



**DEPARTMENT OF PSYCHOLOGY AND COUNSELLING
FACULTY OF SOCIAL AND HUMAN DEVELOPMENT
UNIVERSITI UTARA MALAYSIA**

**POSTPARTUM DEPRESSION
A STUDY AMONG MALAY WOMEN ATTENDING URBAN AND RURAL
HEALTH CENTRES IN KEDAH, NORTH WEST OF PENINSULAR MALAYSIA**

By

Wan Mohd. Rushidi Bin Haji Wan Mahmud

POSTPARTUM DEPRESSION
A STUDY AMONG MALAY WOMEN ATTENDING URBAN AND
RURAL HEALTH CENTRES IN KEDAH, NORTH WEST OF
PENINSULAR MALAYSIA

A thesis submitted to the Centre for Graduate Studies in full fulfilment of
the requirements for the Degree of Doctor of Philosophy,
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By

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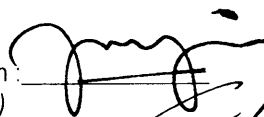
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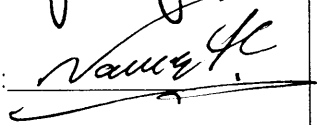
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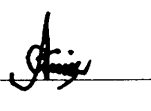
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ABSTRAK

Matlamat: Tujuan kajian ini ialah untuk menentukan kadar prevalens dan pengaruh pelbagai faktor risiko (sosio-demografi, peristiwa dalam kehidupan, obstetrik, neonatal dan socio-budaya) yang mengakibatkan berlakunya kemurungan selepas bersalin dalam kalangan wanita Melayu yang datang ke klinik kesihatan (bandar dan luar bandar) di negeri Kedah. Perbandingan kemudiannya dibuat antara hasil kajian ini dengan kajian terdahulu samada di dalam atau di luar negeri.

Metodologi: Kajian populasi dua peringkat ini dijalankan dari bulan Julai hingga Disember 2002. Wanita Melayu yang baru melahirkan anak (antara 4 hingga 12 minggu) yang datang ke klinik kesihatan yang berkenaan (bandar dan luar bandar) telah dipilih secara rawak. Mereka diberikan soal selidik yang mengandungi soalan mengenai ciri-ciri sosio-demografi, obstetrik dan neonatal, Soal Selidik Sokongan Sosial 'Medical Outcome Study' (MOS) (versi Melayu) dan item yang diadaptasikan daripada Inventori Ramalan Kemurungan Selepas Bersalin (PDPI). Saringan pada peringkat pertama dibuat menggunakan dua ujian iaitu Skala Kemurungan Selepas Bersalin Edinburgh (EPDS) (versi Melayu) dan Skala Kemurungan Beck II (BDI-II) (versi Melayu). Peserta yang mempunyai skor ≥ 12 dalam EPDS atau ≥ 10 dalam BDI-II telah ditemuduga menggunakan Temuduga Diagnostik Komposit Antrabangsa (CIDI) dan Skala Penilaian Kemurungan Hamilton (17 item) (HRSD-17) pada peringkat kedua. Diagnosa kemurungan selepas bersalin telah diberikan hanya jika wanita tersebut memenuhi kriteria yang ditetapkan [Kriteria Pitt (1968) dan Kriteria Kemurungan dalam Klasifikasi

Antarabangsa Mengenai Penyakit : Kriteria Diagnostik Untuk Penyelidikan 1993 (ICD - 10: DCR: 10)].

Keputusan: 354 orang wanita Melayu telah mengambil bahagian dan 58 daripada mereka mengalami masalah kemurungan selepas bersalin memberikan kadar prevalens sebanyak 16.38 %. Kadar lebih tinggi dicatatkan dalam kalangan wanita luar bandar (21.08%) berbanding wanita bandar (11.24%). 22 pembolehubah dengan nilai $p \leq 0.05$ dalam analisis univariat telah dimasukkan dalam analisis multivariat (Regresi Logistik Berganda - Kehadapan Secara Bertingkat berdasarkan Nisbah Kemungkinan). 8 faktor risiko yang dikenalpasti ialah mempunyai pendapatan seisi rumah yang rendah, mengamalkan poligami, kelahiran bukan melalui cara biasa, mempunyai bayi yang mengalami masalah kesihatan dan penyusuan / pemakanan, mendapat skor keseluruhan yang rendah dalam Soal Selidik Sokongan Sosial 'Medical Outcome Study'(MOS) dan mengamalkan diet secara terpilih semasa dalam pantang. Perbincangan mengenai metodologi dan limitasi kajian serta saranan untuk meningkatkan mutu penjagaan wanita selepas bersalin juga telah dikemukakan.

