



POSTNATAL DEPRESSION: **Malaysia ASPIRE Project**

(NMRR-15-2404-26677)

Institut Kesihatan Umum
Kementerian Kesihatan Malaysia

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Kuala Lumpur.

ISBN:

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Acknowledgement

The authors would like to thank the Director-General of Health Malaysia for his support for this survey. Appreciation to the Deputy Director-General (Research and Technical Support) and the Director of the Institute for Public Health, for their unfailing support and technical advice throughout the various stages of this survey.

The Postnatal Depression: Malaysia ASPIRE project was accomplished with budget support from the Ministry of Health, technical advices from the advisors who consisted of experts from both inside and outside the Ministry of Health and Malaysia. The authors would like to express our sincere thanks to them.

The authors thank all the State Health Directors and Maternal and Child Health Officers who have been instrumental in mobilising resources during the data collection phase. Gratitude to all who have assisted in the implementation of the survey, from the Psychiatrists at hospital levels, Family Medicine Specialist at Health Clinics level, and the nurses who act as our data collectors.

Last but not least, sincere appreciation is extended to all respondents who had participated and contributed their time and information to the survey, without whom there would not be any findings to report.

Table of Contents

Executive Summary	vi
1 Phase 1	1
1.1 Objectives	2
2 Methodology and Sampling Design	2
2.1 Study Design	2
2.2 Sampling Design	2
2.3 Sampling Procedure	2
2.4 Sample Size Determination	3
2.5 Field Preparation and Logistic Support	4
2.6 The Questionnaire	5
2.7 Data Management	5
2.8 Training for the Data Collection	6
2.9 Field Data Collection Phase	6
3 General Findings	7
3.1 Sample Coverage	7
3.2 Characteristics of respondents	8
4 Published articles	11
4.1 Ahmad NA, Silim UA, Rosman A, et al. Postnatal depression and intimate partner violence: a nationwide clinic-based cross-sectional study in Malaysia. <i>BMJ Open</i> 2018;8:e020649. doi:10.1136/bmjopen-2017-020649	11
4.2 Chan, Y.Y., Rosman, A., Ahmad, N.A. et al. Prevalence and Factors Associated with Intimate Partner Violence among Postpartum Women Attending Government Primary Health Care Clinics in Malaysia. <i>J Fam Viol</i> (2018). https://doi.org/10.1007/s10896-018-0014-0	20
5 Phase 2	32
5.1 Study Protocol	32
5.2 Findings	42
6 Appendix 1	45
6.1 Questionnaire Phase 1	46
Tools used in Phase 2	51
6.2 Edinburgh Postnatal Depression Scale (EPDS)	84
7 Appendix 2	85
7.2 Mini-International Neuropsychiatric Interview (MINI)	88
7.3 Beck Depression Inventory (BDI)	90
7.4 Automatic Thoughts Questionnaire (ATQ)	92

Executive summary

This study comprises of two phases, Phase 1 as a nation-wide clinic-based survey and Phase 2 as an intervention study.

Phase 1 of the study aimed to determine the prevalence of postnatal depression, and its associated factors, particularly focused on the relationship between intimate partner violence and postnatal depression. The study targeted women 6-16 weeks postpartum at 106 health clinics throughout Malaysia. Postnatal depression was assessed using locally validated Edinburgh Postnatal Depression Scale (EPDS), while Intimate Partner Violence was identified based on locally validated WHO Multi-country Study on Women's Health and Life Events Questionnaire. Our study revealed that 4.5% of postnatal mothers suffering from postnatal depression, with 5.4% women reported ever experience intimate partner violence; 3.8% reported psychological violence, 2.6% physical violence and 1.2% reported sexual violence. Multivariate analysis using logistic regression analysis found that exposure to psychological and sexual violence was positively associated with postnatal depression. Other significant associated factors were low household income, husband/partner who consumed alcohol and lack of family support

Phase 2 of the study was implemented as a randomized controlled trial study investigating the effectiveness of managing postnatal depression using brief cognitive behavioural therapy (CBT) provided by trained nurse in adjunct to usual treatment by medical officer using standard Clinical Practice Guideline as compared to usual treatment by medical officer alone. Study was implemented at six health clinics in Klang Valley. The nurses were trained on brief CBT using a locally prepared intervention package taking into consideration the factors identified in the phase 1 study. Postnatal women with positive EPDS was confirmed as having postnatal depression using Mini International Neuropsychiatric Interview tool, followed by Beck Depression Index in determining the severity of depression. Only mild to moderate depression was considered as respondent for this intervention, while severe depression was referred to Psychiatrist for appropriate management. Respondents were randomised into either intervention or control groups and each respondent were follow-up weekly for six weeks. Based on the preliminary analysis, brief CBT intervention by trained nurses in adjunct to usual treatment by medical officer, show a promising result.

Result of this two-phase study provides evidence for policy-makers to take into consideration for making available the screening for postnatal depression at health clinics. In addition, this intervention package using brief CBT by trained nurse would be the ideal intervention package for training of nurses responsible to manage postnatal mothers at health clinics

PHASE 1:
POSTNATAL DEPRESSION:
MALAYSIA ASPIRE PROJECT

1. OBJECTIVES

1.1 Survey Objectives

General Objective

This survey aims to determine the magnitude of postnatal depression and its associated factors, including intimate-partner violence.

Specific Objectives

- 1.1.1 To assess the prevalence of postnatal depression among postnatal mothers in Malaysia.
- 1.1.2 To assess the prevalence of intimate partner violence among postnatal mothers in Malaysia.
- 1.1.3 To determine factors associated with postnatal depression among postnatal mothers in Malaysia.

2. METHODOLOGY AND SAMPLING DESIGN

2.1 Study Design

Cross-sectional study of mothers with infants in the perinatal period (6-16 weeks) recruited from government primary health care clinics throughout Malaysia.

2.2 Sampling Design

To ensure national representativeness, cluster sampling design was used in the study. Health clinics were considered as cluster. Health clinics within states were randomly selected and eligible mothers within the health clinics were considered as unit of analysis.

2.3 Sampling procedure

All states within Malaysia was included in this study. Health clinics within the states were selected as the Primary Sampling Unit (PSU) and were selected from the sampling frame using systematic probability proportional to size sampling techniques. Cohort of births registered at the selected health clinics from July to November 2016 was used and mothers of this birth cohort were randomly selected and eligible respondents were invited to join the survey (Figure 1). Screening for eligibility was done by the trained nurses at the selected clinics. Nurses identified and refer cases of postpartum psychoses to the identified and trained Family Medicine Specialist (FMS) and if required to the Psychiatrist for further management. In each states, minimum of one FMS and one Psychiatrist were identified and trained to manage the identified cases.

