**Health Behaviour Change Interventions for Couples: A systematic review**

**Abstract**

Partners are a significant influence on individuals’ health, and concordance in health behaviours increases over time in couples. Several theories suggest that couple-focused interventions for health behaviour change may therefore be more effective than individual interventions. Systematic search methods identified RCTs and non-randomized interventions of health behaviour change for couples with at least one member at risk of a chronic physical illness, published from 1990-2014. We identified 14 studies, targeting the following health behaviours: cancer prevention (6), obesity (1), diet (2), smoking in pregnancy (2), physical activity (1) and multiple health behaviours (2). In four out of seven trials couple-focused interventions were more effective than usual care. Of four RCTs comparing a couple-focused intervention to an individual intervention, two found that the couple-focused intervention was more effective. The studies were heterogeneous, and included participants at risk of a variety of illnesses. In many cases the intervention was compared to usual care for an individual or an individual-focused intervention, which meant the impact of the couple-based content could not be isolated. Three arm studies could determine whether any added benefits of couple-focused interventions are due to adding the partner or specific content of couple-focused interventions.

*Keywords:* couples; health behaviour change; review; interventions

# Introduction

Many health behaviours are concordant across couples (Meyler, Stimpson, & Peek, 2007), including dietary intake (Macario & Sorensen, 1998), and smoking (Graham & Braun, 1999; Stimpson, Masel, Rudkin, & Peek, 2006). This is partly due to assortative mating (the fact that couples with similar characteristics are more likely to marry) and mate selection, but may also reflect the influence spouses have on each other’s health behaviours (Wilson, 2002). Couple concordance may explain risk factors for disease at the household level (Wilson, 2002). For example, spouses of patients with several illnesses are at increased risk of the diseases, including hypertension (Hippisley-Cox & Pringle, 1998) and tuberculosis (Crampin et al., 2011). Also, health behaviour change tends to be concordant across couples. For example, in an observational study of couples attending a family health check-up, changes in smoking, blood pressure, blood glucose and cholesterol level were correlated across couples one year after a cardiovascular lifestyle intervention programme (Pyke, Wood, Kinmonth, & Thompson, 1997). Further, when one partner adopts a healthier behaviour, the other is more likely to make a positive health behaviour change (Jackson, Steptoe, & Wardle, 2015).

Baucom Porter, Kirby & Hudepohl (2012) characterize couple-based interventions as either treating one partner as a coach, who assists the at risk partner in making health behaviour change, or focusing equally on both partners and the ways in which communication affects their health and behaviours. This framework can be used in an attempt to understand processes by which couple-based health behaviour change interventions might work, and why and how health behaviour change interventions may be more effective for couples than individuals. Keefe et al. (1996), in an intervention for patients with osteoarthritis, found that while a partner-assisted intervention lead to better long-term adjustment for those who were more happily married, an individual intervention led to worse long-term adjustment for those who were happily married, suggesting the value of involving the spouse in interventions. Related to this, Umberson’s (1992) argument that many spouses monitor and attempt to control their spouse’s health behaviours suggests that interventions that do not involve the controlling spouse are less likely to be effective. Alternatively, Lewis et al., (2006) developed the interdependence model of couple interaction, which proposes that partner influences are helpful when initiating health behaviour change. According to this model, couple-focused health behaviour change interventions should therefore facilitate greater intentions to change and greater behaviour change on the part of the partner, by increasing a relational perspective on the health behaviour change (which would result in attempts to discuss behavioural change and support and influence the other partner to make behaviour changes). Also, Bandura’s social cognitive theory (Bandura, 1986), suggests that reproduction of a behaviour is influenced by the environment, such that appropriate support can enhance self-efficacy to perform a behaviour. Applying this to couple-based interventions would suggest that support from the spouse could facilitate health behaviour change.

