INVESTIGATION OF THE ALCOHOL, SMOKING AND SUBSTANCE INVOLVEMENT SCREENING TEST (THE *ASSIST*) IN PREGNANCY

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Abstract

Screening pregnant women for substance use appears unworthy of debate given the harmful impacts on the fetus, pregnancy outcomes, the woman herself and her offspring to adulthood. However while screening is routine for conditions such as impaired glucose control, obstetric care providers are often reluctant to intervene with substance use, citing knowledge deficits and a lack of effective screening tools. General negativity about the value of intervention and stereotypical views of substance users have also been identified. This study examined existing screening tools and investigated the World Health Organization's *ASSIST* (Alcohol, Smoking and Substance Involvement Screening Test) *Version 3.0*, focussed on tobacco, alcohol and cannabis, the substances most used in the targetted public hospital clinics. The *ASSIST Version 3.0's* performance in pregnancy was assessed using a two-pronged harm categorization: risk to the fetus and risk to the woman as an individual user. For the latter, levels of risk concordant with cut-offs for the general population were utilized. The *ASSIST Version 3.0* performed only moderately well *versus* established self-report tools: the *Revised Fagerstrom Tolerance Questionnaire* (RTQ) for tobacco, the *T-ACE* for alcohol, and the *Timeline FollowBack (TLFB)* for cannabis. Most participants used tobacco (98 of 104); predominance of tobacco use was likely linked to the recognized difficulty in stopping, despite cessation of other substances. *Kappa* analyses of Specific Substance Involvement Scores (SSIS) on *ASSIST Version 3.0* for tobacco did not support changing cut-offs for the woman as an individual user; however, ROC curves delineated an SSIS of 4 as indicative of fetal risk for both alcohol and cannabis. As all 98 tobacco users were 'high risk' users, a cut-off indicative of fetal risk for tobacco could not be determined but may be feasible by further research with first trimester women. Identifying tobacco use with an

established tobacco-specific tool should be the first screening for pregnant women. If tobacco use is identified, screening for other substance use can be initiated and there may be a place for the *ASSIST Version 3.0* in that context. Obstetric care providers need to then be willing and competent to address identified use, whilst avoiding unhelpful stereotyping.

Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being available for loan and photocopying.

Elizabeth Dorothy Hotham

Date

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