

Kertas Asli/Original Article

Development, Validity and Reliability of a Pregnancy Symptoms Questionnaire (PSQ)

(Penghasilan, Validiti dan Kebolehpercayaan Borang Soal Selidik Simptom Kehamilan)

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ABSTRACT

This study aimed to develop and examine the validity and reliability of a pregnancy symptoms questionnaire. A total of 214 pregnant women aged 19 to 40 years old were purposive randomly recruited from December 2009 to January 2010 in Antenatal Clinic, Hospital Universiti Sains Malaysia. Pregnant mothers at second and third trimesters were interviewed to complete the Pregnancy Symptoms Questionnaire (PSQ). The PSQ was developed by experts in nutrition, obstetrics and statistics. The PSQ consists of 38 items on frequency and severity of pregnancy symptoms. Factor analysis was done using Promax rotation method to check for construct validity. A total of 16 items which had poor correlation (<0.3) and less important content were removed during the final revise. The 22 remaining items were found to be loaded on the three components (general, constitutional and somatic pain). The overall Cronbach's alpha coefficient was 0.93 and for each three components ranges from 0.70–0.87. The results suggest that the final PSQ consisting of 22 items is valid and reliable for measuring the frequency and severity of the symptoms experienced during pregnancy. It can be used in nutritional studies related to pregnancy and its outcome.

Keywords: Pregnant mothers, Pregnancy symptoms, Questionnaire, Validation

ABSTRAK

Kajian ini bertujuan untuk menghasilkan soal selidik simptom semasa hamil serta mengkaji validiti dan kebolehpercayaannya. Seramai 214 ibu hamil yang berusia di antara 19 hingga 40 tahun telah dipilih secara rawak bertujuan bermula dari Disember 2009 hingga Januari 2010 di Klinik Antenatal, Hospital Universiti Sains Malaysia. Ibu-ibu hamil pada trimester kedua dan ketiga telah ditemubual untuk melengkapkan Pregnancy Symptoms Questionnaire (PSQ). PSQ telah dihasilkan daripada perbincangan pakar-pakar dalam bidang pemakanan, obstetrik dan statistik. PSQ mengkaji kekerapan dan tahap keterukan sejumlah 38 simptom semasa hamil. Setelah faktor analisis menggunakan kaedah Promax rotation dilakukan untuk menguji validiti kandungan PSQ, sebanyak 16 simptom dengan perkaitan yang lemah (<0.3) telah dikeluarkan. Seterusnya baki 22 simptom dibahagikan mengikut tiga komponen utama; umum (general), gejala alahan (constitutional) dan kesakitan badan (somatic pain). Bacaan Cronbach's alpha bagi keseluruhan PSQ ialah 0.93 sementara bacaan untuk setiap komponen adalah di antara 0.70 hingga 0.87. Hasil kajian menunjukkan PSQ dengan 22 simptom adalah valid dan boleh dipercayai untuk mengukur kekerapan dan tahap keterukan simptom semasa hamil. Seterusnya dapat digunakan di dalam kajian pemakanan yang berkaitan dengan kehamilan dan hasil kehamilan.

Kata kunci: Ibu-ibu hamil, Simptom semasa hamil, Soal selidik, Validiti

INTRODUCTION

Maternal physiology changes remarkably throughout the pregnancy to support the development of the fetus and to prepare the mother for labour and lactation (Coad & Dunstall 2005). The physiological changes of pregnancy such as in respiratory, gastrointestinal and renal systems may exacerbate many irritating symptoms which can be troublesome on a day-to-day basis (Baker 2006). This can be a wide range of discomforts, from fatigue and headache to more severe pregnancy symptom like hyperemesis gravidarum which requires hospitalization. Each stage of

pregnancy has its associated pregnancy-related physical symptoms which are unpleasant and cause profound effects to mother and infant (Kamysheva et al. 2009). Nausea and vomiting tend to occur at the early trimester while somatic pain symptoms e.g. pelvic pressure and Braxton Hicks are common during the third trimester of pregnancy. As proposed by the 'Developmental Origins Hypothesis,' the maternal nutritional, metabolic and hormonal environments are critical to fetal growth and later adult disease (Barker 2003). Therefore, considering that these aspects are correlated with the pregnancy symptoms, thus it is important and appropriate to measure and identify the symptoms among pregnant mothers.