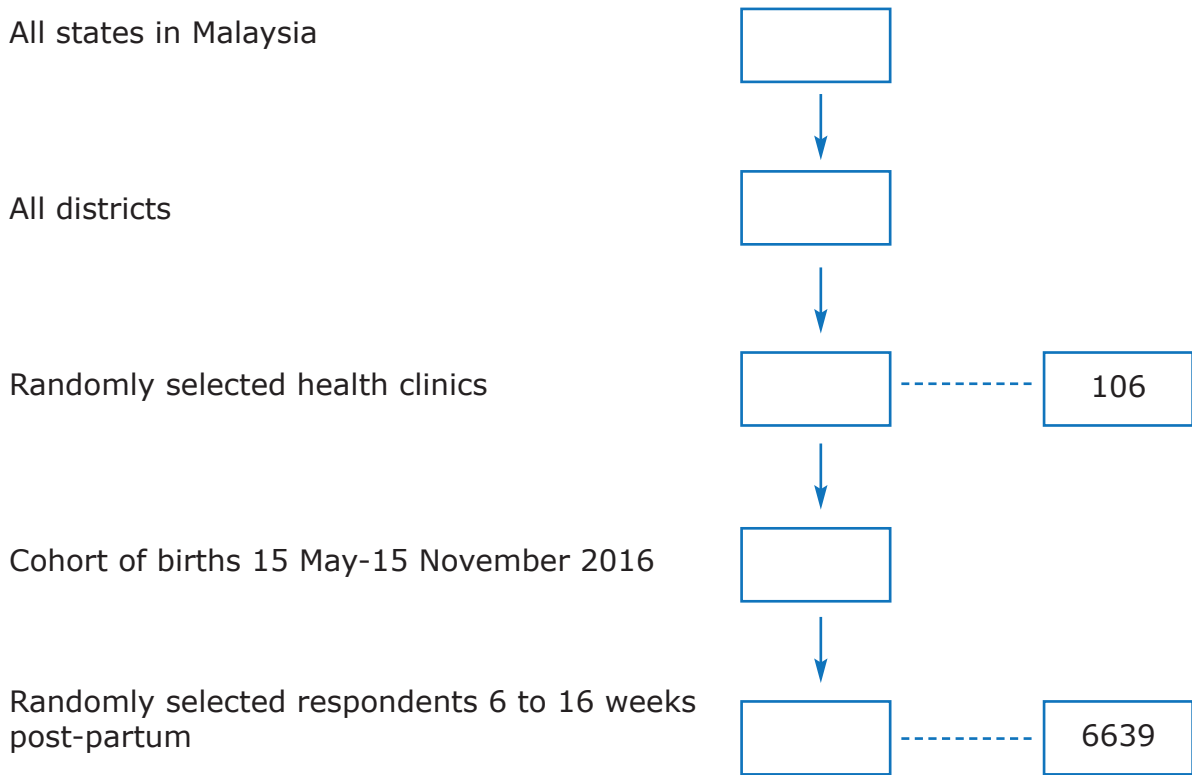
● Inclusion Criteria

Mothers who delivered a child within 6 to 16 weeks of recruitment, who consented to involvement in the study, and do not suffer from psychosis. Only respondents of the legal age of 18 years or above were invited to join this survey.

● Exclusion Criteria

The exclusion criteria were those under the legal consenting age.

Figure 1: Sampling technique



2.4 Sample Size Determination

Sample size was calculated using a single proportion formula for the estimation of prevalence.

$$n_{SRS} \geq \frac{z^2_{\alpha/2} P(1-P)}{e^2}$$

The sample size calculation was based on a few criteria as below:

1. Variance of proportion of the variable of interest (Prevalence of intimate partner violence of 8%)
2. Margin of error (e) (Between 0.01 to 0.05)
3. Confidence Interval of 95%

To calculate sample size, a few adjustments were made:

1. Adjusted n (srs) for the total number of target population (N) (Based on 2016 projected population)
2. Adjusted for the design effect (deff) (Based on previous survey: NHMS 2015)
n(complex)= n * deff
3. Adjusted the n(complex) taking into account expected nonresponse rates of 20%
n(adj) = n(complex) * (1+non response rate)

For this survey, based on the above mentioned considerations, the sample size required was 6584 postnatal mother. The allocation of sample to the state was based on proportionate sampling size to states (**Table 1**).

Table 1: Sampling distribution by states, Malaysia ASPIRE 2016

State	Estimated live birth 2012	Estimated livebirth per month	Estimated livebirth per 2 months	No of Health Clinics	proportion	No of clinics selected	Respondents per state
Johor	57,350	4,779	9,558	94	0.1	12	602
Kedah	35,616	2,968	5,936	57	0.06	6	471
Kelantan	37,074	3,090	6,180	69	0.07	8	483
Melaka	13,397	1,116	2,232	29	0.03	3	180
N. Sembilan	17,402	1,450	2,900	46	0.05	4	231
Pahang	26,472	2,206	4,412	82	0.09	6	511
P. Pinang	22,173	1,848	3,696	30	0.03	5	293
Perak	36,554	3,046	6,092	83	0.09	10	481
Perlis	4,163	347	694	9	0.01	2	59
Selangor	103,252	8,604	17,208	73	0.08	15	1350
Terengganu	25,121	2,093	4,186	46	0.05	5	330
Sabah	53,896	4,491	8,982	100	0.11	12	718
Sarawak	42,626	3,552	7,104	198	0.21	10	562
W.P. K. Lumpur	25,444	2,120	4,240	13	0.01	5	308
W.P. Labuan	1,723	144	288	1	0	1	30
W.P. Putrajaya	2,551	213	426	4	0	2	30
Malaysia	504,814	42,068	84,136	934	1	106	6639

2.5 Field Preparation and Logistic Support

Excellent support was provided by all state health departments in the preparation for field data collection. Maternal and Child Health officers from each state acted as the state Liaison Officer. They provided logistic support via identification of nurses as data collectors. Two Technical Working Groups were formed; content expert group and implementation group. The content expert group comprised of Psychiatrists, Public Health Physicians, Family Medicine Specialists and other medical professionals from both Ministry of Health Malaysia and Public Universities. This group was given the task of developing the proposal, information sheets and consent forms.

The implementation group ensured appropriate sampling methods, recruitment and training of data collectors, followed by data processing and analysis. Data collection of this study was done from September to November 2016. Nurses from the selected clinics were trained using standard training modules. In total, there were 82 nurses for Peninsular Malaysia and 23 nurses for Sabah and Sarawak, who were involved in the data collection. A list of the randomly selected post-partum mothers, respondents for this survey, were given to the appointed nurses.

