

Determinants in changing health behaviour to reduce lifestyle-related risks in pregnancy

Quantitative survey of pregnant women and women of childbearing age

Abstract

Background

Alcohol can result in fetal alcohol syndrome and in other prenatal diseases. Although guidelines recommend, to abstain from alcohol in pregnancy, 12650 children in Germany suffered from fetal alcohol spectrum disorders in 2014. We aimed to measure associations between determinants in behaviour change and alcohol consumption (AC) in pregnancy. Findings should help, to develop interventions to reduce barriers that hinder alcohol abstinence in pregnancy.

Methods

A cross-sectional, self-reported survey was conducted. Questionnaires were distributed in obstetric institutions to women in pregnancy or childbearing age ($n = 557$) in Baden-Wuerttemberg. The questionnaire records alcohol behaviour, socioeconomic status, demographic data and examines domains of behaviour change derivated from Theoretical domains framework (TDF). Used domains are knowledge, beliefs about capabilities, social influences, environmental context and resources, social role, intention, optimism and emotion. Means and internal consistency for domains and correlations between domains and confounders were measured. Multinomial regression analysis (MLR) and moderation examined for relationships between domains and AC. Socioeconomic status as moderator and confounders were considered.

Results

Overall response rate was 95 % ($n = 529$), only for 38 % ($n = 201$) Cronbach's alpha and correlations could be measured. Domains were moderate correlated. 'Environment' and 'emotion' have the lowest means. Principal component analysis showed that domains can be described in two components (TDF1, TDF2), explained 55.11 % of variance. MRL and moderation ($n = 128$) showed that higher scores of TDF1 or TDF2 were not significant predictors of AC. Women who indicated the most alcohol consumption have a higher chance to belong to the Group with the lowest level of AC, when they have more children. This result is applicable if not significant confounders are excluded from MLR.

Conclusions

This study gives a first impression, which domains could be barriers to abstain from alcohol. TDFQA has the potential to examine relationships between domains and AC. Further studies with not abstinent pregnant women are required to assess relationships between TDF1, TDF2 and alcohol consumption in pregnancy.

Keywords

prenatal alcohol exposure, behaviour change, Theoretical domains framework, socioeconomic status, barriers, pregnancy