EXPLORING MEN’S ALCOHOL CONSUMPTION IN THE CONTEXT OF BECOMING A FATHER
A scoping review
EXPLORING MEN’S ALCOHOL CONSUMPTION IN THE CONTEXT OF BECOMING A FATHER: A SCOPING REVIEW

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We recognise and value that families come in all forms. There are multiple ways to become a parent, and parents are not only mothers or fathers (whether biological or not) but anyone who is involved in raising children. This is in line with the definition of parents, used in the Scottish Government’s National Parenting Strategy (2012).

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Background and aim

The transition to fatherhood may present a ‘teachable moment’ when men evaluate their health, modify existing health behaviours and adopt new ones. This scoping review synthesises evidence on men’s experiences of alcohol consumption in the context of fatherhood, and on the effectiveness of existing interventions to reduce drinking among new fathers.

Findings

The review identified five articles published in peer-reviewed journals, and one protocol. Three qualitative studies explored fathers’ experiences of alcohol consumption, two studies reported interventions to reduce alcohol consumption in new fathers, and one was a protocol for an intervention.

The qualitative studies suggest that men may reduce their drinking to support their pregnant partner. However, men’s alcohol consumption beyond this narrow focus is rarely explored. Only one study explored in depth men’s views of problematic drinking during fatherhood and found that men believed that fathers should be a role model for their children.

The review identified two interventions, and only one showed significant reduction in alcohol use among fathers. This was a smoking intervention which did not address alcohol directly. The study suggests that couple-based interventions may be effective in addressing health behaviours.

This scoping review suggests that text message interventions may offer a promising avenue for engaging with men but their effectiveness in addressing alcohol use in new and expectant fathers is unclear.

This review found that it is feasible to recruit expectant and new fathers through antenatal clinics, hospitals and other venues where fathers may go (e.g. antenatal classes), and through men’s pregnant partners.

Implications

The findings have implications for researchers and health practitioners, as insufficient understanding of new fathers’ experiences of alcohol use may result in missed opportunities to address hazardous and harmful drinking among men during the transition to fatherhood.
Introduction

The transition to parenthood represents a time of considerable change. Pregnancy and becoming a mother may encourage some women to adopt healthy behaviours (McBride et al., 2003), and research has focused on producing guidelines and creating interventions to help women reduce and quit drinking alcohol during pregnancy (Stade et al., 2009; Gilinsky et al., 2011; Schölin et al., 2019). However, little is known about alcohol consumption among expectant and new fathers. Research suggests that when men drink during pregnancy, this may increase the likelihood of their partner also drinking and negatively affect relationship quality (Desrosiers et al., 2015; McBride & Johnson, 2016).

The transition to fatherhood may present a ‘teachable moment’ when men’s priorities change from ‘public friendships’ and spending time with friends to ‘settling down’, spending more time with their family and becoming a good role model for their child (Eggebeen et al., 2010; Garfield et al., 2010). Previous research shows that new fathers often evaluate their health behaviours, modify existing behaviours and adopt new ones (e.g. increase in physical activity; decrease in risky behaviours) (Garfield et al., 2010; Olsson et al., 2010; Bodin et al., 2017). Studies also suggest that parents (including fathers) with dependent children drink less frequently than non-parents (Paradis, 2011). This could be due to life responsibilities (Emslie et al., 2012) and changes in the contexts where parents drink (Paradis, 2011; Brierley-Jones et al., 2014). For example, in a qualitative study among middle-aged Scottish adults, Emslie et al. (2012) found that fathers (and mothers) reported changing their drinking patterns to accommodate parenting responsibilities, such as caring for children early in the morning. Parenthood may also be associated with a reduction in heavy drinking as the context of parents’ drinking changes. This may be due to reduction of drinking occasions at bars and at friends’ homes, particularly for fathers (Paradis, 2011).

However, many fathers continue to drink during and after pregnancy (Everett et al., 2007; Bailey et al., 2008; Högberg et al., 2016; McBride & Johnson, 2016). For example, Condon et al. (2004) found that 27.7% of men in their study were classified as ‘at risk’, according to their AUDIT score (which screens for hazardous drinking and alcohol dependence), during their partner’s pregnancy, reducing to 25% after the baby was born.

For some men, the stress of becoming a father and the need to manage competing social demands may present barriers to positive behaviour change. Instead, drinking and smoking, may become forms of ‘hedonistic’ escape (Robertson, 2007; Williams, 2007). For example, men in one study reported smoking to help regulate emotional reactions to the pressures of work, fathering responsibilities, and a desire to maintain personal relationships (Kwon et al., 2014). In a qualitative study with parents of children aged 10 or younger, Wolf et al. (2015) found that fathers often drink to relax, although they need to constantly negotiate this need with parenting responsibilities. Another explanation could be that behaviours, such as drinking and smoking, are used to construct men’s identities (Emslie et al 2013; Kwon et al 2015). For example, there is evidence that new fathers use smoking to help them manage their identity as a father (Olliffe et al., 2010) and that some fathers perceive smoking as a core element of their masculinity (Flemming et al 2015).

For example, Gordon et al. (2013) examined the relationship between traditional masculine norms
'status,' ‘toughness’ and ‘anti-femininity’), substance use, and healthy behaviours among young men transitioning to fatherhood. They found that young men who endorsed the idea that a man is to be emotionally, physically, and mentally tough may engage in health undermining behaviours. However, the masculine norm ‘status’ was protective against substance use and related to the adoption of healthy behaviours (Gordon et al., 2013).

Therefore, it remains unclear how men ‘experience’ alcohol consumption in the context of fatherhood and whether they use alcohol to manage social demands and maintain certain identities. Understanding if and how men’s drinking changes when they become fathers can inform interventions and guide best practice on supporting new fathers to reduce hazardous alcohol consumption. If pregnancy is a ‘teachable moment’ for fathers then alcohol interventions could be delivered during this time in order to capitalise on men’s increased motivation to adopt healthy behaviours, support their partners and care for their children. Reducing/quitting alcohol consumption in the pre- and post-natal period is likely to have benefits for men, their partners and children.

