My Research Journey for The Development of The Hung Postpartum Stress Scale

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The Concept of Postpartum Stress
Postpartum Stress vs. Postpartum Depression
Postpartum Depression

- The western literature indicates it is an important issue in women’s health
- Researchers who have studied endocrine variation have claimed that it occurs because of the event of childbirth

(Hung, 2004)
Eastern Culture

- Women in Asian cultures had a lower incidence of postpartum depression than did women in Western countries because of a traditional postpartum ritual

(Stern & Kruckman, 1983)
The Negative Outcomes of Postpartum Depression

The result of a relative lack of:

- Social structuring of postpartum events
- Social recognition of a role transition for the new mother
- Instrumental assistance to the new mother

(Stern & Kruckman, 1983)
A Culture-Bound Syndrome

Postpartum Depression
(culture-specific syndrome or folk illness)

a combination of psychiatric and somatic symptoms that are considered to be a recognizable disease only within a specific society or culture

( Stern & Kruckman, 1983)
Conceptual Definition for Postpartum Depression

- Depression can occur in any stage of life
- Postpartum depression could be defined as depression that occurs in the postpartum period rather than that occurs as a result of the experience of childbirth itself
Criticisms for The Studies of Postpartum Depression

Estimates of the incidence of postpartum depression vary widely, depending on:

- the measuring instruments used
- the criteria for diagnosis used
- the time in which it is assessed
- the social conditions of the women studied
Taiwanese Postpartum Ritual

-Eastern socio-cultural systems differ in many ways from Western ones
-These differences influence many aspects of the postpartum period
-A postpartum ritual of *Tso-Yueh-Tzu*
First Experience in Conducting Nursing Research (1986)

Postpartum depression

Stress (stressors)

Postpartum stress (postpartum stressors)
Measuring Postpartum Stress

- A valid and reliable measurement of postpartum stress would be used to assess stressors as an indicator of risk adverse to women's health
Requirements for An Instrument Development

- Concept clarification
- Advanced Statistics

Statistical Analysis System (SAS)

Statistical Product and Service Solutions (SPSS)
University of Pennsylvania
USA (1998-2002)

A Concept Analysis

Qualify Examination
The Concept of Postpartum Stress

The Concept Analysis
Purpose of The Concept Analysis

- Provide information for the future test of the validity of a postpartum stress scale
Six Steps of Concept Analysis

1. Identifying the use of the concept
2. Determining the defining attributes
3. Constructing a model case
4. Constructing borderline, related, contrary, and illegitimate cases
5. Identifying antecedents and consequences
6. Defining empirical referents

(Walker & Avant, 2010)
The Publication

Areas for Further Study

- Further testing and validation with the Postpartum Stress Scale could be done for nurses
Revalidation of The Hung Postpartum Stress Scale

My Doctoral Dissertation
The Application of General Stress Scales to Postpartum Stress

General Stress

Postpartum Stress

General Stress Scale

Birth

Postpartum Period

Time
Validity

- Estimates of validity are dependent upon the nature of the people being measured and the circumstances under which they are being assessed.

The Content Domain of Hung's Postpartum Stress Scale versus General Stress Scales
The First Version of The Hung Postpartum Stress Scale
Sample

- Proportional stratified quota sampling
- 861 women during the six weeks following childbirth were sampled (1:10 ratio of items to subjects) from 14 hospitals and 6 obstetric clinics
Criteria for Inclusion in the Sample

- Had a single, healthy, and full-term baby without complications
- Had no major postnatal complications or underlying medical problems
- Were married Taiwanese residents
- Could speak Mandarin Chinese
The Publication

Three Press Releases

The Journal of Advanced Nursing
Large-scale study identifies key stress factors facing new mums

Tiredness, feeding their baby and lack of time to care for other children are three of the key stresses experienced by new mothers, according to a study in the latest Journal of Advanced Nursing.

861 women who had given birth during the last six weeks were asked to rate 85 potential stress factors on a scale of one to five, with higher scores indicating greater stress levels.

The women were all married, had delivered a single, healthy, full-term baby without complications and had no major postnatal complications or underlying medical problems.

Professor Chich-Hsiu Hung from the Kaohsiung Medical University in Taiwan has used the results to update a test she developed 11 years ago, which enables healthcare professionals to identify and treat stress among new mothers.

Three key areas were identified as stressful by new mothers taking part in the study. They were concerned about their maternal role, negative physical and lifestyle changes and lack of social support.

