Predictors of Women's Intentions to Be Screened for HIV During Pregnancy

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Detection of HIV during pregnancy and consequent treatment may reduce harm to the fetus. We examine whether the combination of Health Belief Model and Theory of Planned Behavior predicts women's intentions to be screened for HIV during pregnancy. Two hundred Israeli women who participated in birth preparation classes completed e-mailed questionnaires. The results of a multiple linear regression reveal that perceived susceptibility to HIV, perceived benefits of screening, perceived severity of the illness, health motivation, and normative beliefs predicted women's intentions to be screened, while normative beliefs (beliefs about the extent to which significant others think they should be screened for HIV during pregnancy) was the most significant factor. Strategies to increase women's decision to be screened should address "significant others." Additionally, strategies should include promoting women's awareness of the risk of contracting HIV while emphasizing the benefits of the test and promoting a healthy lifestyle.

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The fetus of a woman who has HIV is at risk of being infected during pregnancy, labor, or breastfeeding. Detection of HIV during pregnancy provides an opportunity for suitable interventions and treatment, consequently reducing harm to the fetus and child, as well as improving long-term clinical outcomes in HIV-infected women (Chou, Cantor, Bougatsos, & Zakher, 2012). Screening for HIV during pregnancy is optional and based on women's personal decisions (Chou et al., 2012; Riskin-Mashiach, 2014).

Screening for HIV during pregnancy is a health behavior. The Health Belief Model (HBM), developed by Becker (1974), is often used to explain and predict health behaviors. The theory is based on the concepts of (a) values, defined as the desire to avoid illness or to maintain health, and (b) expectations, defined as the belief that a specific health action will prevent illness or maintain health. The individual's appraisal of personal susceptibility to an illness and the severity of an illness, the perceived benefits and barriers to performing the behavior, as well as health motivation, form the intention to perform the behavior.

The HBM has served as a theoretical framework for several studies exploring factors related to various populations' intentions to be screened for HIV. For example, Westmaas et al. (2012) found that health motivation was an important predictor of intention for members of ethnic minorities in the Netherlands to be screened for HIV. In an Ethiopian study, high school students' perceptions of barriers to undergoing screening for HIV were found as a significant

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predictor of their intention to be screened (Abebe & Mitikie, 2009).

The model has also been employed in a number of studies exploring factors related to pregnant women's intentions to be screened for HIV. Perceived barriers, perception of benefits, and the risk of becoming ill constituted the most important predictors of pregnant women's intentions to be screened (Moges & Amberbir, 2011). In contrast, de Paoli, Manongi, and Klepp (2004) showed that a clear perception of benefits, male spouse's cooperation, and religion were related to Tanzanian pregnant women's intentions to be screened.

Health behaviors are also often explored using Ajzen's Theory of Planned Behavior (TPB; 1991). The theory states that a person's health behavior is formed by a personal component (beliefs and attitudes toward the behavior) and a social component (the influence of significant others), the latter being examined by means of normative beliefs and subjective norms. Normative beliefs are individuals' beliefs about the extent to which other people who are important to them think they should or should not perform particular behaviors. Subjective norms are individuals' perceptions of the social pressure to perform or not perform the behaviors (Ajzen, 1991). The theory states that significant others often have a considerable influence on a person's health behaviors (Werner, 2003).

According to the research, a male spouse's attitude toward HIV screening has been found to be an important factor affecting women's decisions to be screened. It has been demonstrated that women thought that their male spouses should be consulted on whether they should be screened (Bajunirwe & Muzoora, 2005); and if the male spouse refused to allow the screening, many women refused to be screened (Dube & Nkosi, 2008). In addition, women have refrained from being screened if the results will be shared with family relatives (Dube & Nkosi, 2008). The fear of being stigmatized and of discrimination toward HIV-infected women was one of the primary reasons for their refusals to be screened (Abebe & Mitikie, 2009; de Paoli et al., 2004; Moges & Amberbir, 2011).

In another study that employed the TPB, subjective norms followed by attitudes explained a substantial amount of variance in intention among pregnant women attending public and private antenatal care facilities. Women intended to undergo screening for HIV if they perceived social support and anticipated positive consequences following screening (Mirkuzie, Sisay, Moland, & Åstrøm, 2011).

Identifying predictors of women's intentions to be screened during pregnancy might help plan interventions to increase screening rates among pregnant women. However, it is not sufficiently clear, from the existing research literature, which factors predict women's intentions to be screened for HIV during pregnancy. In light of this, the aim of our study was to assess whether the combination of HBM and part of the TPB (normative beliefs, subjective norms) and knowledge would predict intention to be screened for HIV during pregnancy among Israeli women (Figure 1). The study hypotheses were:

1. The extended research model, including the HBM, TPB, and knowledge, predicts women's intentions to be screened for HIV during pregnancy.
2. There is a difference in intention to be screened for HIV between women who had received information about HIV screening and those women who had received no information.

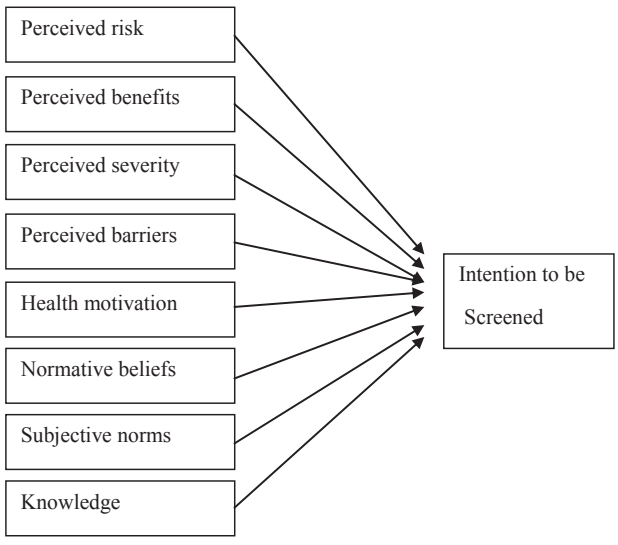

Figure 1. The research model.