Original Article

Perceived Maternal Parenting Self-Efficacy: Translation and Face validation with Iranian mothers of hospitalized Preterm Neonates

Faranak Aliabadi; Leili Borimnejad*, PhD; Mohammad Kamali, PhD.
Iran University of Medical Sciences, Tehran, Iran.

Mehdi Rassafiani, PhD.
Pediatric Neurorehabilitation Research center
University of Social Welfare and Rehabilitation Science, Iran

Sepideh Nazi
Iran University of Medical Sciences, Tehran, Iran.

Objectives: Mothers' perception of their ability to parenting (maternal parenting self-efficacy) is a critical issue that influences their interactions with their preterm neonates. For better support of these mothers, a robust tool is needed which can measure mothers' perception of their ability to understand and care for their preterm neonates as well as being sensitive to the various levels and tasks in parenting. This study aimed to translate and test the face validity of Persian version of Perceived Maternal Parenting Self-Efficacy (PMP S-E) tool with Iranian mothers of hospitalized preterm neonates.

Method: The translation and validation was done in some steps. Forward translated by three independent translators and backward translated by two other translators who were blind to source version. Then, the face validity was evaluated by 10 mothers and the expert panel. At last, the tool adapted and approved by an expert committee.

Result: The Persian version of PMP S-E tool demonstrated good face validity regarding its items' relevancy and clearance.

Discussion: The PMP S-E was successfully translated and adapted into Persian with good face validity. However, further study is needed for evaluating its reliability in Iran and for Iranian mothers of hospitalized preterm neonates.

Key words: parenting, Perceived Maternal Parenting Self-Efficacy tool, translation, face validation

Submitted: 14 September 2013
Accepted: 10 December 2013

Introduction

Self-efficacy is defined as an individual's perception of competence toward a specific task or behavior (1). Also, it has been defined as the perception of one's own ability, when faced with a particular situation, to organize and implement a plan of action successfully (2) Parental self-efficacy refers to parents' perceptions of their capability in the role of caring for and positively nurturing the growth and development of their children (3-5) believed that parents must have qualities related to a strong sense of self-efficacy in order to parent successfully. Parental self-efficacy can be influenced by a variety of parent and child characteristics and also the external factors in a person's social environment (6).

The period immediately following a premature births as an external factor is typically referred to as a time of crisis (7). During the hospitalization of their preterm babies, mothers experience a profoundly different start to parenting than mother of full-term babies. At this point, fundamental judgments are made about what a mother believes she is capable of doing with her baby and these may form her future interactions with the child. Knowing whether or not a mother of a hospitalized preterm neonate feels competent within the various sub domains of parenting would allow healthcare

* All corresponding to: Leili Borimnejad: <borimnejad@gmail.com>

professionals to better manage and support such these mothers (8).

There are some measures of maternal self-efficacy that have been designed for mothers of preterm babies who are no longer hospitalized , for those with infants born at full-term and also for mothers of hospitalized preterm newborns which measures mothers' perceptions of their ability to understand and care for their babies. Perceived Maternal Parenting Self-Efficacy (PMP S-E) tool is the measure which is developed for mothers of their hospitalized preterm newborns and which is sensitive to the levels and tasks of parenting at this time in English (8). The aim of this study is translating the PMP S-E to Persian and determines the face validity of this version.

Methods

This cross-sectional design study was done in 2013. At first, English version of PMP S-E was translated to Persian language by 2 bilingual translators whose mother language was Persian to produce the two independent translations. Both translators were a native PhD candidate of Occupational therapy with an academic and a clinical background. After translation, they had a meeting to consult with one expert translator and write a pre-final Persian version of tool. Two other translators who were blind to source version, translated the Persian version back into the English language to know that the Persian version can reflect the same item content as the English one. Then, the Persian version was reviewed by two translators, the expert translator and two other translators in the neonatal field to prepare a final translated version. To assess the face validity of the PMP S-E tool, the items were presented to 10 mothers of relatively healthy hospitalized preterm neonates. Participants were asked to complete the tool for evaluating the meaning of each item and rate whether they thought each item related to parenting within the context of the neonatal unit, and whether it was clear and easy to understand. As well as, they were asked whether or not they had problems with the questionnaire format, layout, instructions or response scales. Any difficulties were noted and include in the final report. A detailed report written by the interviewing person, including proposed changes of the pre-final version based on the results of the face validity test was then submitted to the expert committee. All participants were asked to fill informed consent form before enrollment.

Participants - A convenience sample of 10 relatively healthy and hospitalized mother-preterm dyads was recruited from 2 intensive care neonatal units in the Tehran, Iran. Mothers of hospitalized preterm neonate who was within the neonatal period (first 28 days of postnatal life) and met the inclusion criteria were recruited in this study. The inclusion criteria were: 1- neonate with birth weight less than 2500 gram, 2- preterm neonate with gestational age more than 27 weeks, 3- mother age with more than 18 years, 4- mothers of medically stable preterm neonate. The exclusion criteria were: (1)- not Persian speaker, (2)- mothers of preterm neonate with any complications other than prematurity such as genetic anomalies, congenital malformations, gastrointestinal disturbances, central nervous system dysfunction, (3)- medically instability of preterm neonate , (4)- receiving parenteral nutrition only or the preterm neonate in need of oxygen therapy.

Tools - The English version of the PMP S-E tool consisted of 20 items (scoring ranges 20–80) with four theorized subscales. The tool took around 10 minutes to complete. The PMP S-E is available in the public domain, is not copyrighted, and may be used at no charge to clinicians and researchers. The authors request that individuals who use the PMP S-E acknowledge the source in their publications.

