vaping during pregnancy and information on (non)nicotine solutions needs to be available to consumers.

**Implications for practice**

Health professionals are a trusted and authoritative source of health information. In this study, recommendations about e-cigarette use from health professionals were frequently mentioned in the forum discussions. Up-to-date and balanced information about the risks and benefits of e-cigarette use during pregnancy needs to be available for health professionals (including midwives) who may be faced with questions about e-cigarette use during pregnancy. Because there is currently limited evidence regarding the potential effects of nicotine exposure during pregnancy on child development, pregnant women should be encouraged and supported to stop all nicotine use. However, the low rates of sustained smoking cessation in this population means that education about harm reduction options is also important. Patient-provider discussions regarding the cleaner delivery of nicotine (e.g. NRT or e-cigarettes) may be necessary as women could be using these products to quit or reduce their smoking. This is particularly important in regulatory contexts where it is not legal to use e-cigarettes containing nicotine because women may be reluctant to disclose e-cigarette use. However, in contexts where e-cigarette use is legal, it is still important that health professionals ask about e-cigarette use and smoking practices to inform and equip women with balanced and up-to-date health information.

**Conclusion**

This is the first analysis, to our knowledge, that examines how the safety of vaping during pregnancy is debated in online communities. Although this topic prompts polarised views, online spaces present opportunities to understand the nuances of these debates. We suggest
that future research examines how women are using e-cigarettes in the context of pregnancy and the advice they receive from health professionals. Online information to educate women about the risks and benefits of e-cigarettes could also be developed.
<table>
<thead>
<tr>
<th>Title of thread</th>
<th>Date started</th>
<th>Number of posts</th>
<th>Thread status</th>
<th>Forum website</th>
<th>Description of forum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaping while pregnant</td>
<td>April 2012</td>
<td>31</td>
<td>Open</td>
<td><a href="http://allaboute-cigarettes.proboards.com">http://allaboute-cigarettes.proboards.com</a></td>
<td>E-cigarette forum (UK)</td>
</tr>
<tr>
<td>Vaping &amp; effects on pregnancy</td>
<td>May 2012</td>
<td>19</td>
<td>Open</td>
<td><a href="http://forums.aussievapers.com">http://forums.aussievapers.com</a></td>
<td>E-cigarette forum (Australia)</td>
</tr>
<tr>
<td>Is it safe to vape 0mg mix when pregnant?</td>
<td>October 2012</td>
<td>9</td>
<td>Open</td>
<td><a href="http://forum.totallywicked-eliquid.com/">http://forum.totallywicked-eliquid.com/</a></td>
<td>E-cigarette forum (UK &amp; USA)</td>
</tr>
<tr>
<td>E-cigs vaping while pregnant</td>
<td>February 2013</td>
<td>108</td>
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<td>E-cigarette forum (UK)</td>
</tr>
<tr>
<td>Pregnant Vaping (0 nic)</td>
<td>March 2013</td>
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<td><a href="http://www.reddit.com/">www.reddit.com/</a></td>
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<tr>
<td>Vaping and pregnant?</td>
<td>August 2013</td>
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<td>Open</td>
<td><a href="http://forums.aussievapers.com/">http://forums.aussievapers.com/</a></td>
<td>E-cigarette forum (Australia)</td>
</tr>
<tr>
<td>Does anyone vape?</td>
<td>October 2013</td>
<td>50</td>
<td>Open</td>
<td><a href="http://community.babycenter.com/">http://community.babycenter.com/</a></td>
<td>General pregnancy forum</td>
</tr>
<tr>
<td>Is it safe to use e-cigarettes while I’m pregnant?</td>
<td>November 2013</td>
<td>10</td>
<td>Open</td>
<td><a href="http://www.babycentre.co.uk/">www.babycentre.co.uk/</a></td>
<td>General pregnancy forum (UK)</td>
</tr>
<tr>
<td>Vaping instead of smoking while pregnant…</td>
<td>June 2014</td>
<td>24</td>
<td>Open</td>
<td><a href="http://www.babygaga.com/">www.babygaga.com/</a></td>
<td>General pregnancy forum</td>
</tr>
<tr>
<td>Vaping during pregnancy…opinions?</td>
<td>July 2014</td>
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<td><a href="http://www.pregnancyforum.co.uk/">www.pregnancyforum.co.uk/</a></td>
<td>General pregnancy forum (UK)</td>
</tr>
<tr>
<td>My girl is pregnant can</td>
<td>August</td>
<td>23</td>
<td>Open</td>
<td><a href="http://vapingunderground.com/">http://vapingunderground.com/</a></td>
<td>E-cigarette forum</td>
</tr>
<tr>
<td>she still vape?</td>
<td>2014</td>
<td>75</td>
<td>Open</td>
<td><a href="http://www.whattoexpect.com/">www.whattoexpect.com/</a></td>
<td>General pregnancy forum</td>
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</tbody>
</table>