This scoping review synthesises evidence on the impact of becoming a father on men’s alcohol consumption and on the effectiveness of existing interventions to reduce drinking among new fathers. The review aims to answer the following questions:

1. What are men’s experiences of alcohol consumption in the context of becoming a father?
2. What are the key characteristics of existing interventions to target alcohol consumption in new fathers?
3. What are the best ways to engage with new fathers in relation to reducing alcohol-related harm?
Methods

This scoping review examines the range and nature of research evidence on men’s alcohol consumption in the context of becoming a father. A scoping review is suitable for this topic as it examines the extent and nature of research activity in a particular field and is particularly appropriate when the research questions are broad and where studies of different designs are included (Arksey & O’Malley, 2005), as is the case for this review (i.e. qualitative studies exploring men’s experiences of drinking and interventions aiming to reduce alcohol consumption in new fathers). A six stage framework for scoping reviews (Arksey & O’Malley, 2005; Levac et al., 2010) was used to ensure the review was undertaken in a rigorous and transparent manner: 1) Identifying the research question; 2) Identifying relevant studies; 3) Study selection; 4) Charting the data; 5) Collating, summarising and reporting the results; 6) Seeking views and contributions of stakeholders. The review is reported following PRISMA guidelines for scoping reviews (Tricco et al., 2018).

Protocol and registration

The protocol for this scoping review is registered on the FigShare database (Dimova et al., 2020).

Eligibility criteria

The review includes studies that report on new fathers’ experiences of alcohol consumption or the feasibility/effectiveness of an intervention to address alcohol consumption in new fathers. For the purpose of this review, alcohol consumption refers to any drinking behaviour, including (but not limited to) moderate drinking, heavy episodic drinking, hazardous drinking and alcohol dependence. We use ‘new fathers’ to refer to those expecting a child or whose youngest child is up to 24 months old. Eligible interventions could take a psychosocial, behavioural or medical approach to address alcohol consumption. Studies that focused on both parents were included only if they reported information on fathers separately. Grey literature, such as newspaper articles and opinion pieces, was excluded. However, unpublished reports were deemed relevant in order to reduce the risk of publication bias in the review (Hopewell et al., 2007). Conference proceedings and study protocols were also deemed eligible for inclusion as they provide important information about ongoing studies. Only studies in English were included due to time and financial restraints.

Information sources

The following electronic databases were systematically searched: Medline, CINAHL, Web of Science, PsychInfo. Reference lists of included articles were hand searched to identify any relevant studies that may have been omitted by the databases search.

Search

Databases were searched from inception until November 2020. A comprehensive search strategy was developed and adapted for each database, by combining key terms for (a) pregnancy, b) fathers and (c) alcohol, and Boolean operators. We consulted previous literature to identify search terms, relating to expectant and new fathers (Poh et al., 2014; Baldwin et al., 2017; Holopainen et al., 2019). No search limits were applied. An example search strategy is presented in Table 1. The
primary author ran the search strategy and collated all identified articles in Microsoft Excel.

**Selection of sources of evidence**

All results, identified in the databases search, were collated and duplicates removed. After this, the titles and abstracts of the articles were independently screened by two reviewers (ED, JM). They marked the selection as ‘include’, ‘exclude’ or ‘unclear’ on the basis of the inclusion criteria. After this, the full text of all articles marked as ‘include’ or ‘unclear’ was obtained and screened independently by the two reviewers to ensure articles met the inclusion criteria. Discrepancies were resolved through discussion.

**Data charting process**

A data extraction tool, informed by The Joanna Briggs Institute (2020), was developed for this review in order to create a descriptive summary of the results and address the review aims. Data were extracted into Microsoft Excel in order to produce evidence tables of included studies. One table presents key information from studies on new fathers’ experiences of alcohol consumption and another on interventions to reduce alcohol consumption in new fathers. Data extraction was done by one reviewer (ED) and double checked by another (JM).

**Data items**

We extracted data on: study information (i.e. author, year, country), aim, methods, population, participant recruitment and eligibility criteria, data collection (for qualitative studies), key findings (for qualitative studies), intervention information (for intervention studies, e.g. theory, components, duration), alcohol measures (for intervention studies) and alcohol outcomes (for intervention studies).

**Synthesis of results**

The extracted information from included studies was brought together in a narrative summary, and organised around the research questions.
Results

Selection of sources of evidence

The databases yielded 5,225 results. After duplicates were removed, the titles and abstracts of 3,304 articles were independently screened by two reviewers (ED, JM). The full text of 41 articles was screened. The review includes five articles, published in peer-reviewed journals, and one protocol. Three of the studies explored fathers’ experiences of alcohol consumption, two reported on interventions and one is a protocol for an intervention to reduce alcohol consumption in new fathers. The study selection process is reported using the PRISMA flowchart (Moher et al., 2009) in Figure 1.

Figure 1: PRISMA flowchart
Characteristics of sources of evidence

Men’s experiences of alcohol in the context of fatherhood

Study description

Three studies explored views and experiences of drinking among the male partners of pregnant women (Benoit & Magnus, 2017; Crawford-Williams et al., 2015; van der Wulp et al., 2013). The studies were conducted in Australia (Crawford-Williams et al., 2015), Canada (Benoit & Magners, 2017) and the Netherlands (van der Wulp et al., 2013). The studies aimed to explore knowledge of the effects of alcohol use in pregnancy among pregnant and newly delivered women and their partners (Crawford-Williams et al., 2015), the place of fathers in discourses about problematic substance use during the perinatal period (Benoit & Magners, 2017), and information women and partners receive about alcohol in pregnancy (van der Wulp et al., 2013).

Study population

The participants in each study comprised four expectant or new fathers (Crawford-Williams et al., 2015), nine expectant fathers (van der Wulp et al., 2013) and eight men who reported being in a committed relationship with the mother of their youngest (or unborn) child (Benoit & Magnus, 2017). Van der Wulp et al. (2013) failed to provide socio-demographic information, and Crawford-Williams et al. (2015) reported that all men were Caucasian and either from Australia or New Zealand. Benoit and Magnus (2017) provided more detailed information about their study population. Six of the eight men in their study self-identified as Indigenous (First Nations, Métis or Inuit) and their median age was 26 years. Two of the eight fathers reported being employed, four were currently in receipt of income assistance, and one father reported being homeless (Benoit & Magnus, 2017).

Recruitment

Participants in all three studies were recruited through posters/flyers in venues, attended by expectant and new parents (e.g. health and social services, women’s and children’s hospital, midwife practice, pregnancy courses, antenatal classes) (van der Wulp et al., 2013; Crawford-Williams et al., 2015; Benoit & Magnus, 2017).

Eligibility criteria were not reported in two studies (van der Wulp et al., 2013; Crawford-Williams et al., 2015). Benoit and Magnus (2017) recruited participants who met the following criteria: 19 years of age or older, affected by substance use either directly or indirectly, low income or insecure housing, and had a pregnant partner, or had a baby in the last 12 months.