Evidence suggests that couple-focused interventions may be more effective than individual interventions in facilitating long-term maintenance of behavioural changes in one or both members of a couple (Martire & Schulz, 2007),and are more effective than either individually focused interventions or usual care for a variety of chronic conditions (Martire, Schulz, Helgeson, Small, & Saghafi, 2010). A review of weight loss interventions for couples revealed that the couple-focused interventions led to more weight loss than stand-alone programmes post-intervention, but these improvements were not sustained over longer periods (Black, Gleser, & Kooyers, 1990). However, this review addressed only interventions targeting diet and exercise behaviours. Also, details of intervention content were not reported (this study was published in 1990, before reporting guidelines had been published for randomized controlled trials (Moher, Sculz, & Altman, 2001)). This is important as Lewis et al. (2006) propose that interventions that attempt to transform motivation for behaviour change to ascribe meaning for relationships should be more successful than interventions where meaning for change is ascribed to the individual. Recent reviews (e.g., Martire et al., 2010) have not addressed people at risk of chronic physical illness, only those who are already managing chronic illness. However, motivation for making lifestyle changes may well be lower in individuals who are at risk of a chronic illness relative to those who have been diagnosed with one, meaning that partners may be able to play a greater role in facilitating behaviour change. Also, when an individual is diagnosed with a chronic illness, their partner often has to take on the role of carer, changing the dynamics of couple interaction (e.g., Martire et al., 2010). Further, in many couple-focused intervention study designs to date, the intervention has been compared only to usual care . This means it is often unclear whether the effectiveness of such interventions is due to the behaviour change techniques used or because the interventions are couple-based. Also, many studies provide individual interventions to couples, without introducing ways in which the couple can support each other and enhance the effectiveness of the intervention.

We aimed to systematically review the findings of randomized trials and non-randomized intervention studies evaluating couple-focused interventions for health behaviour change in populations at risk of chronic physical illness. Secondary aims were to 1) assess the design of each study and whether it isolated the couple-based component of the intervention, and 2) identify successful components of couple-focused interventions.

**Methods**

## ***Procedure***

Two methods were used to locate relevant studies: a keyword search and a backward search. Using the keyword search method, we searched the databases Medline, Embase, Web of Knowledge and PSYCInfo for articles published in the English language between January 1990 (when the review on weight loss interventions14 was carried out, as based on a search of earlier literature, no couple-focused interventions on other topics were identified prior to this date) and June 2014. To avoid exacerbating publication bias, we decided not to include unpublished data and dissertations (Ferguson & Brannick, 2012). Couple focused interventions for HIV prevention were not included as a recent review had been conducted on this topic (Burton, Darbes, & Operario, 2010). Searches included the following terms specific to couples (couple, spouse, partner, significant others, interpersonal relations) and the following terms specific to health behaviour change, which were generated by brainstorming among the authors and checked with experts in the field of health behaviour change (health behaviour, health promotion, physical activity, diets, aerobic exercise, lifestyle, self-examination (medical), cancer screening, smoking cessation). Database-specific strategies were created to accommodate different methods of truncation and MeSH terms. After each term had been entered into the keyword function, the couple-related terms were combined using the OR function, and so were the health behaviour change terms. The results of the previous searches were then combined using the AND function. This generated 192 articles from PsycInfo, 1260 from Web of Knowledge, 2444 from Embase, and 1492 from Medline. The titles and abstracts of these articles were scanned for inclusion in the review. Overall, the keyword search yielded 26 articles. Details of the search strategy are reported in Figure 1, and the full search strategy for Web of Knowledge is reported here: (COUPLE\* OR SPOUSE\* OR PARTNER\* OR “SIGNIFICANT OTHER” OR “INTERPERSONAL RELATIONS”\*) AND (“HEALTH BEHAVIOR” OR “HEALTH PROMOTION” OR “PHYSICAL ACTIVITY” OR “DIET” OR “AEROBIC EXERCISE” OR “LIFESTYLE” OR “SELF-EXAMINATION” OR “WEIGHT LOSS” OR “CANCER SCREENING” OR ‘SMOKING CESSATION”). Some terms differed between databases. For example, the MESH term “self-examination (medical)” came up in PsycInfo, Medline and Embase (which could be searched through the same platform) but not Web of Knowledge. Also, we excluded the term ‘interpersonal relations’ from Embase, as it increased the number of articles from 452 to 2444 without identifying further articles for inclusion.

INSERT FIGURE 1 ABOUT HERE

Following the keyword search, we carried out a backward search, in which we located papers by examining the reference lists of all papers identified from the first step (Meyler et al., 2007). This did not identify any further articles meeting the criteria.

Included studies had to: 1) include populations where at least one partner was at risk of a chronic physical illness they had not already experienced; 2) involve active participation of both partners; 3) include adults aged 18; and 4) have a control group. Studies were excluded if 1) the participants were not at risk of chronic physical illness; 2) there was no control group; and 3) the intervention did not target the couple. Both authors screened identified articles, and any discrepancies were resolved by discussion.

