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Development of a food literacy intervention for couples trying to conceive

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Abstract

Introduction: As a preconception healthy diet is not only beneficial for couples' general health but also for their reproductive health, effective interventions are necessary and lacking. In the field of nutrition, the concept of food literacy is emerging. Food literacy is the interrelated combination of knowledge, skills and self-efficacy on food planning, selecting foods, food preparation, eating and evaluating information about food with the ultimate goal of developing a lifelong healthy, sustainable and gastronomic relationship with food. The present study describes the systematic development of a food literacy intervention for couples trying to conceive.

Materials and methods: The development of the food literacy intervention was guided by Intervention Mapping, a protocol for developing theory- and evidence-based health promotion interventions in combination with consulting stakeholders. Decisions during intervention development were based on literature, an observational study evaluating the diet of couples trying to conceive using a food frequency questionnaire (FFQ) and semi-structured interviews and user tests with experts in the field and couples trying to conceive.

Results: An innovative intervention to influence preconception diet and food literacy based on stakeholders opinion, effective behavior change strategies and attractive intervention channels was developed. Regarding needs assessment, the observational study showed that the diet of couples trying to conceive (n = 57) was inadequate (i.e. lack of vegetable intake) and highly correlated between partners. Objectives regarding food literacy were determined by participating experts (n = 12) rating 'making healthy food choices' as most important objective. A blended format (i.e. a mobile application in combination with telephone interaction with a health care professional) was selected as intervention channel based on semi-structured interviews with people trying to conceive (n = 17) as they highlighted the importance of support by experts and a time efficient intervention. Knowledge and self-efficacy regarding food literacy were selected as determinants to address. The main behavioral change strategies included in the intervention were tailoring, goal setting and motivational interviewing resulting in tailored goals, tips about food literacy and recipes. Experts (n = 15) and couples trying to conceive (n = 8) evaluated the intervention as easy to use.

Discussion: This intervention will be evaluated on reproductive and dietary outcomes via a randomized controlled trial in Belgian Fertility clinics among 460 couples trying to conceive. If this theory- and evidence based food literacy intervention proves to be effective on reproductive and dietary outcomes in couples trying to conceive, it will offer vision and practical tools for implementing food literacy interventions in preconception care.

Conflict of Interest

There is no conflict of interest