- The three highest stress factors expressed by the new mothers were all personal factors - tiredness, lack of sleep and decreasing social activity.

- When it came to caring for their baby, they were most worried about feeding, looking after the umbilical cord, nappy changing and bathing the baby.

- Lack of social support was also stressful, with less time to care for other children, sibling rivalry and inadequate emotional support from their families heading the list.

“The period after a woman gives birth is a potentially stressful time during which she must face dramatic changes and new demands” says Professor Hung. “Until now, few studies have attempted to measure these stresses.”

The responses given by the new mothers to the 85 questions have enabled Professor Hung to develop an improved 61-item Hung Postpartum Stress Scale.
Key stress factors facing new mums - Tiredness, Feeding Baby and Lack of Time to Care for Other Children

Main Category: Women's Health / OB/GYN News
Article Date: 28 Apr 2005 - 0:00 am (PDT)

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"The period after a woman gives birth is a potentially stressful time..."
Thousands of new mothers 'cannot cope with a baby'
By Sarah Womack, Social Affairs Correspondent

(Files: 26/04/2000)

Thousands of new mothers cannot cope with having a baby and are suffering significant levels of stress, a report said yesterday.

Inadequate family support, sibling rivalry and the changes in lifestyle caused by a new baby create significant anxieties which are underestimated, said the study in the Journal of Advanced Nursing.

These problems can quickly lead to or deepen post-natal depression.

The study said that the period after a baby is born is characterised by such dramatic change and new demands on the mother that face considerable anxiety.

For example, a baby's crying creates alarm, even though a crying baby is normal because cries are its only form of communication.

Even women who experienced completely normal births had to cope afterwards with constant physical tiredness and distress over changes to their bodies.

The study follows a report by Dattamonitor which found that less than a quarter of women who suffer post-natal depression are seen by health professionals. Most mothers assume they will get better naturally and are unaware that depression can become a recurring illness.

Almost eight in 10 women experience the "baby blues" a few days after birth. But 10 per cent of this group will suffer some form of depression, with one in 250 needing hospital treatment.

Up to 30 mothers a year commit suicide before their child's first birthday.

Those who have suffered post-natal depression include the late Princess of Wales, the models Jerry Hall and Rachel Hunter and Pinnegar, the television presenter.

The new study, led by Prof Chich-Hsia Hung from Taiwan's Kaohsiung Medical University, is based on results from 861 new mothers asked to rank 12 stress factors.

It will be used to help doctors around the world treat new mothers suffering from stress.

Exhaustion, lack of sleep and decreased social activity were the most common causes of stress. When it came to looking after a feeding, changing and bathing them topped the list.

The information has been used to update an existing "post-partum stress scale", which is widely used.
E-Mails from the World

- For permission to use the Hung PSS

- For the article
The Perceived Stress Scale (Women’s Stress) 
The Postpartum Period

Concepts of Validity and Reliability


*Journal of Clinical Nursing, 16*(9), 1773-1775.
The First Version of The Hung Postpartum Stress Scale

61 items
Significance for the Development of the Hung PSS

- Postpartum women experiencing specific postpartum stressors would be detected and subsequently protected by supportive nursing intervention that provides stressor-specific coping resources
The First Version of The Hung Postpartum Stress Scale

A Homogeneous Sample of Low-risk Women
Concept of Validity

- When an instrument is used in a new context or with a different group of people, it is necessary to reestablish its psychometric properties

The Second Version of The Hung Postpartum Stress Scale

The Hung Postpartum Stress Scale
The Purpose of The Study

➢ To revalidate that earlier study by applying the Hung PSS to measure postpartum stress for high-risk postpartum women
Sample

- Proportional stratified quota sampling
- The Kaohsiung area of southern Taiwan: 11 registered general hospitals & 7 specialty clinics
Sample-1

878 postpartum women

* speak Mandarin Chinese
* read Chinese
* newborn baby was alive

A total sample of 859 women
(1:10 ratio of items to subjects)
The Publication

The Second Version of The Hung Postpartum Stress Scale

62 items
The Application of the Instrument

- **Nursing interventions** can be tailored to address the items on the **Hung PSS** that postpartum women indicate to be the most stressful.
Conclusion

- A representative sample regardless of low- or high-risk postpartum women
- A large sample with 10-to-1 subject-to-item ratio

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Confirmatory factor analysis
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