The following information was extracted from each study: aims, design, sample size, intervention given to partners, intervention given to control group (if applicable), length of follow-up, measures and findings. Details of included studies are reported in Table 1.

INSERT TABLE 1 ABOUT HERE

RCTs and non-randomized intervention studies were assessed using the Cochrane Collaboration Risk of Bias tool (Higgins et al., 2011) by both authors (EAC and NM), and any disagreements resolved by discussion. Details are reported in Table 2.

INSERT TABLE 2 ABOUT HERE

# Results

On reading, 12 of the 26 studies were excluded. Two targeted healthy adults who were not at risk of a specific chronic illness (Niederhauser, Maddock, Le Doux, & Arnold, 2005; Wallace, Raglin, & Jastremski, 1995),two had no control group ((Homan, Litt, & Norman, 2012; Shoham, Rohrbaugh, Trost, & Muramoto, 2006),two targeted the at-risk individuals through their female partners (Matsuo et al., 2010; Chan, Leung, Wong, & Lam, 2008), partner inclusion was not compulsory in three (de Vries, Bakker, Mullen, & van Breukelen, 2006; Prestwich et al., 2005; Wakefield & Jones, 1998), and three did not target physical health issues (Fisher, Wynter, & Rowe, 2010; Midmer, Wilson, & Cummings, 1995; Sciacca, Dube, Phipps, & Ratliff, 1995).

Overall, 14 studies carried out by 13 research groups were included in this review. The sample size ranged from 39 couples (Burke et al., 1999) to 3839 (Oien, Storro, Jensen, & Johnsen, 2008). The studies were carried out in the USA (Cohen et al., 1991; Lee et al., 2014; Manne et al., 2013; McBride et al., 2004; Robinson, Turrisi, & Stapleton, 2007; Voils et al., 2013; Wing, Marcus, Epstein, & Jawad, 1991), Australia (Burke et al., 1999; Burke, Giangiulio, Gillam, Beilin, & Houghton, 2003; the UK (van Jaarsveld, Miles, Edwards, & Wardle, 2006), Israel (Benyamini, Ashery, & Shiloh, 2011), South Korea (Park, Song, Hur, & Kim, 2009), Germany (Gellert, Ziegelmann, Warner, & Schwarzer, 2011), and Norway (Oien et al., 2008).

The studies targeted the following health behaviours: colorectal cancer screening, breast self-examination, skin self-examination,obesity, diet, smoking in pregnancy, and physical activity.

There were ten RCTs, two non-randomized intervention studies, and two studies in which trial data were retrospectively analysed. Six studies utilised a usual care/ no treatment control group. Four of the ten RCTs compared a couple-based intervention to an intervention targeting the individual.One non-randomized study compared people joining exercise programmes as couples relative to individuals. One study retrospectively used trial data to compare the effect of inviting individuals versus both members of a couple to colorectal cancer screening, one RCT compared varying levels of partner involvement, one non-randomized intervention study compared two couple-focused interventions differing in intensity, and one RCT compared two interventions targeting the couple.

The studies targeted a variety of populations (both men and women unless otherwise specified). Populations included individuals at average risk of colorectal cancer, couples where the woman had never had breast cancer (which one in eight women will experience in their lifetime; Cancer Research UK, 2014),individuals who had not had a mammogram within the past year, individuals who had been married or cohabiting for less than two years (this period is often associated with weight gain and physical inactivity), obese individuals with diabetes, adults being treated for essential hypertension, individuals with low-density lipoprotein cholesterol > 76mg/DL being treated in primary care, persons at risk of melanoma, and couples aged over 60, who are at greater risk of chronic illness than the general population.

Behaviour change outcomes included both objective measures (e.g., attendance at screening, cholesterol levels, systolic and diastolic blood pressure, heart rate, weight, hip and waist circumference) and self-report measures, including self-reported levels of physical activity, diet, self-examination, and smoking. The interventions varied considerably in intensity, from an invitation to screening (van Jaarsveld et al., 2006), to a 16-week programme focusing on health behaviours (Burke et al., 1999; 2003). Length of follow-up varied from a single visit post-intervention where measurements were taken (e.g., blood pressure, heart rate) (Burke et al., 1999) to 15 months (Lee et al., 2014). This information is reported in Table 1.