Data collection

In two studies, questions were not specifically directed at fathers as the studies involved both mothers and fathers. These explored personal definitions of problematic substance use during pregnancy and early parenting, in addition to questions around participants’ living situation, experiences with healthcare services (Benoit & Magnus, 2017) and discussions around the negative consequences of drinking during pregnancy, sources of information about alcohol use in pregnancy and the availability of reliable health information (Crawford-Williams et al., 2015).
Van der Wulp et al. (2013) asked men about their pregnant partner’s alcohol use, whether they have discussed this with their partner, and their views and experiences of information on alcohol consumption during pregnancy.

Interventions to address alcohol consumption in new fathers

Study description

The review includes three studies reporting on interventions to reduce alcohol use among new and expectant fathers (Noonan et al., 2016; Robinson et al., 2017; Fletcher et al., 2018). This comprises one randomised controlled trial (RCT) examining whether a smoking cessation intervention had unintended effects on binge drinking among new fathers in the USA (Noonan et al., 2016), one developmental study (a text-based intervention informing men about the benefits of reducing risky drinking during the transition to fatherhood in Australia; Robinson et al., 2017) and one protocol for an RCT, proposing a text based intervention with expectant fathers in Australia (Fletcher et al., 2018).

Study population

Robinson et al.’s (2017) study included 51 men (49 current fathers and two expectant fathers). Most of these men (n=44) were married or in a de facto relationship. The majority (n=38) were between the ages of 36 and 50 years. Finally, almost all of them (n=50) were employed and 39 had university education.

Noonan et al.’s (2016) study included 348 men with a mean age of 30 years; half (49%) were White and 46% reported being of more than one race. Two thirds (66%) reported education below secondary level. Perceived financial burden was also measured: 38% of men reported having difficulty paying their bills, 42% indicated having enough money to pay the bills but little spare, 15% had enough money to pay the bills but had to cut back on other things, and only 5% had enough money for special things.

Recruitment

Robinson et al. (2017) recruited participants via social media and inclusion criteria were: current or expectant Australian fathers who have ever consumed alcohol, and who have access to the Internet. Participants in the other study were recruited through clinics (Noonan et al., 2016) and had to meet certain criteria for smoking (as this was a smoking cessation intervention and alcohol was a secondary outcome). Fletcher et al. (2018) plan to recruit 800 expectant and new fathers through a study-specific website, that men will be made aware of through media outlets, including social media and flyers distributed by health staff. The inclusion criteria will be men who have a partner who is more than 16 weeks pregnant or their infant is less than 12 weeks of age, have a mobile phone capable of receiving text messages, and are able to read and understand English (Fletcher et al., 2018).

Alcohol measures

Noonan et al. (2016) measured binge drinking in the past 30 days by asking men how many days a week they had an alcoholic beverage, and then asking men who drank one or more days a week, to
report the number of drinks they had each day. Those who indicated having five or more drinks a day were considered to be ‘binge’ drinkers. Robinson et al. (2017) used the AUDIT C (which screens for hazardous drinking and alcohol dependence) and also asked fathers to rate the importance and difficulty (using a Likert scale) of following the Australian alcohol guidelines. Fletcher et al. (2018) plan to measure alcohol outcomes using the AUDIT C.

**Alcohol outcomes and intervention effectiveness**

Robinson et al. (2017) describe the development and piloting of 30 text messages to inform men about the benefits of reducing risky drinking during the transition to fatherhood. They asked fathers to rate the text messages for message importance and likelihood of seeking further information. Participants attributed higher importance to messages in a child voice compared to those in a second person voice. However, fathers gave similar ratings of likelihood of pursuing information between child voice and second person voice. In sub-group analysis, the authors found that men who consumed alcohol at high-risk levels rated importance of drinking to recommended guidelines as less important but also more difficult to adhere to, compared to those who drank at low-risk levels. The qualitative component of the study found that most fathers responded positively to the text messages and reported that messages that directly connected their behaviour with their child’s health and emotional wellbeing had a greater impact than the messages about their own health (Robinson et al., 2017). However, some men viewed these messages as manipulative. Finally, the study found that ex-drinkers and risky drinkers indicated a preference for strongly worded alcohol messages (Robinson et al., 2017).

The men in Noonan et al.’s (2016) study, who received the couples-based intervention, were less likely to report binge drinking at 12 months compared to those in the control arm. In addition, men who quit smoking reported less binge drinking compared to non-quitters.

Fletcher et al. (2018) predict that alcohol use (based on the AUDIT C) will be lower among men who receive the SMS4dads intervention, compared to those who receive the comparison SMS4health intervention.

**Results of individual sources of evidence**

The extracted information from included studies is presented in Tables 2 and 3.
Synthesis of results

What are men’s experiences of alcohol consumption in the context of becoming a father?

This review highlights the scarcity of qualitative research exploring men’s experiences of alcohol consumption in the transition to fatherhood. Only one of the included studies explored fathers’ experiences in depth and it focused on problematic substance use (including drugs).

Motives for reducing

There is very limited information exploring men’s motives for reducing drinking during pregnancy or in the postnatal period.

Fathers in two studies reported reducing their alcohol consumption during pregnancy to show support for their partner (van der Wulp et al., 2013; Crawford-Williams et al., 2015). Some men reduced their drinking because they missed their spouse as a drinking companion (van der Wulp et al., 2013). Becoming a father was also reported as a reason for reducing drinking among men (Benoit & Magnus, 2017). The men in this study believed that fathers’ alcohol (and other substance) use can be as harmful for the baby as that of the mother, although they acknowledged that fathers were not held to the same degree of responsibility in relation to abstinence as mothers (Benoit & Magnus, 2017). Men in the study talked about the ‘provider’ ideals and how substance use can interfere with parenting in both financial and emotional ways. For example, substance use was perceived to become problematic when money for substances ‘is coming out of your child’s mouth’ (Benoit & Magnus, 2017, p. 388). Similarly, substance use could affect emotional support when time for consumption ‘is coming out of the time being spent with your baby.’ (Benoit & Magnus, p. 388). Respondents discussed perceiving themselves as role models for their children (Benoit & Magnus, 2017). This was viewed as particularly necessary for breaking the cycle of socioeconomic disadvantage as one man in the study said that he would not want his child to follow his path or go to prison (Benoit & Magnus, 2017). Participants in Benoit & Magnus’ (2017) study also talked about domestic violence as an example of substance-related harm and the majority of participants said that safety needs to be a prerequisite for the inclusion of fathers in family life. One man in the study, who identified as indigenous, shared that he becomes aggressive when drinking and believed this is linked to his ethnicity.