To ensure completion of data collection according to the schedule, states in Malaysia were divided into 6 zones; Northern Zone (Perlis, Kedah, Penang and Perak), Central Zone (Kuala Lumpur, Putrajaya and Selangor), Southern Zone (Negeri Sembilan, Melaka and Johor), East Coast Zone (Pahang, Terengganu and Kelantan), and officers from the Centre for Family Health Research acted as the Field Supervisors.

Data was collected using a combination of both face-to-face interview and self-administered questionnaire by the respondents. Responses were captured using tablets with in-built quality control to minimise errors, and was upload to the server in the institute after the quality check done. Data collection was done within the clinic vicinity. An information sheet and consent form were made available to every respondent.

During the data collection period, respondents who were detected as having any positive EPDS or experienced any violence were referred to the Family Medicine Specialist in-charge of the clinics or Psychiatrist for further management. Cases with psychiatric emergencies such as having suicidal behaviours were referred to the psychiatrist in the hospital for further management.

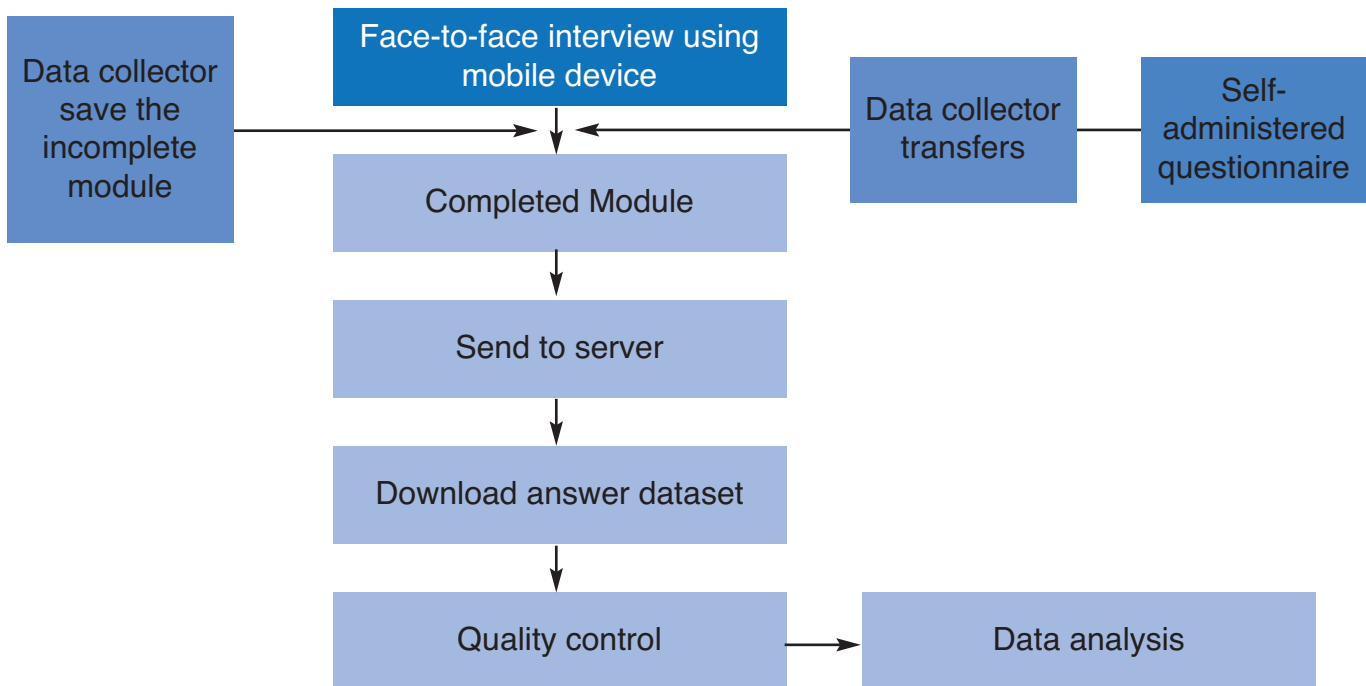
2.6 The Questionnaire

Structured questionnaire with face-to-face interview and self-administered were used for data collection. The questionnaire was pre-tested and available in bi-lingual (Bahasa Melayu or Malay and English). The face-to-face interview questionnaire and self-administered questionnaire were programmed into an application and the data collection was done using tablet. There were eight sections of questionnaires: Section A (Respondent and community), Section B (General health and attitude) which also comprises 10 questions of the Edinburgh Postnatal Depression Scale (by self-administered), Section C (Reproductive health), Section D (Children), Section E (Husband and current partner), Section F (Respondent and partner), Section G (Injury) and Section H (Impact and ways to deal with problems). The questionnaire used for the survey is attached with this report (Appendix 1).

2.7 Data Management

Data processing activities were centralized at the Institute for Public Health which started from receiving data from the field (input from mobile tablet device to server) until production of cleaned dataset for analysis.

Two types of questionnaires were used; face-to-face interview and self-administered questionnaire. Face-to-face interviews were carried out by nurses using mobile devices based on the questionnaire system application developed. Answers from self-administered questionnaire were also keyed into the mobile application according to respondent ID to complete the module. Completed modules were sent to Survey Creation System (SCS) server centralized in the Institute for Public Health after quality check done. Data in the server were downloaded weekly by the data management team. Datasets were continuously monitored for quality control (especially on the respondent ID, outliers or incorrect data). Subsequently, the final dataset was sent for the data analysis.

Figure 2: Flow chart of Data Entry and Quality Control

2.8 Training for the Data Collection

Prior to data collection, a training workshop was conducted for the nurses, who acted as the interviewers, and Family Medicine Specialist and Psychiatrist from the selected clinics, who responsible to manage the referred cases. The training course was conducted separately for data collectors from Peninsular Malaysia and Sarawak, Sabah and Labuan.

The main objectives of the training were to familiarize the data collectors with the questionnaire, develop the interpersonal skills and appreciate the need for good teamwork. Briefing on the questionnaire, mock interview in the classroom and individual interviewing practice under supervision were conducted during the training.

The nurses were given guidelines on the criteria for referral of respondents with health problems. They were also trained on the techniques of using mobile devices and trouble shooting.

2.9 Field Data Collection Phase

Data collection started on 1 September 2016 and ended on 31 October for Peninsular Malaysia and 30 November for Sabah and Sarawak. Every data collector was provided with tablets for data collection, coupled with manual on the SCS Application User's Guide. The application contained all the face-to-face interview modules.

