



Review

Preconception health care interventions: A scoping review



Natalie Hemsing*, Lorraine Greaves, Nancy Poole

Centre of Excellence for Women's Health, 4500 Oak Street, Box 48, Vancouver, BC V6H 3N1, Canada

ARTICLE INFO

Article history:

Received 20 March 2017

Revised 16 August 2017

Accepted 17 August 2017

Keywords:

Preconception health
Interconception health
Scoping review

ABSTRACT

Pregnancy is often framed as a “window of opportunity” for intervening on a variety of health practices such as alcohol and tobacco use. However, there is evidence that interventions focusing solely on the time of pregnancy can be too narrow and potentially stigmatizing. Indeed, health risks observed in the preconception period often continue during pregnancy. Using a scoping review methodology, this study consolidates knowledge and information related to current preconception and interconception health care interventions published in the academic literature. We identified a total of 29 intervention evaluations, and summarized these narratively. Findings suggest that there has been some progress in intervening on preconception health, with the majority of interventions offering assessment or screening followed by brief intervention or counselling. Overall, these interventions demonstrated improvements in at least some of the outcomes measured. However, further preconception care research and intervention design is needed. In particular, the integration of gender transformative principles into preconception care is needed, along with further intervention design for partners/ men, and more investigation on how best to deliver preconception care.

© 2017 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

Calls have been made for preconception care in which women and men are regularly counseled on sexual and reproductive health and planning during the reproductive years, and in which women's health is valued along with a focus on fetal health outcomes [1]. In the provision of prenatal care, women's health has often been underemphasized by health care professionals [2] and health interventions aimed at improving reproductive care implemented exclusively during pregnancy are often too narrow in scope. Among women who become pregnant, health risks experienced in the preconception period often continue during pregnancy, such as the use of alcohol, tobacco and other substances, nutritional deficiencies, and chronic health issues. In addition, the increasing prevalence of obesity and chronic conditions demand attention in the context of preconception care [3]. All of these health issues and risk factors are associated with negative health outcomes for the woman, her pregnancy and the fetus [4–6]. For example, maternal obesity and maternal diabetes are both associated with an increased risk of: gestational diabetes, pre-eclampsia, risk of obstetric interventions, and having a baby with congenital anomalies [3,7]. Tobacco, alcohol and illicit substance use during pregnancy can result in obstetric complications, preterm birth and

low birth-weight [8], and alcohol consumption during the periconception period is associated with Fetal Alcohol Spectrum Disorder (FASD) and birth defects [9]. Further, almost half of pregnancies are unplanned, and behaviours such as smoking and substance use are potentially stigmatizing and hence, not consistently disclosed [10]. Preconception care provides an opportunity to intervene with women and their partners early, and address such health risks that are of benefit to all women and men regardless of intention or desire to conceive. Preconception care is useful to improve both sperm and partner health which are also associated with pregnancy and birth outcomes [11]. Such care need not be pronatalist [12].

Current approaches to preconception care differ between countries. A systematic review of preconception policies, guidelines, services and recommendations in 6 European countries including: Belgium, Denmark, Italy, the Netherlands, Sweden and the United Kingdom (UK) [13] revealed that all countries had recommendations for women with chronic conditions, but recommendations for women and men in general were inconsistent, suggesting the need for the development of standard European guidelines. In Canada, the Public Health Agency of Canada included one chapter dedicated to preconception health in the report- *Family-Centred Maternity and Newborn Care: National Guidelines* in 2000, and updated this in 2016 [14]. However there is no evidence if and how the recommendations have been implemented [15].

* Corresponding author.

E-mail address: nhemsing@cw.bc.ca (N. Hemsing).

In contrast, the USA has had a national strategic plan and guidelines on preconception health, released in 2006 [16]. With leadership and funding from the Centre for Disease Control (CDC), a public–private partnership called the Preconception Health and Health Care (PCHHC) Initiative, made up of federal agencies and private sector organizations was developed to support implementation of the recommendations outlined in the report [17]. There have been many achievements, including: the development of strategic plans, national summit meetings, increased federal funding for preconception health programs, the development of the PCHHC resource centre and the publication of multiple reports and articles [18]. Yet, despite clear progress achieved by the PCHHC initiative, there is evidence that further work is required, particularly in designing, implementing and evaluating preconception health approaches. Floyd et al. [19] note the need for: studies evaluating holistic preconception care and counseling, further research to address health disparities in preconception health and birth outcomes, and ongoing evaluation and monitoring of the PCHHC initiative [19].