Knowledge of alcohol and pregnancy

Only one study in this review explored (expectant) fathers’ knowledge of the effects of alcohol use during pregnancy on babies (Crawford-Williams et al., 2015). Although most participants (women and their partners) acknowledged that alcohol has the potential to cause harm to the unborn baby, the quantity of alcohol needed to cause harm, and the impact of the timing of the exposure were not well known. Many participants believed that alcohol consumption by the mother in the first trimester would cause harm but a small amount of alcohol throughout the pregnancy was not perceived as harmful for the baby. One man in the study reported knowing women who drink ‘a glass of wine’ while pregnant and believed this can ‘calm the mother’s mood’ and have benefits for the baby (Crawford-Williams et al., 2015, p. 5).

Support for decreased drinking

Benoit & Magnus (2017) found that agreement to abstain from alcohol was mostly viewed as the mother’s decision rather than a mutual decision. Some respondents reported their partners gave them an ultimatum to stop drinking or lose their family, although there were examples where the pregnant woman supported the man to quit drinking (Benoit & Magnus, 2017). Finally, van der Wulp et al. (2013) found that men reported websites about pregnancy were not suited for expectant fathers as they contain pink colours and pictures of pregnant women. Similarly, fathers in Benoit and Magnus’ (2017) study reported feeling uncomfortable in parenting groups.

What are the key characteristics of existing interventions to target alcohol consumption in new fathers?

Given the limited evidence on interventions to target alcohol consumption in new fathers, this scoping review cannot identify key characteristics of successful interventions. However, we provide the characteristics of included interventions below.

Only one intervention was identified which assessed effectiveness. Noonan et al.’s (2016) intervention was couples-based and included a booklet guide on quitting smoking, free nicotine replacement therapy (NRT) for six weeks, three face-to-face counselling sessions during pregnancy, and three sessions postpartum (one face-to-face and two over the phone). The intervention did not focus on alcohol consumption, as this was a secondary outcome. The face-to-face counselling session was conducted in the participants’ home and focused on emotions (e.g. pride, responsibility) and discussion about the health effects of smoking. A male counsellor worked with the father to build motivation and set goals around quitting smoking, and a female counsellor worked with the mother to promote healthy eating and activity goals. The counsellors also helped the couple to develop effective communications skills and support each other in reaching their goals. The phone counselling sessions focused on reviewing progress towards smoking cessation and practising communication skills.

Robinson et al.’s (2017) intervention did not assess effectiveness. Their intervention included 30 text messages (limited to 160 characters), which were based on Australia’s drinking guidelines, and addressed alcohol-related harms in relation to infant health, the spousal relationship, father-infant relationship and the fathers’ health. The intervention was informed by theory, using motivational interviewing (MI) and the Stages of Change model. The messages were presented either from a child’s voice, as if the child is addressing their father (e.g. ‘Hey dad, do you know how many drinks you can have before it affects your health?’) or from a second person voice (e.g. ‘Do you know how many drinks you can have before it affects your health?’).

In the intervention, proposed by Fletcher et al. (2018), the messages were developed through consultation with parents, academics and practitioners. A father who takes part in the full 77-week intervention will receive 294 messages, 25 of which focus on alcohol, but their content is not reported by Fletcher et al. (2018). The messages are timed according the babies’ expected or actual date of birth, so the issues they address are likely to be relevant for the father. The messages aim to engage with fathers through humour, use of the baby’s voice, and an encouraging, non-judgmental tone.
What are the best ways to engage with new fathers in relation to reducing alcohol-related harm?

The limited number of studies identified by this review suggests that it is feasible to recruit expectant and new fathers through antenatal clinics, hospitals and other venues where fathers may go (e.g. antenatal classes, pregnancy courses). Potentially successful approaches could include the use of posters/flyers, recommendations through gatekeepers (e.g. midwives, nurses), and by directly approaching men after gatekeeper approval is obtained (van der Wulp et al., 2013; Crawford-Williams et al., 2015; Noonan et al., 2016; Benoit & Magnus, 2017). Social media is another potentially successful avenue for engaging expectant and new fathers (Robinson et al., 2017; Fletcher et al., 2018). However, only one of the studies in this review provided sufficient information to determine how successful different approaches are (Noonan et al., 2016). The study presents secondary analysis from a smoking cessation trial, where the researchers approached 555 men, of which 411 agreed to participate (Pollack et al., 2015). This suggests that contacting partners of pregnant women directly (after agreement from the pregnant woman) can be a successful approach to engaging fathers.

Stakeholder involvement

The review findings and their implications were discussed in a stakeholder meeting, attended by representatives from third sector organisations that work with fathers and families, and academics with extensive experience in gender-based interventions and research focusing on fathers. The key points from the stakeholder discussion informed the discussion section of this report.
Discussion

This is the first scoping review to bring together evidence on the impact of becoming a father on men's alcohol consumption and on the effectiveness of existing interventions to reduce drinking among new fathers. We found only three studies that explored fathers' experiences of alcohol consumption, two that reported on interventions to reduce alcohol consumption in new fathers (only one of which assessed effectiveness) and one protocol for an intervention. The review highlights the almost complete absence of new fathers' voices in relation to experiences of alcohol use and effectiveness of interventions to support new fathers to reduce alcohol consumption. This is in line with the findings of a previous scoping review, which points to the invisibility of fathers in studies of psychosocial interventions for substance-abusing parents (Heimdahl, 2016).

What are men's experiences of alcohol consumption in the context of becoming a father?