Data analyses - The face validity is a qualitative measure of validity. It is not quantified with statistical methods. In this study, the face validity of Persian version of PMP S-E tool was assessed by review of the items (questions) by 10 mothers of relatively healthy hospitalized preterm neonate and the expert committee including 5 clinicians in the field of neonatal. They made their judgments on whether the items are relevant, clear and easy to understand. Then, the final Persian version of PMP S-E was developed.

Results

After completing the questionnaire by participants for evaluating the meaning of each item, they rated whether they thought each item related to parenting within the context of the neonatal unit, and whether it was clear and easy to understand. Also, they were answered whether or not they had problems with the questionnaire format, layout,

instructions or response scales. Their difficulties with any items and proposed changes of the pre-final version were noted by the interviewing person and include in the final report. At last, the pre-final version submitted to the expert committee and final Persian version was developed.

Perceived maternal parenting self-efficacy questionnaire is shown in table (1). PMP S-E Obtained from and included with permission from the instrument authors (Christopher R. Barnes and Elvidina N. Adamson-Macedo) (8, 9)

Table 1. Perceived maternal parenting self-efficacy questionnaire

Item No.	Item
	Factor 1. Care taking procedures
16	I am good at keeping my baby occupied
17	I am good at feeding my baby
18	I am good at changing my baby
19	I am good at bathing my baby
	Factor 2. Evoking behavior(s)
5	I can make my baby happy
8	I can make my baby calm when he/she has been crying
9	I am good at soothing my baby when he/she becomes upset
10	I am good at soothing my baby when he/she becomes fussy
11	I am good at soothing my baby when he/she continually cries
12	I am good at soothing my baby when he/she becomes more restless
14	I am good at getting my babies attention
	Factor 3. Reading behavior(s) or signaling
1	I believe that I can tell when my baby is tired and needs to sleep
2	I believe that I have control over my baby
3	I can tell when my baby is sick
4	I can read my baby's cues
13	I am good at understanding what my baby wants
15	I am good at knowing what activities my baby does not enjoy
	Factor 4. Situational beliefs
6	I believe that my baby responds well to me
7	I believe that my baby and I have a good interaction with each other
20	I can show affection to my baby

Discussion

The purpose of this study was to translate and evaluate face validity of the PMP S-E tool. Our results provide support for Persian version of this tool and the face validity of the tool for use with Iranian mothers of hospitalized preterm neonates during the neonatal period.

We choose this tool for the following reasons: The maternal self-efficacy construct has multiple applications within the healthcare environment for both the healthcare providers and recipients. Specifically, it provides information that can be used to empower those with parental responsibility to make choices that will enhance their ability to care for their new babies as members of their families (10). The PMP S-E tool offers a unique methodology to help staff in the screening of mothers' parenting abilities. We recommend that the PMP S-E tool total score should be apply as a general indicator of self-efficacy level, but that the subscales should also be used to understand what support and help each individual mother may require. In addition, using this tool takes just 10 minutes to complete, making it easy to administer in clinical settings. Also, The PMP S-E tool is unique in comparison to other measures of maternal/parenting self-efficacy in terms of the population it was designed for. Preterm birth is a stressful event for all involved and it may affect mothers' perceptions of themselves as successfully performing parenting tasks and he PMP S-E could be use during this stressful period.

Although this tool was translated to Persian language and face validated for use with Iranian mothers of hospitalized preterm neonates, it needs to evaluate the content validity and reliability of the Persian version for use with this population. These studies have been performed with the same research team and their report will report as soon as possible.

Conclusion

This study is the first Persian translation of a tool that is capable to measure maternal parenting self-efficacy in mothers of hospitalized preterm neonates in the Iran. The final Persian version of PMP S-E is now accessible. To access to this version, everyone could contact to first author of this article.

This article is based on a thesis written by the first author in partial fulfillment of the requirements for the PhD in Occupational Therapy from School of Rehabilitation Sciences, Iran University of Medical sciences.

Acknowledgments

We would like to thank specially from Christopher R. Barnes and Elvidina N. Adamson-Macedo and all mothers and collogues who helped in this study.

References:

1. Bandura A. Self-efficacy: The exercise of control. New York: W. H. Freeman; 1997.
2. Bandura A. Self-efficacy mechanism in human agency. American psychologist. 1982;37(2):122.
3. Coleman PK, Karraker KH. Self-efficacy and parenting quality: Findings and future application. Developmental Review. 1997;18:47-85.
4. Kuhn JC, Carter AS. Maternal self-efficacy and associated parenting cognitions among mothers of children with autism. American Journal of Orthopsychiatry. 2006;76:564- 75.
5. Teti DM, Gelfand DM. Behavioral competence among mothers of infants in the first year: The meditational role of maternal self-efficacy. Child Development. 1991;62:918- 29.
6. Hess CR, Teti DM, Hussey-Gardner B. Self-efficacy and parenting of high-risk infants: The moderating role of parent knowledge of infant development. Applied Developmental Psychology. 2004;25:423-37.
7. Caplan G, Mason EA, Kaplan DM. Four studies of crisis in parents of prematures. Community Mental Health Journal. 2000;36(1):25-45.
8. Barnes CR, Adamson-Macedo EN. Perceived Maternal Parenting Self-Efficacy (PMP S-E) tool: Development and validation with mothers of hospitalized preterm neonates. Journal of Advanced Nursing. 2007;60:550-60.
9. Simmons CA, Lehmann P. Tools for strengths- based assessment and evaluation: Springer publishing company; 2012.
10. Price C. Family centred care for the neonate the view from Wolverhampton. Neuro endocrinology letters. 2004; 25:87-93.