The SCS Application Interface consists of the:

1. Login Screen: The data collectors entered their state code, clinic code, respondent ID, IC or passport number, name, interviewer ID and date of interview specifically.

2. Home screen: In this home screen, the options provided to data collectors were:
 - i. Dashboard Section: To start new survey; data collectors were required to click "Choose Survey" link to continue to questionnaire page.
 - ii. Draft Section: To review and edit previously saved survey that had not been finalized yet.
 - iii. Finalized Section: To review and edit previously saved survey that had not been submitted to the server. All data in this section were ready to be submitted to server or deleted.
 - iv. History Section: To review the previously submitted survey
 - v. Bin Section: All deleted/ unwanted items will be stored here
 - vi. Search Button: To search for the previously saved survey
3. Questionnaire pages: All face-to-face questionnaires were programmed into application.

In the application, data collectors entered answers given by respondents depending on the type of response required in the application; such as Multiple Choice Options, Free Text, Numeric or Alphanumeric Answers. As the data collected in the field were directly submitted to the server, on-field data quality check was essential in making sure that the data submitted were in good quality. Hence, the applications were developed in such a way that each answer option was given certain rules for quality control.

Example:

- a. Each question page has a mandatory question to avoid data collector accidentally skipped the page.
- b. Several questions were skipped due to logic respond for the previous question.
- c. At the end of the survey, before submitting the survey to the server, data collectors were prompted again by the app on how many more questions were left unanswered. The unanswered questioned will be marked with red color. Data collectors could open the unanswered questions and answered them before submitting to the server.
- d. For data backup, data collector was asked to save the data in the internal storage/ external memory card of the tablet.

3. GENERAL FINDINGS

3.1 Sample Coverage

Out of 6669 randomly selected respondents, only 5745 respondents were successfully interviewed, resulting in response rate of 86.14%. **Table 2** shows the response rate by states.

Table 2 : Response Rate by states, Postnatal Depression: Malaysia ASPIRE 2016

States	Eligible	Successfully Interviewed	Response Rate (%)
Johor	602	595	98.84
Kedah	471	399	84.71
Kelantan	483	440	91.10
Melaka	180	179	99.44
N. Sembilan	231	230	99.57
Pahang	511	311	60.86
P. Pinang	293	251	85.67
Perak	481	401	83.37
Perlis	59	57	96.61
Selangor	1350	1250	92.59
Terengganu	330	294	89.09
Sabah	718	606	84.40
Sarawak	562	362	64.41
W.P. Kuala Lumpur	308	303	98.38
W.P. Labuan	30	26	86.67
W.P. Putrajaya	30	23	76.67
TOTAL	6639	5727	86.26

3.2 Characteristics of respondents

Out of 5727 respondents who responded to the survey, majority was below 35 years. By ethnicity, the distribution was similar to the ethnic distribution in Malaysia. Majority of the respondents were married and attained at least secondary education level. By occupation status, almost half of the respondents have a paid job or involved in business but only one-quarter of them have household income of RM5000 or more (Table 3).

Table 3 : Socio-demographic Characteristics of the Respondents, Malaysia ASPIRE2016

	Unweighted count	Estimated population	Prevalence (%)	95% CI	
				Lower	Upper
MALAYSIA	5727	521878	100	100	100
State					
Johor	595	60166	11.5	5.50	22.58
Kedah	399	36781	7.0	2.58	17.85
Kelantan	440	38956	7.5	2.74	18.76
Melaka	179	14421	2.8	0.85	8.60
Negeri Sembilan	230	18223	3.5	1.12	10.32
Pahang	311	27118	5.2	1.88	13.58
P.Pinang	251	21132	4.0	1.39	11.21
Perak	401	36162	6.9	3.05	14.98

Perlis	57	14349	2.7	0.65	10.87
Selangor	1250	107339	20.6	10.58	36.16
Terengganu	294	28112	5.4	1.88	14.46
Sabah	606	52752	10.1	4.24	22.21
Sarawak	362	38289	7.3	2.84	17.65
WP Kuala Lumpur	303	23612	4.5	1.64	11.87
WP Labuan	26	1790	0.3	0.05	2.51
WP Putrajaya	23	2676	0.5	0.12	2.20
Age Respondent					
18-19	140	12719	2.4	1.75	3.39
20-24	903	72423	13.9	12.47	15.41
25-29	1842	172228	33.0	31.43	34.62
30-34	1749	164254	31.5	29.82	33.18
35-39	866	80570	15.4	13.70	17.35
40-44	207	18741	3.6	3.07	4.20
45-49	20	943	0.2	0.10	0.33
50 and above	0	0	0.0	0.00	0.00
Ethnicity					
Malays	3889	330311	63.3	54.61	71.19
Chinese	549	66786	12.8	8.97	17.94
Indians	262	21466	4.1	2.74	6.14
Sarawakians	253	30398	5.8	2.24	14.28
Sabahans	471	47001	9.0	4.57	17.00
Other Bumis	29	3318	0.6	0.30	1.35
Others	274	22598	4.3	2.79	6.65
Mother's Status					
Married	5615	510594	97.8	96.71	98.58
Used to be married	21	2547	0.5	0.25	0.94
Currently have partner	39	4617	0.9	0.47	1.64
Used to have partner	37	2860	0.5	0.32	0.93
Never married	15	1259	0.2	0.12	0.51
Mother's education					
No formal/Primary	382	37760	7.2	5.47	9.51
Secondary	3300	312909	60.0	56.44	63.37
Tertiary	2045	171209	32.8	28.97	36.89
Mother's occupation					
Working	2481	210306	40.3	35.74	45.04
Business	326	31704	6.1	4.91	7.49
Not working/Housewife	2919	279832	53.6	48.75	58.43
Household income					
Less than RM1000	513	58597	11.2	8.12	15.33
RM1000 – RM1999	1282	120615	23.1	20.02	26.52
RM2000 – RM2999	1044	95185	18.2	16.38	20.26
RM3000 – RM3999	894	75233	14.4	12.60	16.45
RM4000 – RM4999	532	43167	8.3	7.04	9.70
RM5000 and above	1462	129080	24.7	20.74	29.21

Table 4: Characteristics of successfully interviewed vs unsuccessful (non-respond), Malaysia ASPIRE 2016

