



# Psychometric Properties of the Persian Version of the Fear of Childbirth among Pregnant Women Attending Comprehensive Health Centers

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## ABSTRACT

**Introduction:** One topic that has changed globally is fertility, which is influenced by factors such as the fear of childbirth, leading to the delay or avoidance of pregnancy. The global prevalence of fear of childbirth (FOC) has been reported to be 14%. The present study was designed and conducted to validate a questionnaire assessing fear of childbirth.

**Methods and Materials:** Psychometric properties of the Persian version of the FOC questionnaire were assessed through six stages: translation, evaluation of content validity, assessment of face validity, examination of construct validity, analysis of discriminant validity, and determination of reliability. A panel of experts (n = 10) and pregnant women (n = 10) evaluated the questionnaire items for content and face validity, respectively. The questionnaire consisted of nine elements, including fears such as the fear of losing sexual pleasure/attractiveness, fear of pain during natural childbirth, fear of embarrassment, fear of harming the baby, fear of cesarean section, fear of maternal or infant death, fear of inadequate pain relief, and fear of bodily harm, totaling 40 questions. A cross-sectional study employing a random sampling method was conducted with 300 pregnant women to establish construct validity. Internal consistency was assessed using Cronbach's alpha and the McDonald's omega coefficients.

**Results:** The average age of the women in the study was 35.39 years. The content validity ratio, content validity index, and impact score for FOC were 0.98, 0.98, and 3.54, respectively, indicating strong content and face validity. Exploratory factor analysis was conducted on the 40 items to assess construct validity, revealing that nine factors accounted for 76.18% of the cumulative variance. The fit indices (CFI = 0.97, TLI = 0.95,  $\chi^2/df = 4.20$ , RMSEA = 0.04) supported the model's validity in confirmatory factor analysis. The average variance extracted values exceeding 0.5 indicate good convergent validity of the factors. Internal consistency was evaluated using Cronbach's alpha and McDonald's omega coefficients, which yielded values of 0.90 and 0.92, respectively.

**Conclusion and Discussion:** Addressing the FOC as a public health concern necessitates targeted education. Therefore, it is essential to recognize these fears by utilizing a standardized tool to develop effective support strategies and suitable interventions to achieve this. This questionnaire serves as a novel instrument for evaluating the complex fear of childbirth. Its reliability and validity have been confirmed among Iranian women in the community, making it a valuable resource for identifying the concerns of pregnant women and formulating educational interventions tailored to these specific fears.

### Citation:

Hosseini A, Khoshnazar Z, Rostami M, Ramezani F, Nekuee AS, Khaledian A, Hosseini Koukamri P. Assessment of the Psychometric Properties of the Persian Version of the Fear of Childbirth Among Pregnant Women Attending Comprehensive Health Centers. *Iranian biomedical journal* 2024; 28(7): 6.

Keywords: Fear, Pregnant Women, Psychometrics