Overall, there is lack of qualitative research that explores expectant and new fathers' experiences of alcohol use during and after pregnancy. While screening for eligible studies for this review, we did identify studies that qualitatively explored parents' experiences of alcohol consumption, but the majority focused on women and those that included men highlighted the role of fathers in helping women to stop drinking (Balachova et al., 2007; Edvardsson et al., 2011; Hammer, 2019). The experiences of fathers have been largely neglected in alcohol research. Although three qualitative studies met the inclusion criteria for this review, two of these did not explore in any depth men's views on how becoming a father affected their drinking. They suggest that men may reduce alcohol consumption in order to support their pregnant partner (van der Wulp et al., 2013; Crawford-Williams et al., 2015). Only one study in this review explored men's views of problematic drinking during fatherhood (Benoit & Magnus, 2017). Men believed that a father should be a role model for their children and problematic substance use should not interfere with parenting. This resonates with a study, not included in this review, which found that parents’ narratives around alcohol use focus on not setting a bad example or putting children in danger (Wolf & Chávez, 2015). Parents in Wolf and Chávez’s (2015) study managed these perceived risks in relation to social context. Some parents believed drinking outside the home is riskier because of the need to drive, while others perceived drinking at home to be riskier as it sets a bad example for their children (Wolf & Chávez, 2015). A key finding from Benoit and Magnus' (2017) study was that fathers believed that their substance use can be as harmful to the baby as that of the mother (Benoit & Magnus, 2017). However, participants had low incomes and were affected by any substance use (not necessarily alcohol), so these findings may not be applicable to all fathers in the general population.

The qualitative studies in this scoping review also show that fathers may find antenatal websites to be tailored specifically for women (Van der Wulp et al., 2013; Crawford-Williams et al., 2015) and may feel uncomfortable in parenting classes (Benoit & Magnus, 2017). This resonates with recent work by Miller & Nash (2017), who conducted qualitative longitudinal studies to explore the experiences of fathers in the UK and Australia during the antenatal and postnatal periods (up to two years after birth). Men in the UK attended couple-based antenatal classes and reported feeling uncertain and out of place as they felt the classes were tailored for the mothers (Miller & Nash, 2017). Australian men, who attended all-male classes felt more secure, especially when the midwife was male. However, some of the participants believed that outdated male stereotypes (e.g. men's drinking, watching/doing sports, etc.) were drawn upon both by other participants and the instructor (Miller & Nash, 2017). A recent qualitative study in Australia also found that beliefs
about gender roles and perceptions that interventions are mother-focused can act as barriers to fathers participating in parenting interventions (Sicouri et al., 2018).

What are the key characteristics of existing interventions to target alcohol consumption in new fathers?

Paternal alcohol consumption can have negative effects on foetal and infant health outcomes, and on maternal alcohol consumption during pregnancy (Desrosiers et al., 2015; McBride & Johnson, 2016; Kerr et al., 2012). Despite this, there is a clear lack of interventions designed to address alcohol use during the transition to fatherhood. The current review identified only one intervention that assessed effectiveness. This was a smoking cessation intervention, which had an unintended impact on binge drinking and led to a significant decrease in binge drinking among fathers (Noonan et al., 2016). The study by Noonan et al. (2016) suggests that involving both members of the couple in an intervention and emphasizing communication skills are important for intervention effectiveness. This is not surprising given the strong support in the literature for Behavioural Couples Therapy to reduce drinking and increase relationship functioning (McCrady et al., 2019). The utility of family-based interventions has been previously demonstrated in the field of smoking. For example, Chan et al. (2017) compared a family-based intervention, that included six nurse-led individual face-to-face and phone counselling sessions and a voluntary face-to-face family session, to a control intervention of brief advice, leaflet and a self-help booklet. The participants were a daily-smoking father and a non-smoking mother, with a child aged 18 months or younger. Chan et al. (2017) found that compared to the control group, fathers in the intervention group reported greater prevalence of seven-day and six-month self-reported smoking abstinence, which was higher in participants who engaged with the family session. The potential of family-based interventions to address multiple risk behaviours, such as hazardous drinking and smoking, needs to be explored further.

This scoping review suggests that text message interventions may offer a promising avenue for engaging men, as Robinson et al. (2017) found their intervention to be feasible and well-accepted by fathers. The acceptability and potential effectiveness of the intervention proposed by Fletcher et al. (2018) has also been previously explored. In a pilot study, Fletcher et al. (2016) found that the proposed intervention has good acceptability and fathers found the content helpful. However, they do not report on the acceptability of text messages that focus on alcohol specifically. In a subsequent analysis, Fletcher et al. (2019) distinguished two mechanisms, structural and psychological, that can explain the potential effectiveness of the proposed intervention. The authors suggest that the intervention would contribute towards a smooth transition to fatherhood, by providing fathers with knowledge and preparation, while also normalising reflections on mood and mental health (Fletcher et al., 2019). The utility of text message interventions to reduce alcohol-related harm among men has previously been demonstrated (Crombie et al., 2017; Crombie et al., 2018) and there is clear evidence that text message interventions can promote healthy behaviours among pregnant women (Balci & Kadioglu, 2018). The intervention, proposed by Fletcher et al. (2018) in their protocol, includes text messages in a child’s voice, which aim to create a virtual conversation between the father and the baby, thus promoting father involvement. The use of virtual conversation in the form of a narrative has strong potential to increase engagement and reduce resistance to change (Miller-Day et al., 2013; Murphy et al., 2013). For example, Crombie et al. (2018) found high engagement in an alcohol-reduction text message intervention among men, living in disadvantaged areas in Scotland. The text messages were embedded in a humorous narrative that followed the journey of a man who gradually reduces drinking (Crombie et al., 2018).
The character encounters difficulties, and models key behaviour change techniques, such as goal setting and action planning (Crombie et al., 2018).

**What are the best ways to engage with new fathers in relation to reducing alcohol-related harm?**

The scoping review suggests it is feasible to recruit expectant and new fathers through antenatal clinics, hospitals and other venues where fathers may go (e.g. antenatal classes) (van der Wulp et al., 2013; Crawford-Williams et al., 2015; Noonan et al., 2016; Benoit & Magnus, 2017). However, given low participation of fathers in parenting interventions (Burgess, 2009; Andreson et al., 2014), more tailored approaches need to be adopted, especially ones that can reach specific groups, such as separated fathers (Burgess, 2009).

Social media can also be a successful way to engage expectant and new fathers (Robinson et al., 2017; Fletcher et al., 2018). A recent study investigating methods to improving men's recruitment to health behaviour research found that vibrant images and concise captions via Facebook increased engagement of men (Ryan et al., 2019). The study also found that asking women to invite men increased male participation (Ryan et al., 2019). This resonates with the findings from Noonan et al. (2016) and Pollack et al. (2015) who found that contacting partners of pregnant women directly (after agreement from the pregnant woman) can be a successful approach to engaging fathers. However, this needs to be done carefully because viewing mothers as ‘gatekeepers’ may also act as a barrier to fathers’ engagement with parenting interventions (Sicouri et al., 2018).