	Success	Unsuccess
State		
Johor	595	7
Kedah	399	72
Kelantan	440	43
Melaka	179	1
Negeri Sembilan	230	1
Pahang	311	200
P.Pinang	251	42
Perak	401	80
Perlis	57	2
Selangor	1250	100
Terengganu	294	36
Sabah	606	111
Sarawak	362	200
WP Kuala Lumpur	303	5
WP Labuan	26	4
WP Putrajaya	23	7
Age Respondent		
18-19	140	17
20-24	903	124
25-29	1842	280
30-34	1749	234
35-39	866	107
40-44	207	35
45-49	20	3
50 and above	0	0
Age (mean)	30	29
Ethnicity		
Malays	3889	576
Chinese	549	101
Indians	262	31
Sarawakians	253	92
Sabahans	471	75
Other Bumis	29	12
Others	274	23

4. PUBLISHED ARTICLES

Open Access

Research

BMJ Open Postnatal depression and intimate partner violence: a nationwide clinic-based cross-sectional study in Malaysia

Noor Ani Ahmad,¹ Umi Adzlin Silim,² Azriman Rosman,³ Majdah Mohamed,³ Ying Ying Chan,¹ Noraida Mohd Kasim,¹ Muslimah Yusof,¹ Mohamad Aznuddin Abd Razak,¹ Maisarah Omar,¹ Fazly Azry Abdul Aziz,¹ Rasidah Jamaluddin,¹ Fatanah Ismail,³ Nurashikin Ibrahim,³ Tahir Aris¹

To cite: Ahmad NA, Silim UA, Rosman A, *et al.* Postnatal depression and intimate partner violence: a nationwide clinic-based cross-sectional study in Malaysia. *BMJ Open* 2018;8:e020649. doi:10.1136/bmjopen-2017-020649

►► Prepublication history for this paper is available online. To view these files, please visit the journal online (<http://dx.doi.org/10.1136/bmjopen-2017-020649>).

Received 4 December 2017

Revised 25 March 2018

Accepted 13 April 2018



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Abstract

Introduction An estimated 13% of women in the postnatal period suffer from postnatal depression (PND) worldwide. In addition to underprivileged women, women who are exposed to violence are at higher risk of PND. This study aimed to investigate the relationship between intimate partner violence (IPV) and PND in Malaysia. **Methods** This survey was conducted as a nationwide cross-sectional study using a cluster sampling design. Probable PND was assessed using a self-administered Edinburgh Postnatal Depression Scale (EPDS). Demographic profiles and IPV were assessed using a locally validated WHO Multicountry Study on Women's Health and Life Events Questionnaire that was administered in a face-to-face interview. An EPDS total score of 12 or more and/or a positive tendency to self-harm were used to define PND. **Results** Out of 6669 women, 5727 respondents were successfully interviewed with a response rate of 85.9%. The prevalence of probable PND was 4.4% (95% CI 2.9 to 6.7). The overall prevalence of IPV was 4.9% (95% CI 3.8 to 6.4). Among the women in this group, 3.7% (95% CI 2.7 to 5.0), 2.6% (95% CI 1.9 to 3.5) and 1.2% (95% CI 0.9 to 1.7) experienced emotional, physical and sexual violence, respectively. Logistic regression analysis revealed that women who were exposed to IPV were at 2.3 times the risk for probable PND, with an adjusted OR (aOR) of 2.34 (95% CI 1.12 to 4.87). Other factors for PND were reported emotional violence (aOR 3.79, 95% CI 1.93 to 7.45), unplanned pregnancy (aOR 3.32, 95% CI 2.35 to 4.69), lack of family support during confinement (aOR 1.79, 95% CI 1.12 to 2.87), partner's use of alcohol (aOR 1.59, 95% CI 1.07 to 2.35) or being from a household with a low income (aOR 2.99; 95% CI 1.63 to 5.49). **Conclusions** Exposure to IPV was significantly associated with probable PND. Healthcare personnel should be trained to detect and manage both problems. An appropriate referral system and support should be made available.

Strengths and limitations of this study

- A nationwide study using a cluster sampling design that allowed the findings of this study to be generalised to the overall Malaysian population as a majority of postnatal mothers seek care at government health facilities.
- Objective assessment of the potential causes of postnatal depression using a locally validated, self-administered Edinburgh Postnatal Depression Scale.
- Intimate partner violence was assessed using locally validated questionnaires.
- Postnatal depression was based on the screening tool and was not diagnostic.

Introduction WHO estimates that 13% of women in the postpartum period experience mental disorders, with depression being particularly common.¹ Depression has been observed to be higher

Introduction

in low-income and middle-income countries, ranging from 4.9% to 50.8% among mothers at 4–8 weeks post partum.² According to self-reported questionnaires, the prevalence of depression among Asian women is 23.7%, 16.5% and 17.4% at 6 weeks, 3 months and 6 months after childbirth, respectively.³ The prevalence in Malaysia varies based on the setting, with 20.7% in primary care settings⁴ and 31.7% in hospital settings.⁵ Postnatal depression (PND) generally occurs within 4–6 weeks of childbirth and presents with symptoms such as an upset mood, anhedonia, forgetfulness, irritability, anxiety, sleep disturbances and poor functioning.⁶ Various factors were found to be associated with PND. A young maternal age; low socioeconomic status; partner's habits, such as alcoholism; lack of education; marital conflict; unsupportive partner and psychological factors, such as antenatal depression, stressful life events or intimate partner violence (IPV) are all associated with PND.^{2,3} While depression at any time in a woman's life is devastating, depression during the perinatal, antenatal and postnatal

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periods is of special importance and is a public health concern due to its detrimental effects on women, families and their children. It can lead to serious complications, such as maternal suicide, child abuse and neglect and an increased risk of the child having emotional and behavioural problems later in life.^{7–10}

IPV refers to any behaviour in an intimate relationship that causes physical, psychological or sexual harm to those in the relationship. Such behaviour includes acts of physical aggression, forced intercourse and other forms of sexual coercion and various controlling behaviours.¹¹ IPV is associated with fatal and non-fatal health effects, including homicide and suicide, as well as negative health behaviours during pregnancy, poor reproductive outcomes and adverse physical and mental consequences.¹² IPV has been described as one of the most important predictors for depression in women. A review of studies exploring the determinants of PND in low-income and lower-middle-income countries reported an association between physical violence by intimate partners and PND.¹³ A household survey performed in Peninsular Malaysia revealed that 7.8% of women were emotionally abused, 5.0% were physically abused and 1.7% were sexually abused.¹⁴ However, this survey only targeted adult women and not women in the postpartum period.