Vaping while pregnant: December 2014

*Open refers to threads that are active and able to receive posts, while closed refers to inactive but still viewable threads. *Only some forums specify a location/country.
<table>
<thead>
<tr>
<th>Table 2. Summary of three discursive strategies and example extracts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quitting (nicotine) cold-turkey is unsafe</strong></td>
</tr>
<tr>
<td>I had 2 different doctors tell me not to quit outright, if I could to smoke the least amount that I could while pregnant because of anxiety issues that would make my BP sky rocket to very dangerous levels when I would try to quit.</td>
</tr>
<tr>
<td>Do people not realize the health risks that are involved with quitting while pregnant? I know of multiple women who were advised by their OB to continue smoking limited amounts of cigarettes through pregnancy because it was healthier than quitting altogether.</td>
</tr>
<tr>
<td>A specialist told me to start smoking again, up to 5 a day. He said it wouldn’t hurt the baby as much as the stress.</td>
</tr>
<tr>
<td>So you really need to weigh up the pros and cons of a few vapes vs a high level of stress and anxiety, and what the impact of both those might be on the baby. I think people massively underestimate the effect of stress on both mother and baby.</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Ok here is why my dr. Said about SMOKING..she said the stress you put on the baby could be as harmful as smoking.</td>
</tr>
<tr>
<td>I suggest not taking medical advice from anyone other than your OB, but I've read multiple studies that have shown quitting altogether does in fact stress your body out to unsafe levels. Maybe your OB can give you safe guidelines for cutting back and advise you whether or not to try vaping.</td>
</tr>
<tr>
<td>I am vaping right now. There are some things to take into consideration concerning quitting &amp; vaping: Like some other mommas here, I have anxiety issues, &amp; also was told by my doctor that</td>
</tr>
<tr>
<td>quitting cold turkey could risk making my blood pressure go out of whack &amp; even put the fetus in distress.</td>
</tr>
</tbody>
</table>
### Table 3. Overview of identified themes according to forum thread

<table>
<thead>
<tr>
<th>Title of thread</th>
<th>Forum website</th>
<th>Quitting (nicotine) cold-turkey is unsafe</th>
<th>Vaping is the lesser of two evils</th>
<th>Vaping is not worth the risk</th>
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</thead>
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<td><a href="http://allaboute-cigarettes.proboards.com">http://allaboute-cigarettes.proboards.com</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vaping &amp; effects on pregnancy</td>
<td><a href="http://forums.aussievapers.com">http://forums.aussievapers.com</a></td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Is it safe to vape 0mg mix when pregnant?</td>
<td><a href="http://forum.totallywicked-eliquid.com/">http://forum.totallywicked-eliquid.com/</a></td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
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<td>E-cigs vaping while pregnant</td>
<td><a href="http://ukvapers.org/">http://ukvapers.org/</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pregnant Vaping (0 nic)</td>
<td><a href="http://www.reddit.com/">www.reddit.com/</a></td>
<td>×</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pregnancy &amp; Vaping</td>
<td><a href="http://www.e-cigarette-forum.com/">www.e-cigarette-forum.com/</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vaping and pregnant?</td>
<td><a href="http://forums.aussievapers.com">http://forums.aussievapers.com</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Does anyone vape?</td>
<td><a href="http://community.babycenter.com/">http://community.babycenter.com/</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td><a href="http://www.babycentre.co.uk/">www.babycentre.co.uk/</a></td>
<td>✓</td>
<td>✓</td>
<td>×</td>
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<tr>
<td>Vaping instead of smoking while pregnant…</td>
<td><a href="http://www.babygaga.com/">www.babygaga.com/</a></td>
<td>✓</td>
<td>✓</td>
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<td></td>
<td>✓</td>
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</tr>
<tr>
<td>My girl is pregnant can she still vape?</td>
<td><a href="http://vapingunderground.com/">http://vapingunderground.com/</a></td>
<td>✓</td>
<td>✓</td>
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</tr>
<tr>
<td>Vaping while pregnant</td>
<td><a href="http://www.whattoexpect.com/">www.whattoexpect.com/</a></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

✓ Theme present in forum posts; ✗ Theme absent from forum posts
References


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