Kesimpulan: Kemurungan selepas bersalin adalah satu realiti dalam kalangan wanita Melayu dan kadar prevalensnya adalah seiring dengan kadar yang dilaporkan di kebanyakan negara lain. Pengaruh sosio-budaya juga memainkan peranan disamping faktor risiko lain yang telah dikenalpasti.

ABSTRACT

Aims: To determine the rates and influence of various putative risk factors (socio-demographic, life events, measures of social support, obstetrics, neonatal and cultural variables) of postpartum depression among Malay women attending rural and urban health centres in Kedah, North West of Peninsular Malaysia; and to compare the findings to other available local and international studies.

Method: This two-stage population survey was conducted between July and December 2002. Malay women between 4 to 12 weeks postpartum attending designated urban and rural health centres in Kedah were randomly selected. Details of the independent risk factors were assessed using specifically designed questionnaires, the Malay version of the MOS Social Support Survey and items adopted from the Postpartum Depression Predictors Inventory. Double screening test strategy using the Malay versions of the Edinburgh Postnatal Depression Scale (EPDS) and Beck Depression Inventory II (BDI-II) was employed in the first stage. Those scoring either ≥ 12 on EPDS or ≥ 10 on BDI-II (or both) were interviewed using the Composite International Diagnostic Interview (CIDI) and 17 items Hamilton Rating Scale for Depression (HRSD). Diagnosis of postpartum depression was only made if the women fulfilled the required criteria [Pitt's criteria (1968) and the Tenth Edition of the International Classification of Disease – Diagnostic Criteria for Research 1993 (ICD 10: DCR 10) criteria for depressive episode].

Results: 354 women were finally recruited and 58 (16.38%) of them fulfilled the criteria for postpartum depression. The rates were higher among rural women (21.08%) compared to their urban counterparts (11.24%). 22 independent variables with $p \leq 0.05$ on univariate analyses were then entered into Stepwise Multiple Logistic Regression (Forward Likelihood Ratio). 8 predictor variables specifically polygamous marriage, low total household income, non-spontaneous vaginal delivery, presence of financial problem, existence of infant's health or feeding problems, low scores on the overall support index of the MOS Social Support Survey and taking selected diet during the postpartum period, were finally identified and linked to higher propensity to develop postpartum depression. Methodological issues, limitations and recommendations were discussed.

Conclusions: Postpartum depression is a reality among Malay women attending both urban and rural health centres in Kedah, North West of Peninsular Malaysia. Its rate is comparable to other international figures and certainly not as low as previously anticipated. Finally, despite possessing some similar correlates and risk factors described in other western studies, postpartum depression among Malay women is also shaped by their own unique socio-cultural characteristics.

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DEFINITIONS AND ABBREVIATIONS

A. DEFINITIONS

1. Education

Primary	Formal primary school attendance of six years or less
SRP / PMR	‘Sijil Rendah Pelajaran’ / ‘Penilaian Menengah Rendah’ or equivalent to at least 9 years or school education
SPM	‘Sijil Pelajaran Malaysia’ or equivalent to 11 years of school education
STPM /	‘Sijil Tinggi Pelajaran Malaysia’ or equivalent to 13 years of school education
Diploma / university degree	Diploma or degree in any universities or institutions of higher learning

2. Traditional rituals

‘Pantang larang’	Traditional Malay prohibitions
‘Dalam pantang’	Confinement period
‘Mengurut’	Traditional massage
‘Bengkung’	Wearing the traditional belt
‘Bertuku’	Using the traditional hot stones
‘Melenggang perut’	Traditional rocking of the stomach
‘Bersalai’	Traditional roasting bed
‘Bertangas’	Special form of heating (thermal heating of the private part)
Sexual abstinence	Abstaining from sexual intercourse during the ‘dalam pantang’ (confinement) period