## ***Content of Interventions***

Only three interventions reported using couple-based behaviour change techniques (e.g., getting the spouse to focus on patient goals). Manne et al. (2013) provided couples with a couple-tailored booklet, based on responses members of the couple had given to a survey (which included responses to barriers). This booklet contained pictures of couples, explained the importance of including the spouse in the screening decision, and described ways to have a positive discussion about screening. The invitation letter to the study asked the participant to read the booklet and discuss it with their spouse. In Voils et al. (2013), the intervention consisted of nine monthly goal setting calls, which were made to patients and spouses separately. Initially, education on diet and self-management was provided to both patients and spouses, and spouses were provided with orientation to support patient goal achievement (focusing on patients’ goals) and asked to generate a specific behaviour plan they would follow to support patient goal achievement.  In the second telephone call, patients were required to set goals and create action plans. Spouses were informed about these goals and action plans, and received suggestions on how to help patients. In subsequent months, while patients monitored their progress, spouses were informed of changes and continued to receive suggestions to support patients. Finally, in Wing et al. (1991), couples participated in a 20-week behavioural weight control programme with 12 weekly sessions and 4 bi-weekly sessions. The treatment programme emphasized the importance of spouse support for modifying diet and exercise. Couples were taught to identify things their spouse could do to help them comply with the programme, and required to make a contract to provide at least one form of practical support per week. Spouses were taught listening skills and to praise each other for appropriate changes in behaviour. Couples were taught to identify joint problems and work together to develop solutions.

## ***Results of the quality assessment***

Randomized trials and non-randomized intervention studies are addressed separately. Most RCTs (8/10) were classified as having unclear risk of bias overall, but three were classified as having high risk of bias for one of the key domains, and therefore high risk of bias overall. Most trials were classified as having unclear risk of bias because they had not reported how the allocation sequence was generated and concealed, or whether blinding was accurate during the study. Six out of 10 RCTs addressed incomplete data adequately,one did not, and in three it was unclear. In 9 out of 10 RCTs, it was not clear whether outcomes were reported selectively; only one of the RCTs had published a study protocol.

Two non-randomized intervention studies (Oien et al., 2008; Park et al., 2009) were assessed according to the Risk of Bias tool. These studies were assessed as having high risk of bias. In non-randomized trials, even when the experimental and control groups appear comparable at baseline, the effect size is at risk of bias due to residual confounding (Reeves, Deeks, Higgins, & Wells, 2008).In one of the two non-randomized intervention studies, the allocation sequence was not adequately generated or concealed (recruitment to the intervention and control groups took place over separate time periods). In one study, it was clear that blinding had not occurred. None addressed incomplete outcome data adequately. In both, it was unclear whether the outcomes had been reported selectively. The two studies based on retrospective analysis of trial data (Gellert et al., 2011; van Jaarsveld et al., 2006) could not be assessed for risk of bias without reference to the original trial papers.

Only six of the 14 studies reported carrying out a power calculation (Benyamini et al., 2011; Burke et al., 1999; Burke et al., 2003; Lee et al., 2014; Park et al., 2009; Voils et al., 2013). Some of the remaining studies may have been underpowered (e.g., Wing et al., 1991). However, insufficient detail was given of statistical assumptions made when calculating sample size.

## ***Summary of Study Findings***

### *Attendance at cancer screening*

Retrospective analysis of trial data revealed that individuals were more likely to attend for colorectal cancer screening following two invitations by post if they were part of a couple where both members were invited (OR = 1.34; 95% CI 1.14–1.58) (van Jaarsveld et al., 2006). Similarly, an RCT of a couple-based educational programme about breast screening for Korean Americans who had not had a mammogram in the past year led to increased uptake of mammograms at 6 months (P<.001) and 15 months (p = .004) relative to a couple-based educational programme about having a healthy diet (Lee et al., 2014). However, an RCT targeting couples where both members were non-adherent with colorectal cancer screening recommendations demonstrated no difference in uptake of colorectal cancer screening in individuals following receipt of a couple-tailored booklet versus an individually focused booklet (Manne et al., 2013).

### *Performance of cancer screening*

An RCT showed that instructions to perform an action plan for breast self-examination (BSE) with a partner was no more effective than instructions to perform the same action plan alone (Benyamini et al., 2011). Similarly, an intervention comparing a lecture on BSE alone versus a lecture plus the opportunity to be videotaped carrying out BSE and receive feedback on performance (both couple-focused) demonstrated no group differences in performance of BSE, or knowledge about BSE and breast cancer (Park et al., 2009). However, participants in a couple-focused skin self-examination programme (10 minutes training in skin self-examination plus skills training) were significantly more likely to check their skin 4 months post-intervention (64.6% versus 30.8%; *P*< .001), and had significantly greater self-efficacy for skin self-examination than those taught the same techniques alone (Robinson et al., 2007).