Multiple systematic reviews have examined preconception care interventions and reported improvements in maternal and child outcomes [20,21], although some reported that effects were minimal or non-significant [22,23]. However, these reviews differ in research question and types of studies included, are narrow in scope, and tend to report a lack of methodologically robust evidence. In response, we conducted a scoping review of preconception care interventions to identify the breadth of current preconception health care interventions, and further understand how preconception health care can be improved. The purpose of this scoping review is to map current evidence on preconception health care interventions, and identify gaps and future research priorities. The research question is: What is the extent and nature of the published academic literature on preconception health interventions, including: how preconception health is being addressed (the type and format of interventions being used, which dimensions of preconception health are being addressed, and how are these dimensions of preconception health impacted), who interventions are aimed at, and in what settings?

Methods

We followed a scoping review methodology as presented by Arksey and O'Malley [24]. We searched for intervention studies on preconception health published between January 2005 and June 2016 in the following academic databases: Medline full text; CINAHL complete; Studies of Women and Gender Abstracts; Social Services Abstracts; Social Sciences Citation Index; Health and Psychosocial Instruments; The Cochrane Library; and the Native Health Database. We used the following search terms: preconception health, interconception health, family planning, reproductive health; and program, intervention, care, approach, guidelines, assessment, and tool. All peer-reviewed articles published in English which described or evaluated a preconception health intervention were included.

We excluded the broader literature describing the prevalence of preconception health risk factors. Literature reviews, policy papers and commentaries were also excluded, but are used to contextualize the rationale and discussion of findings. We did not exclude studies based on: study design, intervention type, outcomes measured, setting, or population (i.e. women, men and couples of all socio-demographics were included). Interventions delivered during pregnancy were excluded; however, retrospective studies that asked pregnant or postpartum women or their partners about the preconception care they received prior to pregnancy were included.

A total of 1326 search returns were imported into Endnote reference management software. Manual searching of the reference lists of key articles resulted in an additional 23 studies. Titles were read and screened by one researcher, and were organized into two Endnote databases: one with included studies and one with excluded studies. These Endnote databases were then checked by a second researcher to ensure relevant studies were not excluded. Following removal of duplicates and title screening, 235 studies were included. Abstract and full text screening was again conducted by one researcher, and checked by a second researcher, reducing the number of included studies to 57. If there was ambiguity regarding the eligibility of an article for inclusion, the research team discussed the study and made a decision regarding inclusion or exclusion. A total of 29 preconception health intervention studies were identified. A flow diagram detailing the number of studies included and excluded at each stage is provided in Fig. 1.

We then extracted data from the 29 included studies in Microsoft Excel, including information on: location and setting, study design, number of participants and characteristics, the preconception health factors addressed, methodology, the aim of the study, key findings, and study limitations. As is typical in scoping reviews, we did not quality assess included studies [25], but rather focused on identifying the current state and breadth of preconception intervention research, and identifying patterns and gaps to inform the development of recommendations for future research and interventions. The research team met to review, discuss and define the themes of the collected studies. Themes were chosen by grouping similar intervention studies, based on the: risk factors addressed, the population or type of intervention. The data extracted were then narratively summarized within this thematic outline.

Results

Studies are summarized within the following categories: interventions addressing multiple risk factors; interventions addressing dual risk factors; technology-assisted interventions; counselling for women/couples with pre-existing health conditions; group health education; community-based social marketing interventions; and interconception interventions. Details on the: study design, country and setting, preconception risk factors addressed, intervention approach, participants and key findings are presented in Table 1.

Interventions addressing multiple risk factors

Three interventions addressed multiple preconception health risks through risk assessment followed by advice or motivational interviewing (MI). These were all delivered in clinical settings, primarily in primary care clinics. The interventions ranged in intensity and duration, from brief advice [26] to more lengthy consultations and counseling [27,28].

Two of these studies evaluated behaviour change among women who received preconception care and subsequently conceived; both demonstrated improvements in at least one risk factor. One of these studies, conducted in Australia, evaluated a 45-min risk assessment delivered by a midwife. The advice was based on the US Centre for Disease Control (CDC) categories of preconception health, with tailored follow-up provided by an obstetrician [27]. Evaluation of this intervention revealed that pregnant women who received preconception care prior to conception were more likely to: supplement with folate, be vaccinated, consult with a specialist regarding any pre-existing health condition, report less weight gain prior to conception, and report fewer preterm births and hypertensive disorders. Yet women who received preconcep-

Download English Version:

<https://daneshyari.com/en/article/5565930>

Download Persian Version:

<https://daneshyari.com/article/5565930>

[Daneshyari.com](https://daneshyari.com)