**Gaps in previous research**

This review highlights the need for more research to explore men’s experiences of alcohol consumption in the context of becoming a father. The lack of qualitative research and insufficient understanding of new fathers’ experiences of alcohol use may result in missed opportunities to address hazardous and harmful drinking among men during an important period of transition into fatherhood. Longitudinal qualitative studies could provide an in-depth understanding of men’s transition into fatherhood. For example, Miller et al. (2011) found that while equality and sharing care for the baby are anticipated in the postnatal period, return to paid work disrupts these intentions and results in fathers trying to incorporate caring practices into evenings and weekends. Managing work pressures and fathering responsibilities may also compromise men’s intention to adopt and maintain healthy behaviours (Gordon et al., 2013; Flemming et al., 2015; Kwon et al 2015). Future qualitative research should explore the perspectives of fathers in relation to alcohol consumption as well as the social context of their drinking, at different time points following the birth of the baby.

Qualitative research exploring fathers’ experiences of alcohol consumption also needs to include a diverse sample in terms of age and whether the participants are first-time fathers. Previous research suggests that younger fathers and first-time fathers may be more likely to make lifestyle adjustments (Bodin, 2017). In addition, having a planned pregnancy may also be an important factor influencing men’s health behaviours. Shawe (2019) found that men who indicated a planned pregnancy were significantly more likely to reduce alcohol consumption and adopt other health behaviours (e.g. healthy eating, reduce or stop smoking).

Future research also needs to explore successful strategies to engage with new fathers. Recruitment
through antenatal classes and through women as gatekeepers may be effective but may also result in the exclusion of specific groups of men. Social media may provide a promising way to engage with men. However, in order to understand how successful specific recruitment strategies are, future studies need to provide information on non-responders.

Antenatal information needs to be father-friendly as being given information has been shown to have a significant positive effect on reducing alcohol consumption among men (Shawe et al., 2019). More research is needed to inform the content and form of presentation for information targeting new fathers.

Finally, there is a need for interventions to support new fathers to reduce their alcohol consumption. Although text message interventions may be a cost-effective way to reduce drinking, their components, acceptability, and effectiveness among new fathers remain largely unexplored.

Implications

The findings of this review have implications for families, health professionals, and policy makers. Parenting interventions offer a promising avenue for promotion of healthy behaviours. However, the majority of global parenting interventions marginalise fathers (Panter-Brick et al., 2014) and fathers often feel excluded and inadequate when engaging with health visiting services (Menzies, 2019). An important step towards creating father-friendly services is to ensure antenatal services signal fathers’ involvement. A recent series of interventions found that inclusion of environmental cues, such as men’s magazines and pictures of fathers, increased intentions and confidence in men to be involved as fathers and to engage in health behaviours (Albuja et al., 2019). In addition, Menzies (2019) recommends that health professionals need to link the birth transition to fatherhood, rather than simply preparing men to support their partners. Such conversations can offer an excellent opportunity to address men’s health behaviours, such as smoking and alcohol consumption. In a survey among men in England, Shawe et al. (2019) found that men who receive preconception information may be more likely to reduce drinking and smoking, and adopt a healthy a diet. Early childhood programme practitioners are also in an excellent position to engage fathers, as they have frequent interactions with parents to discuss children’s progress. In a qualitative study with fathers from low-income settings, Anderson et al. (2014) found that a mismatch between programme strategies and fathers’ role beliefs can hinder programme engagement. The study suggests that practitioner interactions that value fathers and support them in developing parenting skills can facilitate fathers’ engagement with the programme (Andreson et al., 2014).

Although it is crucial for parenting interventions to involve and be promoted to fathers (Panter-Brick et al., 2014; Sicouri et al., 2018), they need to be carefully designed to be respectful of cultural values. Minority ethnic parents are often disproportionately affected by barriers, such language understanding, distance to travel and cost (Page et al., 2007). In addition, cultural and ethnic factors may influence paternal engagement (Hoffreth, 2003). For example, O’Donnel et al. (2019) found that in some cultures power relations in households can hinder change to creating smoke-free homes. Health care professionals need to be equipped to show greater sensitivity to the subtleties of cultural norms and be careful to not make incorrect assumptions on the basis of perceived cultural values (Crawshaw et al., 2010).

Despite socio-political changes affecting paternal parenting culture, fathers may still feel
unsupported when it comes to antenatal support (Kowlessar et al., 2015) and health visitors may face organisational and cultural barriers to father-inclusive practice (Humphries & Nolan, 2015). To further promote change, nationwide policies need to challenge gender biases, normalise parenting practices and promote training and education for health professionals. Documents that refer to parents may implicitly perpetuate fathers’ role as ‘bystanders’. This is acknowledged in Scotland’s National Parenting (2012) strategy, which says that ‘when discussing parenting we still tend to think of the mother rather than the father, leaving fathers feeling of secondary importance or worse, excluded’ (Scottish Government, 2012, p. 35). An inquiry by the Equal Opportunities Committee in 2014 revealed that the Scottish Government has taken steps to address fathers in its guidance and literature, but more work is required so organisations working with parents can ensure their work actively involves fathers (Scottish Parliament, 2014).

Limitations of the current review

A number of limitations of the current scoping review should be acknowledged. The review was performed with a high level of methodological rigour, but it is possible that the search strategy did not capture all available research. In an effort to identify studies that focus on expectant and new fathers, we included key terms related to pregnancy (e.g. antenatal, postnatal). Therefore, the search may have excluded studies focusing on fathers of young children. The review included only studies in English and studies in other languages may offer additional evidence. Although the review did not exclude grey literature, we did not specifically search for grey literature so unpublished reports may have been omitted by the search. Finally, the review followed clear inclusion and exclusion criteria, which may have resulted in the exclusion of studies that focus on the experiences of parents but do not separately report data in relation to fathers.

