ORIGINAL RESEARCH—EDUCATION

Transtheoretical Model-based Postpartum Sexual Health Education Program Improves Women's Sexual Behaviors and Sexual Health

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ABSTRACT

Introduction. Postpartum sexual health education was once routinely administered to postpartum women, but few interventions were specifically described or clearly based on theory, and few sexual interventions affected women's sexual behaviors.

Aim. To evaluate the effectiveness of a refined theory-based interactive postpartum sexual health education program (IPSHEP) in enhancing postpartum women's sexual behavior and health.

Methods. For this prospective, randomized controlled trial, 250 participants were randomized to three groups. Experimental group A received our refined theory-based IPSHEP. Experimental group B received only an interactive, self-help pamphlet. The control group received routine education (a 10- to 15-minute educational talk and a sexual health pamphlet without an interactive design). Data were collected at baseline, 3 days, 2 months, and 3 months postpartum.

Main Outcome Measure. Postpartum women's sexual self-efficacy (SSE), diversity of sexual activity (DSA), return to sexual activity, and sexual satisfaction (SS).

Results. Women who received our theory-based postpartum sexual health education program had significantly greater SSE ($P < 0.05$) and greater DSA ($P < 0.05$), and tended to resume their sexual life earlier than women in the routine teaching and interactive pamphlet-only groups ($P < 0.05$). However, the SS levels of postpartum women who received our program did not differ significantly from those of women who received routine teaching or the interactive pamphlet only.

Conclusions. Our findings suggest that a theory-based postpartum sexual health education program improved women's sexual health and sexual behavior and that the transtheoretical model can be translated into practice, supporting its use to enhance the sexual health of postpartum women. Despite the lack of a significant effect on SS, women who received our theory-based postpartum sexual health education program tended to maintain their prepregnancy level of SS in early postpartum. **Lee J-T and Tsai J-L. Transtheoretical model-based postpartum sexual health education program improves women's sexual behaviors and sexual health. J Sex Med 2012;9:986–996.**

Key Words. Postpartum; Sexuality; Sexual Activity after Childbirth; Health Education; Patient Teaching; Transtheoretical Model

Introduction

Enjoying sexuality, having a healthy baby, becoming a competent mother, and building an emotionally satisfying spousal relationship are important reproductive health objectives for women [1]. Nevertheless, childbearing challenges women's marital satisfaction and sexual life, making the childbearing years a vulnerable stage in women's sexual life.

The first sexual intercourse after childbirth can be an important step for couples to reclaim their

intimate relationship [2]. Couples generally experience a significant decline in sexual activity and intimacy from pregnancy to early postpartum, as adaptation to motherhood takes considerable energy and involves sleep disturbances, profound psychosocial changes, and hormonal effects [3–5]. Most women resume sexual activity within 3 months of delivery, but 83% experience sexual problems and 30–52.5% report painful intercourse [6,7].

In Taiwan, the custom of "doing the month" places a taboo on sexual intercourse during the month after childbirth [8] and produces a sexual approach-avoidance conflict for women. On one hand, the taboo reinforces their fear that sexual intercourse will adversely affect normal body repair after childbirth. On the other hand, they feel obligated to satisfy their husband's desire, and fear not meeting his needs. Due to this cultural practice, combined with improper contraceptive knowledge and fear of unexpected pregnancy [9], Taiwanese women tend to delay returning to sexual activity or may have difficulty deciding to resume sexual life. Postpartum women in Western culture may also have less sexual interest and inhibited performance because of fatigue, perineal pain, decreased vaginal lubrication, and fears of injuring a healing wound or becoming pregnant again [10]. These sexual problems may have a midterm or long-term negative impact on women's physical and mental health and on their relationships and family development [1,11].

Sexual education has been found in the literature reviews to benefit sexual health and behavior [12,13], suggesting that sexual health education would relieve unnecessary pressure on women's and couples' sexual life. Although sexual education has been one aspect of routine postpartum education [14], it does not meet postpartum women's needs as it is limited to the timing of first postnatal intercourse and contraceptive use [1]. However, the effectiveness of postpartum education has seldom been questioned, its effectiveness on sexual behavior has not been established in randomized controlled trials (RCTs) [14], and few interventions were specifically described or are clearly based on theory.

RCTs provide evidence about intervention effects but no insight into why an intervention is effective. If an intervention is not based on theory and offers no empirical evidence, one cannot predict which components are essential for its effect [15]. To promote effective patient education, educational theories must consider not only educational methods and media to suit patients' interests, abilities, and cultural backgrounds, but also whether educational strategies help patients achieve healthy behaviors [16]. One model that appears useful and valid for characterizing women from diverse cultures is Prochaska's transtheoretical model (TTM) [17,18], an integrative model of behavior change that has been applied successfully to such health behaviors as exercise [19], condom use [20], and safe sexual behavior [21,22].

The effectiveness of behavioral change programs may be increased by framing them with the TTM, which assumes that individuals evolve through five stages (precontemplation, contemplation, preparation, action, and maintenance) of considering or adopting a health-related or health-promoting behavior. The model also describes 10 change processes (consciousness raising, self-reevaluation, self-liberation, counterconditioning, stimulus control, reinforcement management, helping relationships, dramatic relief, environmental reevaluation, and social liberation) [18,23], which can be employed in interventions to facilitate behavior change and progression through the stages. By using the change processes identified as most useful at a particular stage (i.e., matched treatment), behavior change is facilitated more successfully than by using the same intervention techniques with everyone, regardless of change stage [23,24].

Therefore, we used the TTM as the basis for developing an interactive postpartum sexual health education program (IPSHEP) that met the sexual education needs of postpartum Taiwanese women [9,25] and enhanced their sexual health knowledge (SHK), sexual attitudes, and sexual self-efficacy (SSE) [26]. Based on our process evaluation of the IPSHEP, we revised its pamphlet and added an educator's guide booklet. This refined IPSHEP was recently shown to effectively improve Taiwanese women's contraceptive health [36].

Aim

The aim of this study was to evaluate the effectiveness of a refined theory-based IPSHEP on postpartum women's sexual behavior and health, i.e., SSE, diversity of sexual activity (DSA), return to sexual activity (RSA), and sexual satisfaction (SS).

Methods

This study was part of a prospective RCT research project conducted from 2005 to 2007 to evaluate