There is an existing theoretical and conceptual framework that describes the hierarchical relationship between PND and its risk factors that is suitable for use in an epidemiological study. The framework divides determinants into three levels: proximal, intermediate and distal.¹⁵

Proximal determinants include violence and controlling behaviour from partners, and intermediate determinants encompass both partner and family factors, including the role of family support during confinement (figure 1). 'Confinement' is widely practised among Malaysian women after giving birth regardless of their socio-demographic and cultural differences. It is practised due to a belief that it is beneficial to women's well-being.¹⁶ During this period, family support in the form of accompaniment

and caring for the mother is crucial. These behaviours may be the key protective element against PND rather than the ritual itself.^{16 17}

Although studies from several countries have shown a positive association between PND and IPV, currently no study has investigated the relationship between these factors in Malaysia. Thus, this study aimed to determine the magnitude of PND in Malaysia and its associated factors, with a particular focus on IPV. Although both conditions, PND and IPV, are pressing public health concerns worldwide, they are generally undetected by perinatal care services without proper screening programmes and interventions in place.

Methods

Study design

This study was a nationwide clinic-based cross-sectional study. To ensure national representativeness, a cluster sampling design was used.

Setting

The study was conducted at the Maternal and Child Health Unit at government primary care clinics throughout Malaysia. Malaysia operates a dichotomous system with both public and private sectors. The Ministry of Health serves as the main provider of healthcare services. Health facilities are well distributed, with a mean distance of 8.4 km.¹⁸ The majority (98.2%) of women consulted 1 month after delivery with >80% of the children received a primary vaccination at these government primary care clinics.¹⁹

Participants

Women who were at 6–16 weeks post partum and who registered at a government primary care clinic for post-natal care and/or child immunisation were eligible to be included in the sampling frame. Women who did not

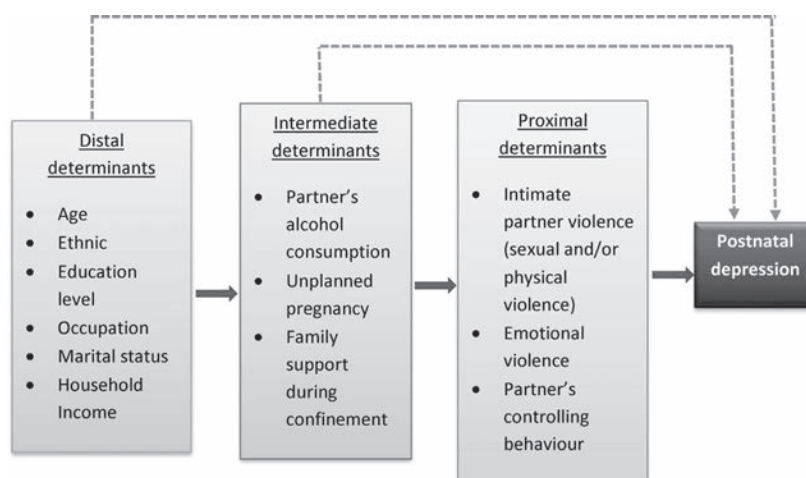


Figure 1 Conceptual framework illustrating the hierarchical model of risk factors for postnatal depression.

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register and/or were unable to communicate in either English or *Bahasa Malaysia* were not eligible.

Recruitment strategies

Sampling was performed by a resident statistician who was not directly involved in this study. Sampling was conducted using a two-stage random sampling design. The first stage used the sampling frame of all government primary care clinics in Malaysia. These clinics, considered to be clusters, were then randomly selected using the systematic probability proportionate to the size sampling technique. For the second stage, the sampling frame was formed from women between 6 and 16 weeks post partum who registered for a postnatal care and/or child immunisation at the randomly selected clinics and who were given consultation appointments between 1 June and 30 October 2016. The number of women selected from each state was then determined in proportion to the number of registered women. The clinic-based cards containing the women's profiles and the appointment dates were extracted and tagged to indicate eligible respondents.

The women were invited to join the study on the day of their appointment date. The women were given an Information Sheet and Consent Form by trained nurses at the registration counter. Those who consented to participate in the study were called into a private room within the clinic without their partners and were then given the self-administered Edinburgh Postnatal Depression Scale (EPDS) for assessment of PND.²⁰

²¹ On completion of the screening, the trained nurses conducted a face-to-face interview in the same private room using the WHO Multicountry Study on Women's Health and Life Events Questionnaire.²² The questionnaire also included a few additional questions based on the variables in the conceptual framework. The added questions were tested for face validity before being used in this study.

Two nurses per selected clinic were given a 5-day training on interview techniques and were trained to handle PND and IPV, including the management and referral processes. The potential risk of interviewer bias was minimised by assessing interviewer skills during role-play sessions and ad hoc supervision at the clinics by the research team members. The entire questionnaire, except the EPDS, was installed as web-based application into a mobile device with a built-in quality assessment feature and was administered as a computer-assisted personal interview. The responses from EPDS were manually entered into the application after the interview session ended. Data collection took place from 1 June through October 2016.

Patient and public involvement

Patients and public were not involved in either the development of the research question, study design or recruitment process. Patients who were detected as having probable PND or IPV were referred for appropriate management by the family physician at the respective clinics.

Variables

Outcome variables

The main outcome of this study, probable PND, was assessed using a self-administered locally validated EPDS. This scale is composed of 10 statements on common depressive symptoms that use Likert-type responses (0–3 scores) that reflect the severity of symptoms. Wan Mahmud *et al* found that, at a cut-off score of 11/12, the sensitivity and specificity of the EPDS were 100% and 98.18%, respectively.²⁰ Another validation study recommended a cut-off score of 11.5 with a sensitivity of 72.7% and specificity of 92.6%.²¹ In the first study, EPDS was tested against the International Statistical Classification of Diseases and Related Health Problems, 10th revision criteria, with assessment of its concurrent validity against the Malay version of the General Health Questionnaire and the Hamilton Depression Rating Scale (HDRS) score.²⁰ The second study was tested and showed good correlations with both the Malay version of the Beck-Depression Inventory and HDRS.²¹ Based on these two studies and a consensus from the content expert, this study categorised women who had a total score of 12 or more and/or a positive response to question 10 on the risk of self-harm in the EPDS as having probable PND.