Conclusion

This scoping review highlights the almost complete absence of new fathers’ voices in relation to their experiences of alcohol use and of research on the effectiveness of interventions to support new fathers to reduce alcohol consumption. The findings have implications for researchers and health practitioners, as insufficient understanding of new fathers’ experiences of alcohol use may result in missed opportunities to address hazardous and harmful drinking among men during an important period of transition into fatherhood.
References


Kowlessar, O., Fox, J. & Wittkowski, A. (2014). First-time fathers’ experiences of parenting during the first year. *Journal of Reproductive and Infant Psychology*, 33, 4-14


### Tables

**Table 1: Example of the electronic search strategy (Medline)**

<table>
<thead>
<tr>
<th>Search ID</th>
<th>Search terms</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>antenatal.mp.</td>
<td>31,559</td>
</tr>
<tr>
<td>2</td>
<td>antepartum.mp.</td>
<td>5,342</td>
</tr>
<tr>
<td>3</td>
<td>prenatal.mp.</td>
<td>164,903</td>
</tr>
<tr>
<td>4</td>
<td>perinatal.mp.</td>
<td>68,517</td>
</tr>
<tr>
<td>5</td>
<td>postnatal.mp.</td>
<td>100,828</td>
</tr>
<tr>
<td>6</td>
<td>postpartum.mp.</td>
<td>63,970</td>
</tr>
<tr>
<td>7</td>
<td>pregnan*.mp.</td>
<td>958,204</td>
</tr>
<tr>
<td>8</td>
<td>1 or 2 or 3 or 4 or 5 or 6 or 7</td>
<td>1,080,429</td>
</tr>
<tr>
<td>9</td>
<td>father*.mp.</td>
<td>41,411</td>
</tr>
<tr>
<td>10</td>
<td>dad*.mp.</td>
<td>16,273</td>
</tr>
<tr>
<td>11</td>
<td>expectant father*.mp.</td>
<td>216</td>
</tr>
<tr>
<td>12</td>
<td>men.mp.</td>
<td>462,475</td>
</tr>
<tr>
<td>13</td>
<td>significant other*.mp.</td>
<td>3,543</td>
</tr>
<tr>
<td>14</td>
<td>partner*.mp.</td>
<td>157,128</td>
</tr>
<tr>
<td>15</td>
<td>husband*.mp.</td>
<td>34,695</td>
</tr>
<tr>
<td>16</td>
<td>spous*.mp.</td>
<td>30,027</td>
</tr>
<tr>
<td>17</td>
<td>paternal*.mp.</td>
<td>29,091</td>
</tr>
<tr>
<td>18</td>
<td>9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17</td>
<td>721,713</td>
</tr>
<tr>
<td>19</td>
<td>alcohol.mp.</td>
<td>269,187</td>
</tr>
<tr>
<td>20</td>
<td>drink*.mp.</td>
<td>177,674</td>
</tr>
<tr>
<td>21</td>
<td>19 or 20</td>
<td>362,706</td>
</tr>
<tr>
<td>22</td>
<td>8 and 18 and 21</td>
<td>1,770</td>
</tr>
</tbody>
</table>
### Table 2: Studies on new fathers’ experiences of alcohol consumption

<table>
<thead>
<tr>
<th>Study information</th>
<th>Aim</th>
<th>Methods</th>
<th>Population</th>
<th>Recruitment</th>
<th>Key findings (in relation to fathers)</th>
</tr>
</thead>
</table>
| Benoit & Magnus (2017). Canada | Explores how parents fit fathers into discourses about problematic substance use during the perinatal period. | Qualitative study, using interviews (part of a larger mixed-methods study). Interviews in family-friendly locations, including the parents’ homes. Open-ended questions about participants’ living situation, experiences with healthcare services, opinions about how Her Way Home (HWH) services (a new harm reduction program for new and expectant mothers) could be most helpful, and about a personal definition of problematic substance use during pregnancy and early parenting. | Eight expectant or new fathers  
**Age:** Median = 26  
**Relationship status:** Eight in a committed relationship with the mother of their youngest (or unborn) child.  
**Ethnicity:** Six Indigenous (First Nations, Métis or Inuit).  
**Employment:** Two employed; four in receipt of income assistance.  
**Housing status:** One homeless. | Via posters in health and social service sites and community centres frequented by families; and snowball sampling. | Fathers saw themselves as role models for their children. Modelling virtuous behaviour was framed as necessary for breaking the cycle of socioeconomic disadvantage, including criminality. Some men believed fathers’ substance use became problematic when it compromised emotional and physical support for the mother. The epitome of substance-related harm for fathers was domestic violence; the majority of participants conceded that safety was a prerequisite for the inclusion of fathers in family life or in family social programs. Men believed fathers’ problematic substance use can be as harmful to the baby as that of the mother. Agreement to abstain was more often represented as the mother’s decision, rather than a mutual negotiation. |
| Crawford-Williams et al. (2015). Australia | To identify gaps in knowledge about the effects of alcohol use in pregnancy among pregnant women, newly delivered and their partners. | Qualitative study, using focus groups. Focus group guide focused on the adverse consequences of drinking during pregnancy, the partner’s role in health decisions, the sources of information about alcohol use in pregnancy, and the availability of reliable health information. | Four expectant or new fathers  
**Age range:** 23 to 40 years.  
**Ethnicity:** Caucasian, either from Australia or New Zealand.  
Information on male partners is not reported separately. | Flyers at a Women’s and Children’s Hospital and at a University. | Most women and their partners recognise that alcohol has the potential to cause harm to the unborn baby. However, the quantity of alcohol required to cause harm, and the impact of the timing of the exposure were not as well known. Knowledge of FASD: Belief that alcohol consumption in the first trimester would cause the most harm, but small amounts of alcohol, such as one or two glasses throughout the whole of pregnancy would not be harmful to the foetus. Men’s role in pregnancy: Some men showed support by cutting back their own drinking, while others continued to drink. |
van der Wulp et al. (2013). The Netherlands

To explore what information Dutch pregnant women and partners receive about alcohol in pregnancy.

Qualitative study, using interviews and focus groups. Questions related to men in the sample included: Has your partner used alcohol in her pregnancy?; Have you discussed antenatal alcohol use with your partner?; What did you discuss specifically?; Did you receive or search for information about alcohol consumption during pregnancy?; Discussion around the content of the information and thoughts on how information can be improved.

Nine expectant fathers

**Age**: Mean = 34 years.

**Place of residence**: 56% lived in cities, 44% lived in village/rural locations.

**Education**: 78% had Higher vocational school/college degree/university degree, 22% had secondary vocational/high school degree.

**Antenatal alcohol use**: 33% of men in the sample

**Percentage first pregnancy**: 78%

Through midwife practices, pregnancy courses, antenatal childbearing classes, pregnancy yoga classes. Midwives distributed recruitment flyers. Pregnant women and partners in pregnancy classes were recruited at class meetings.