### *Smoking in pregnancy*

A non-randomized intervention study (Oien et al., 2008) of 3 minutes of advice given to expectant couples by a healthcare professional during an antenatal appointment did not influence smoking cessation six weeks post-birth. Similarly, an RCT of a couple-based intervention (6 counselling calls; 3 during pregnancy, 3 postpartum) supplemented by a booklet and video did not increase smoking cessation at 12 months postpartum relative to usual care (McBride et al., 2004).

### *Physical activity*

 A non-randomized intervention study found adults aged over 60 were more likely to remain in an exercise programme at four-week follow-up if their partners also participated than if they did not participate (Cohen’s D = 0.46, 95% CI 0.14 – 0.78) (Gellert et al., 2011).

### *Nutrition/ Weight control*

An RCT of a couple-based intervention consisting of nine monthly goal-setting telephone calls to individuals with high cholesterol levels and support planning calls to spouses compared to usual care (clinical management by providers) showed no effect on LDL cholesterol levels at 11 months follow-up (Voils et al., 2013). Similarly, an RCT comparing an intervention targeted at individuals with essential hypertension and their partners where both partners were active participants (attended 3 dietary lessons 2 weeks apart, followed dietary restrictions and collected 24-hour urine samples), to an intervention where the non-hypertensive partner was a ‘passive participant’ (attended the dietary lessons only) did not lead to group differences (Cohen et al, 1991). However, in an RCT of a weight control programme for obese individuals with Type II diabetes comparing individuals treated alone and with a partner35 obese women lost more weight when treated with a partner, whereas obese men lost more weight when treated alone *(F (l,* 38) = 7.7, *p <* .01) (Wing et al., 1991). Spouses lost more weight when treated together than alone (Cohen’s D = 1.52, 95% CI 0.89 – 2.16).

### *Multiple health behaviours*

 A pilot study of a 16-week programme on nutrition and physical activity for couples who had been married or cohabiting less than two years led to a reduction in total fat consumption (p =.04), saturated fat intake (p =.01) and cholesterol levels (p=.02) (Burke et al., 1999). A larger-scale RCT of the same 16 week programme led to a reduction in fat consumption (p=.01), overall cholesterol levels (p = .02) and LDL cholesterol levels (p = .02) (Burke et al., 2003). However, no primary outcomes were named, and insufficient information was provided to enable calculation of effect sizes.

# Discussion

We carried out a systematic review of RCTs and non-randomized intervention studies evaluating couple-focused interventions for health behaviour change in populations at risk of chronic physical illness. The studies we identified targeted a variety of outcomes and behaviours, with few studies in any one area. Interventions for couples led to improvements in attendance at cancer screening, skin self-examination, increased breastfeeding, reduction in dietary fat intake, weight loss, and increased exercise. However, they did not increase smoking cessation or breast self-examination.

Two retrospective analyses of intervention studies showed individuals were more likely to participate in health behaviours with a partner than alone (van Jaarsveld et al., 2006; Gellert et al., 2011). Two trials (Burke et al., 1999; Burke et al., 2003) out of five comparing couple-focused interventions to usual care showed couple-focused interventions were significantly more effective than usual care in improving health outcomes for couples, and the other three (McBride et al., 2004; Oien et al., 2008; Voils et al., 2013) found no effect of couple-based interventions relative to usual care. Similarly, none of the three studies using couple-based behaviour change techniques demonstrated a significant result. Based on these eight interventions, it is unclear whether targeting couples will improve the effectiveness of health behaviour change interventions.

Evidence for the effectiveness of couple-focused interventions relative to individual interventions is more mixed, but expected given the varied targeted outcomes and intervention approaches considered. Two out of four RCTs showedthat couple-based interventions were more effective than individual interventions, and two RCTs demonstrated no difference between the two. Two studies comparing couple-based interventions differing in intensity found no differences between the two. Finally, in an RCT, a couple-based intervention targeting the behaviour in question led to greater improvements in the health behaviour than an active couple-based control group.

Inviting both members of a couple to colorectal cancer screening led to increased attendance at screening relative to inviting only one member. Such a low-cost intervention could easily be implemented in the UK healthcare system, and may also be relevant to other health screening programmes that are applicable to both sexes.

