Validation of the Chichewa Perinatal PTSD Questionnaire (PPQ) and Chichewa Child Health Worry Scale (CHWS) in Malawi

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# Student/Faculty Disclosure

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Goals and Objectives

Overall goal

- At the end of the session participants will understand the translation and validation process of the Chichewa screening tools for postpartum PTS symptoms and maternal worry.

Specific Objective

- Explain the postpartum emotional burden following preterm birth.
- Explain the translation and validation process for the Perinatal PTSD questionnaire and Child Health Worry Scale in Malawi.
Introduction and Background

- Malawi has the highest preterm birth rate in the world--18.1 per 100 live births (World Health Organization, 2014).

- Mothers of preterm infants have higher risk for:
  - elevated depressive symptoms
  - elevated anxiety
  - greater posttraumatic stress
  - more maternal worry (Brandon et al., 2011; Dudek-Shriber, 2004; Lasiuk et al., 2013)
Introduction and Background

- In Malawi, majority of research have focused on perinatal depressive symptoms (Stewart et al., 2010; Stewart et al., 2009; Stewart et al., 2015; Stewart et al., 2008; Stewart, Umar, Tomenson, & Creed, 2013)

- Chichewa instruments for postpartum emotional responses include
  - The Self-Reporting Questionnaire (SRQ)
  - Edinburgh Postnatal Depression Scale
Posttraumatic Stress Symptoms

- Studies of postpartum PTS in Malawi could not be located
- Chichewa instruments for assessing traumatic stress are non-existent
- The Perinatal PTSD Questionnaire (PPQ) is one of the most commonly used instruments
Perinatal PTSD Questionnaire (PPQ)

- A 14-item instrument
- Total scores of 6 or higher indicate elevated PTS
- High internal consistency with a Cronbach alpha ranging from 0.80 to 0.87
Maternal Worry about Child’s Health

- In Malawi, mothers worry about maternal death.
- Mothers also worry about giving birth to a healthy infant and these concerns included suicidal ideations.
- Chichewa instruments on maternal worry about child’s health in the postpartum period could not be located.
Child Health Worry Scale (CHWS)

- A 7-item instrument
- 5-point Likert scale with higher scores indicating more worry
- High internal consistency with Cronbach’s alpha ranging from 0.89 to 0.90
Method

- **Study setting**
  - Kamuzu College of Nursing and Queen Elizabeth Central Hospital

- **Study population**
  - 8 nurses-midwives
  - 30 postpartum mothers
Translation and Back Translation

- Translation and verification – Iterative process
- Back translation by another bilingual person and verification of back translation to original instrument – Iterative process
- Expert agreement
Data Collection

- Nurse-Midwives
  - Focus Group discussion of the translations and English version

- Postpartum mothers
  - The Self Reporting Questionnaire (SRQ)
  - PPQ
  - CHWS
  - Interview regarding the wording and difficulty of the translation
Results

- **Expert Agreement**
  - Items had at least 60% of the experts agreeing whether the meaning was maintained in the back translation.

- **Nurse-Midwives**
  - Nurse midwives agreed with the translations
  - Minor changes to wording were made to avoid triggering distress
  - All nurse midwives agreed with the order of the questions, the more distressing questions were at the end.
Results

Postpartum Mothers

- **Validity and Reliability**

  - High internal-consistency reliability and validity of the PPQ
    - The items had Cronbach alpha ranging from 0.84 to 0.89
    - The whole instrument had a Cronbach alpha of 0.82.
    - The PPQ correlated with the SRQ with $r = 0.74$, $p = < .001$. 
Validity and Reliability

- High reliability and validity of the CHWS
  - Item reliability had Cronbach alpha ranging from 0.90 to 0.93
  - The internal consistency of the whole instrument was Cronbach alpha of 0.86.
  - The CHWS correlated the SRQ subscale with $r = 0.61$, $p = <.001$.

- Qualitative analysis revealed that mothers found the questions easy but they thought being asked about fear of infant loss was very distressing.
Conclusions

- Findings contribute to the literature on negative emotional responses in the perinatal period.

- The validation process was limited because there are no other validated instruments for assessing PTS and worry in Malawi.

- Both PTS and worry are neurotic symptoms as such the SRQ was still used.
References


THANK YOU
ZIKOMO