Development and Validation of the Self-Management
Self-Efficacy Scale for Premature Birth Prevention (SMSE-PBP)
for women of childbearing age

Sun-Hee Kim1, Yu-Jin Lee2

1Professor, College of Nursing, Research Institute of Nursing Science, Daegu Catholic University, Daegu, Korea;
2Postdoctoral Researcher, College of Nursing, Daegu Catholic University, Daegu, Korea

PURPOSE

This study aimed to develop and evaluate the validity and reliability of a self-management self-efficacy for premature birth prevention (SMSE-PBP) in women of childbearing age.

METHODS

Instrument development and validation were undertaken in three phases:
First phase: conceptualization; self-management behaviors concept, literature review, qualitative interview.
Second phase: item generation and evaluation of content validity; three rounds of experts’ content validity test, Cognitive Interviewing.
Third phase: evaluation of construct and concurrent validity and reliability.
Data were analyzed using exploratory and second-order confirmatory factor analyses, and concurrent validity was examined using Pearson’s correlation coefficients, omega hierarchical, and Cronbach’s alpha.

RESULTS

Content validity was assessed by experts and cognitive interviews using women of childbearing age.
The SMSE-PBP consists of a second-order 3-dimension and 10-factor scale with 60 items; therefore, the construct and concurrent validity of the SMSE-PBP were supported.
The pre-pregnancy SMSE-PBP (dimension 1) consisted of a 3-factor scale with 13 items. The pregnancy SMSE-PBP (dimension 2) consisted of a 5-factor scale with 32 items. The hospital SMSE-PBP (dimension 3) consisted of a 2-factor scale with 15 items.
The omega values were .93 for pre-pregnancy SMSE-PBP, .92 for pregnancy SMSE-PBP, and .94 for hospital SMSE-PBP. Cronbach’s α was .88 for pre-pregnancy SMSE-PBP, .96 for pregnancy SMSE-PBP, and .96 for hospital SMSE-PBP.

DISCUSSION

The SMSE-PBP scale is valid and reliable for women of childbearing age; it is helpful for women of childbearing age and health professionals to assess women’s SMSE-PBP and pre-pregnancy, pregnancy, or hospital SMSE-PBP.
The next steps include assessing the relationship with pregnancy health behaviors.

Key words

Premature birth, Reproducibility of results, Self-efficacy, Self-management

Acknowledgement: This research was supported by Basic Science Research Program through the National Research Foundation of Korea (NRF) funded by the Ministry of Education (grant number: 2021R1I1A3047489)