The studies differed considerably with regard to population, type of intervention, outcome measures, length of follow-up and part of the world they were carried out in. This meant it was not possible to carry out a meta-analysis. The two areas that previously have had a number of couple-focused intervention studies conducted, weight loss and HIV prevention, found that couple- focused interventions were successful in enabling weight loss post-treatment (Black et al., 1990), although the effects were not sustained; and reduced unprotected sexual intercourse and increased condom use relative to control groups (Burton et al., 2010). This evidence for possible effectiveness of couple-based interventions suggests that, in the health behaviour change areas identified in our review, further studies are needed to assess the effectiveness of couple-based versus individual interventions, despite increased resources and logistical challenges involved with trying to recruit and retain couples (Coyne & Lepore, 2006; McGrath et al., 2010).

 No studies were classified as having low risk of bias. Three RCTs and two non-randomized intervention studies were classified as having a high risk of bias. In most cases, the requirements of the Cochrane collaboration risk of bias tool were not met due to unclear reporting, partly because many were carried out pre CONSORT guidelines. However, it is important to note that in one of the non-randomized studies (Park et al., 2009) there was no option to take part as an individual rather than a couple. Further, only six studies reported sample size or power calculations and few discussed potential bias in their results. A limitation of the review is that we focused only on peer-reviewed published studies and may have missed relevant studies from the grey literature. However, it is unlikely that studies from the grey literature would have been better quality than the studies in our review, as poorer quality studies are less likely to be published in peer-reviewed journals.

Martire et al. (2010) carried out a review of couple-related interventions for chronic illness. Martire’s review identified similar concerns regarding the design of couple-focused intervention, and highlighted three main design and measurement issues that researchers should consider in testing such interventions: 1) that researchers reference research and theory that led them to use couple-based interventions, 2) that outcomes are assessed for the partner as well as the patient, and 3) that couple- and individual- oriented approaches be compared. Their review significantly differs from this review as the interventions they assessed looked mainly at influencing relationship functioning, rather than involving the spouse to provide support and facilitate behaviour change (their theoretical framework was that chronic illness is likely to lead to a change in relationship functioning between members of the couple). Nevertheless, based on this review, we agree with Martire and colleagues’ recommendations, and concur with their comment that improvements in methodological quality and attention to published guidelines for the reporting of clinical trials, e.g., the CONSORT guidelines (Moher et al., 2001) are required when carrying out research on couples.

We noted the following methodological issues with the studies. First, very few provided a theoretical rationale for the use of couple-based interventions. Second, as very few studies addressed changes in couple functioning, we were unable to determine possible mechanisms for intervention effectiveness. Third, only one study used dyadic analysis. Such analysis would enable researchers to account for the correlation between patients and partners in their health behaviours, leading to increased understanding of possible actor and partner effects (Kenny, Kashy, & Cook, 2006). Fourth, many studies did not report details of intervention content. This is important, as couple-based behaviour change techniques may be more effective than techniques targeting the individual (Lewis et al., 2006). Fifth, many papers did not report the necessary information to enable calculation of effect sizes. Some did not even report means and standard deviations. This is important as without this information it is impossible to determine the effectiveness of an intervention. Finally, only four RCTs compared couple-focused and individual interventions, and only one compared a couple-focused intervention to a control group of couples. Three arm studies comparing an individual intervention, a control group of couples, and a couple-focused intervention are required to 1) determine any added benefits of couple-focused interventions relative to individual interventions, and 2) determine whether those added benefits are due to merely adding the partner or the specific content of couple-focused interventions.

## ***Conclusions***

Research has demonstrated high concordance between partners’ health behaviours, and there is a sound theoretical basis for the effectiveness of couple-focused interventions for health behaviour change. However, many of the couple-focused intervention studies reported in the literature have important limitations. The risk of bias in all of the studies identified in this review leaves us with no studies to direct our understanding on an important topic. Further methodologically sound, rigorously reported and analysed couple-focused interventions are therefore required in order to determine added benefits of couple-based interventions relative to evidence-based individual interventions, and identify mechanisms of change. Studies, ideally randomised controlled trials, are needed which publish protocols prior to starting recruitment, report details of the allocation sequence, conceal allocation, prevent knowledge of the allocated intervention during the study, and correctly address incomplete outcome data in the analysis (Higgins et al., 2011). For behavioural scientists to ensure their studies are rigorous enough to be taken seriously and implemented in practice, this shift to enhanced transparency in data collection and reporting is essential.

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