‘Bercukur’	The ritual of shaving the hair of the newborn infants
‘Akikah’	The ritual of sacrificing an animal (a goat /lamb/cow/camel etc.) usually on day 7 of the delivery of the baby
‘Mandi tolak bala’	Traditional bath
Traditional medication	Usually contains herbs and other traditional ingredients

3. Psychometrics and statistical analysis

Validity	Refers to the extent to which a measure really does measure what it sets out to measure
Reliability	Refers to the consistency of a measure when applied repeatedly under similar circumstances
Content equivalence	The content of each items of an instrument is relevant to the phenomena of each culture being studied
Semantic equivalence	The meaning of each item is the same in each culture after translation into the language and idiom (written or oral) of each culture
Technical equivalence	The method of assessment (e.g. pencil and paper, interview) is comparable in each culture with respect to the data it yields
Criterion equivalence	The interpretation of the measurement of the variable remains the same when compared with the norm for each culture studied
Conceptual equivalence	The instrument is measuring the same theoretical construct in each culture
Sensitivity	(of a new measure) is the proportion of the true cases correctly identified
Specificity	(of a new measure) is the proportion of the non-cases correctly identified

Positive predictive value (of a new measure) is the proportion of the subjects it identifies as cases that are actual cases according to the ‘gold standard’

Negative predictive value (of a new measure) is the proportion of the subjects it identifies as non-cases that are actual non-cases according to the ‘gold standard’

		GOLD STANDARD	
		Case	Non-Case
		a	b
NEW MEASURE	Case	c	d
	Non- case		

Sensitivity	$a / (a + c) \times 100\%$
Specificity	$d / (b + d) \times 100 \%$
Positive predictive value	$a / (a + b) \times 100\%$
Negative predictive value	$d / (c + d) \times 100\%$
Efficiency	$[(a + d) / (a + b + c + d)] \times 100\%$
Misclassification rate	$[(b + c) / (a + b + c + d)] \times 100\%$

B. ABBREVIATIONS

APA	American Psychiatric Association
BDI	Beck Depression Inventory
BDI-II	Beck Depression Inventory II
CDC	Centres for Disease Control
CIDI	Composite International Diagnostic Interview
CIS	Clinical Interview Schedule
D	Depressed
DCR	Diagnostic Criteria for Research
DSM	Diagnostic and Statistical Manual

EPDS	Edinburgh Postnatal Depression Scale
GHQ	General Health Questionnaire
HRSD	Hamilton Rating Scale for Depression
ICD	International Classification of Disease
LR	Likelihood Ratio
LSCS	Lower Segment Caesarean Section
MOS	Medical Outcome Study
ND	Non Depressed
RDC	Research Diagnostic Criteria
REM	Rapid eye movement
RM	Ringgit Malaysia
SPSS	Statistical Package for Social Sciences
WHO	World Health Organization

CHAPTER 1

INTRODUCTION

AN OVERVIEW OF POSTPARTUM DEPRESSION

Mental health is a major concern in our society. According to the World Health Organization, five of the leading causes of disability worldwide are due to mental problems (World Federation of Mental Health, 2001). Depression heads the list, accounting for more than 17% of the disability associated with mental health problems and estimated to be the second most disabling condition worldwide by the year 2020 (Murray and Lopez, 1997). Epidemiological studies from diverse cultures reveal that the disorder is twice as prevalent in women (Desai and Jan, 2000) with childbearing years appear to be the time of increased vulnerability.

Childbirth above all represents a major transition in a woman's life, and is traditionally associated with joy and fulfillment. Sadly for some, this period may instead be 'a time of emotional turmoil' (Bewley, 1999) with depression existing as an uninvited companion during her passage to motherhood (Hayes, Muller, and Bradley, 2001). That depression is often depicted as the 'dangerous thief that steals motherhood' as it robs the mother of precious times spent with her infant, which she has anticipated throughout her pregnancy (Beck, 1999a).

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