Predictor variables

IPV was defined as a single or repeated experience of physical and/or sexual violence. IPV was assessed based on the questionnaire used in the WHO Multicountry Study on Women's Health and Life Events.²³ In this study, we used a locally validated questionnaire from Saddki *et al* that reported Cronbach's α values ranging from 0.767 to 0.858 across domains.²² Using this questionnaire, four types of violent behaviours were assessed: physical, sexual, emotional violence and controlling behaviour. Physical violence was defined as positive responses to a history of being slapped, pushed, beaten, kicked, choked or threatened with a weapon, and sexual violence was defined as a positive response for any history of sexual coercion, sex out of fear or forced to engage in a degrading sexual act. Emotional violence was defined as a positive response to ever having been insulted, publicly humiliated, intimidated or threatened or had a partner who threatened to hurt the respondent herself or someone she cared about. Controlling behaviour was defined as a positive response to ever having been kept away from friends and/or immediate family, partner insisting on knowing the participant's whereabouts at all times, treated indifferently, partner feeling angry if the participant spoke to another man, partner suspicious of the participant being unfaithful and/or expected permission to seek health-care for herself by their former or present husbands/ partners. In this study, emotional violence and controlling behaviours were considered to be possible predictors for PND, and not part of IPV.

Other important predictors of PND are a lack of family support and unplanned pregnancy. Family support during confinement was defined as an answer

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of 'yes' to the questions "Did you observe a confinement period after your last child birth?" and "When you need help or have a problem, can you usually count on family members for support?" The response to the question "Was your last pregnancy planned or unplanned?" was used to categorise the pregnancy as planned or unplanned.

Possible confounding variables included age, ethnicity, marital status, education level, occupation and household income. Age was grouped into four categories: 18–24 years, 25–29 years, 30–34 years and 35 years and greater. Ethnicity was classified based on the major ethnic groups in Malaysia: Malay, Malaysian Chinese and Malaysian Indian and was followed by 'Other Bumiputera' and 'Other'. Other Bumiputera was composed of indigenous groups and local Sabahans and Sarawakians, and 'Other' was mostly composed of foreigners, immigrants, both legal and illegal, residing in Malaysia.

The education levels were categorised based on the Malaysian education system. Respondents were considered to have no formal education/primary education if they had not attended any formal schooling or had only completed up to 6 years of primary school. Those who had completed 11 years of formal schooling were defined as having completed secondary education while respondents with diplomas or higher qualifications were considered as having completed tertiary education. Household income was calculated based on the pooled income of family members and categorised into four groups.

Sample size

To the best of our knowledge, there is currently no information on the prevalence of IPV among women during the postnatal period in Malaysia. Thus, the sample size in this study was determined based on three available sources: a 20.7% prevalence of probable PND in Malaysia,⁴ 8.0% prevalence of IPV in Malaysia¹⁴ and 35.2%–38.9% prevalence of family violence among women with probable perinatal depression taken from a systematic review.²⁴ To ensure an adequate sample size, the sample size was calculated based on the lowest prevalence (8.0%) using a single proportion formula to estimate prevalence. Additionally, based on a design effect of 2 and an estimated non-response rate of 20%, the required sample size was 6639 women.

Data management and analysis

Data from mobile devices were automatically uploaded into the server at the institute and converted into comma-separated values, CSV and Statistical Package of Social Sciences (SPSS) files. Only data with complete responses on the EPDS module were used for analysis. Data were analysed using the complex sample module in the IBM SPSS for Windows V.23.0 (IBM, Armonk, New York, USA) to account for the complexity of the sampling design. The final weights were calculated based on design weight and non-response weight, and a plan for

analysis was created. Categorical variables were defined based on the variable operating definitions. Using the complex sample module, the overall prevalence of PND and estimated population affected by it were determined. Bivariate analysis was conducted to determine the factors associated with PND. Crude ORs were used to describe the strength of the associations between dependent and independent variables. A multivariable logistic regression model was fitted to determine the factors associated with PND. The primary predictor was IPV (physical and/or sexual violence). Other included independent variables were emotional violence, controlling behaviours, family support during confinement, unplanned pregnancy and partner's use of alcohol. Other possible confounders, such as ethnicity, respondent's age, marital status, education level, occupation and household income, were also included. We used a logistic regression model to produce a crude OR as a measure of the associations between PND and the independent variables. For the final model, a FORWARD LR variable selection method was used to identify significant variables. Only variables with *p* values <0.25 were included. The statistical significance of the individual regression coefficients was tested using the Wald X^2 statistic. The adjusted OR (aOR), with the respective 95% CIs, was then calculated. A *p* value of <0.05 was considered significant. The model fit was tested using the Hosmer-Lemeshow statistic, which was non-significant (*p*>0.05).

Ethics

All participants gave their informed consent before participating. Identifiable data were not entered into the mobile device. Women who were found to be positive for EPDS and/or positive for any type of violence were referred to the Family Physician at the respective clinics for further management.

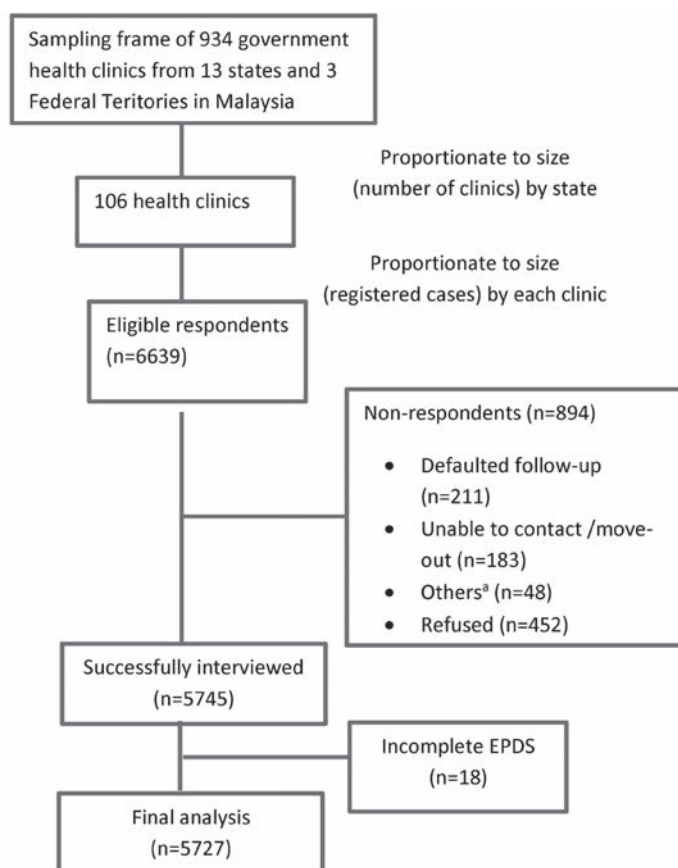
Results

Out of 6639 randomly selected respondents, 5745 were successfully interviewed, but only 5727 completed the EPDS questions, resulting in a response rate of 85.9%. A total of 442 respondents did not attend clinic appointments, were non-contactable, or moved out of the clinic's operation area during their eligibility period (6–16 weeks post partum). Another 452 respondents refused to participate, and 18 respondents had incomplete EPDS data (figure 2). No differences were found between the age, ethnicity or sex of respondents and non-respondents.