Many partners reduced their alcohol use around their spouse to support her to refrain from alcohol and because they missed their spouse as a drinking companion. Partners reported that websites about pregnancy seemed largely designed for women, as they were published in pink and contained pictures of happy pregnant women.
### Study information

<table>
<thead>
<tr>
<th>Aim</th>
<th>Methods</th>
<th>Population</th>
<th>Recruitment</th>
<th>Intervention information</th>
<th>Alcohol measures and outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>To conduct the first randomized controlled trial of a text-based intervention, SMS4dads, which targets fathers’ mental health during the perinatal period.</td>
<td>Randomised Control Trial.</td>
<td>800 fathers-to-be or new fathers will be recruited.</td>
<td>Through the SMS4dads website; social media, flyers distributed by health staff in contact with parents, and mainstream media outlets. <strong>Eligibility criteria:</strong> having a partner who is more than 16 weeks pregnant or their infant is less than 12 weeks of age, have a mobile phone capable of receiving text messages, and they can read and understand English.</td>
<td>A 77-week programme, including 294 text messages, limited to 160 characters. Messages will provide new fathers with information, support them in caring for their own physical and mental health, nurturing strong relationships with their child, and developing strong parenting partnerships with their partner. Messages are timed according the babies expected or actual date of birth and thereby designed to address issues that are likely to be occurring for the father when the information arrives. Messages aim to engage with fathers through humour, by use of the baby’s voice, and through an encouraging, non-judgmental tone. Some messages address particular issues such as alcohol consumption (n=25).</td>
<td>Measures: The Alcohol Use Disorders Identification Test (AUDIT C, 3 items). <strong>Outcomes:</strong> It is predicted that use of alcohol will be lower among those receiving SMS4dads than among those receiving SMS4health.</td>
</tr>
<tr>
<td>Robinson et al. (2017). Australia</td>
<td>To develop 30 text messages to inform men about the benefits of reducing risky drinking during the transition to fatherhood.</td>
<td>A developmental study in addition to a qualitative study of participants experiences of the intervention.</td>
<td>Via social media. <strong>Eligibility criteria:</strong> being a current or expectant Australian father, having ever consumed alcohol and having access to the Internet.</td>
<td>30 short messages, limited to 160 characters. The messages were informed by Motivational Interviewing and the Stages of Change model. They addressed alcohol-related harms in relation to infant health, the spousal relationship, father-infant relationship and the fathers’ health. Messages were based on national alcohol guidelines regarding alcohol consumption. The text messages were presented using two types of message voice: a child's voice, as if the father's own child were addressing him (e.g., 'Hey dad, do you know how many drinks you can have before it affects your health?') or a second person voice (e.g., 'Do you know how many drinks you can have before it affects your health?').</td>
<td>Measures: Importance and difficulty of drinking alcohol as per Australian alcohol guidelines (Using 10-point Likert scales); AUDIT C. Outcomes: Most fathers’ (65%) current alcohol levels were considered risky according to the Australian Alcohol Guidelines. Messages in a child’s voice were given a higher importance rating, compared to those in a second person voice. Most interview participants found the messages to be non-judgmental in style. Messages that directly connected the father’s behaviour with their child’s health and emotional wellbeing had greater impact than the messages about men’s own health. Messages using the child’s voice made men aware of their paternal responsibilities and how their drinking behaviour may impact upon their child, but some men believed messages in a child’s voice to be manipulative. Ex-drinkers and risky drinkers indicated a preference for the strongly worded alcohol messages.</td>
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<tr>
<td><strong>Parenting experience:</strong> Two (3.9%) expectant fathers, 49 (96.1%) current father</td>
<td><strong>Living arrangements:</strong> 44 (86.3%) married/de facto, 7 (13.7%) separated</td>
<td><strong>Age group:</strong> 13 (25.5%) between 25–35 years, 38 (74.5%) between 36–50 years</td>
<td><strong>Education level:</strong> Two (3.9%) year 10 or below, 10 (27.4%) years 11 or 12, 39 (76.5%) university under/postgraduate</td>
<td><strong>Employment:</strong> 50 (98.0%) full-time/part-time, one (2.0%) unemployed.</td>
<td></td>
</tr>
</tbody>
</table>
| Noonan et al. (2016). USA | To examine whether arm effects exist for a cessation intervention on the unintended outcome of binge drinking. | Secondary analysis of data from the Parejas Trial, a randomized controlled trial to compare a culturally tailored smoking cessation intervention among Latino fathers during pregnancy and postpartum. | 348 men.  
Age: Mean = 30 years.  
Race: 49 white, 46 more than one race, five other, six missing data.  
Monthly income: 22 <$500, 32 between $501-$1000, 25 between $1001-$1500, 21 > $1501.  
Perceived financial burden: Five had enough money for special things, 42 had enough money to pay the bills but little spare money, 15 had money to pay the bills but cut back on things, 38 had difficulty paying the bills.  
Education: 66 < 9th Grade.  
Alcohol use in the past 30 days: 17 none, 26 <once a week, 36 one day a week, 12 two days a week, 10 three or more days a week; 51 binge drinkers. | Through antenatal clinics.  
Eligibility criteria: at least 16 years of age, having smoked at least 100 cigarettes in their lifetime, and having smoked in the last 30 days, pregnant partner between 13 and 29 week gestation. | Intervention: a smoking cessation booklet, free nicotine replacement therapy six weeks, three two-hour face-to-face counselling sessions at the couple’s home during pregnancy, and three sessions postpartum (one face-to-face and two over the phone).  
Face-to-face sessions included: a PowerPoint slide show on the emotions surrounding the family (including pride, protectiveness; and responsibility), discussion about the health effects of smoking; goal setting (male counsellor helped the man to build motivation and set goals around quitting smoking; female counsellor worked with the woman to promote healthy eating and activity goals); promotion of effective communication skills.  
Phone sessions with men lasted approximately 15 mins and focused on reviewing progress towards smoking cessation and practicing couple’s communication skills.  
Comparison intervention: a smoking cessation booklet and free nicotine replacement therapy six weeks. | Measures: Binge drinking in the past 30 days, measured in two stages: 1) asking men: ‘During the past 30 days, on or about how many days a week did you drink alcoholic beverages?’  
2) Those men that drank one or more days a week were then asked, ‘Consider a drink to be a can or bottle of beer, a 4-oz glass of wine, or one cocktail containing 1-oz of liquor. On average, when you drink alcoholic beverages how many drinks do you have each day?’  
Those men who answered 5 or more drinks a day were considered to be binge drinkers.  
Outcomes: Men who received the couples-based intervention were less likely to report binge drinking at 12 months compared to those in the control arm, and men who quit smoking reported less binge drinking at 12 month follow-up compared to non-quitters. |