We used data from 5727 respondents in the analysis. The majority of respondents were between 25 and 35 years of age. The majority of respondents were married and had attained at least a secondary education level, and half of the respondents were working mothers (table 1).

Prevalence of probable PND

The prevalence of probable PND among women at 6–16 weeks post partum was 4.4% (95% CI 2.9 to 6.7). There



*Others include communication/language barriers or duplicated name in the dataset

Figure 2 Flow diagram of respondent recruitment.

was no difference in prevalence in different age groups. The prevalence was higher among 'Other Bumiputeras' and 'Other' ethnicities compared with the Malays. Women who were unmarried, had a low education status, were not working and had low household incomes had a higher prevalence of probable PND. Women with partners who consumed alcohol, those with unplanned pregnancy and those without family support during confinement were also found to have a higher prevalence (table 2).

Prevalence of IPV

For partner violence, 3.7% (95% CI 2.7 to 5.0), 2.6% (95% CI 1.9 to 3.5) and 1.2% (95% CI 0.9 to 1.7) of women had ever experienced emotional, physical or sexual violence, respectively. Controlling behaviour was experienced by 30.2% (95% CI 24.2 to 36.9) of women. Most of the violence occurred as combinations of emotional, sexual and physical violence. Analyses showed that 1.7%, 0.7% and 0.5% reported experiencing only emotional violence, only physical violence and only sexual violence, respectively. Ever experiencing intimate partner sexual

and/or physical violence was reported by 3.3% (95% CI 2.5 to 4.3) of women.

Factors associated with probable PND

Multivariate analysis proved the relationship between IPV and probable PND. The odds of having probable PND doubled for women who had ever experienced IPV (aOR 2.34; 95% CI 1.12 to 4.87) after controlling for age, marital status, ethnicity, education level, occupation and partner's controlling behaviour. Probable PND was almost four times higher among women who had ever experienced emotional violence (aOR 3.79; 95% CI 1.93 to 7.45) after controlling for other variables. Additionally, probable PND was three times higher in women with unplanned pregnancies (aOR 3.32; 95% CI 2.35 to 4.69), 79% higher among those who lacked family support during confinement (aOR 1.79; 95% CI 1.12 to 2.87), 59% higher among those who reported partner alcohol consumption (aOR 1.59, 95% CI 1.07 to 2.35) and was three times higher in women with household incomes of <RM1500 (aOR 2.99; 95% CI 1.63 to 5.49) compared with those who earned >RM5000 (table 3).

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Table 1 Sociodemographic profile of the respondents (n=5727)

	Unweighted count	Percentage (%)
Age (years)		
18–24	1043	18.2
25–29	1842	32.2
30–34	1749	30.5
35 and above	1093	19.1
Ethnicity		
Malay	3889	67.9
Malaysian Chinese	549	9.6
Malaysian Indians	262	4.6
Other Bumiputeras	753	13.1
Others	274	4.8
Marital status		
Married/has partner	5654	98.7
Not married/no current partner	73	1.3
Education level		
No formal/primary	382	7.2
Secondary	3300	60.0
Tertiary	2045	32.8
Occupation		
Working	2807	49.0
Not working/housewife	2920	51.0
Household income*		
<RM1500	1575	27.5
RM1501–RM3000	1879	32.8
RM3001–RM5000	1308	22.9
RM5001 and more	958	16.7

*Missing data=7; 1US\$=RM3.89 (currency exchange on 3 February 2018).

Discussion

To our knowledge, this is the first study to investigate the relationship between probable PND and IPV using a large number of respondents in Malaysia. This study examined the factors associated with probable PND, with IPV being the main predictor. An earlier population-based study observed that IPV was a significant public health concern in Malaysia,¹⁴ and studies on PND have also demonstrated its importance.^{4, 5} Our study clearly demonstrated the relationship between these two problems, which has implications for planning future services and intervention strategies.

Prevalence of probable PND

The prevalence of probable PND (4.4%) in our study was lower than that reported in an earlier study conducted in Kelantan, one of the states in Malaysia (20.3%).⁴ Both studies were conducted at primary care clinics and used

Table 2 Factors associated with probable postnatal depression (n=5727)

Variables	Prevalence (95% CI)	Crude OR (95% CI)
Respondent's age (years)		
18–24	6.9 (3.8 to 12.4)	1.49 (0.96 to 2.13)
25–29	4.6 (3.0 to 7.2)	0.93 (0.63 to 1.37)
30–34	3.1 (1.9 to 4.8)	0.69 (0.45 to 1.04)
35 and above	4.0 (2.2 to 7.1)	R
Ethnicity		
Malay	3.7 (2.5 to 5.5)	R
Malaysian Chinese	1.7 (0.8 to 3.7)	0.69 (0.38 to 1.26)
Malaysian Indian	4.5 (2.0 to 9.7)	1.48 (0.81 to 2.72)
Other Bumiputeras	9.1 (3.6 to 20.9)	2.63 (1.90 to 3.62)
Others	5.1 (2.3 to 10.5)	1.92 (1.12 to 3.27)
Marital status (current)		
Married/has partner	4.2 (2.7 to 6.5)	R
Unmarried/nocurrent partner	17.6 (7.1 to 37.5)	3.14 (1.49 to 6.64)
Education level		
No formal/primary education	8.9 (3.5 to 20.9)	2.46 (1.53 to 3.95)
Secondary education	4.7 (3.1 to 6.9)	1.45 (1.06 to 1.97)
Tertiary education	2.9 (1.8 to 4.6)	R
Occupation		
Working	2.5 (1.5 to 4.1)	R
Not working/housewife	6.1 (3.9 to 9.5)	1.88 (1.42 to 2.49)
Household income		
<RM1500	8.5 (5.0 to 13.9)	3.75 (2.29 to 6.14)
RM1500–RM3000	3.4 (2.3 to 5.0)	1.74 (1.04 to 2.93)
RM3001–RM5000	2.2 (1.2 to 3.9)	1.00 (0.55 to 1.82)
RM5001 and more		R
Unplanned pregnancy		
Yes	11.5 (5.6 to 22.2)	4.19 (3.10 to 5.67)
No	2.7 (1.7 to 4.1)	R
Partner's consumed alcohol		
Yes	5.6 (3.3 to 9.4)	1.71 (1.20 to 2.42)
No	3.5 (2.2 to 5.5)	R
Lack of family support during confinement		
Yes	10.8 (6.2 to 18.1)	2.80 (1.96 to 3.99)
No	3.8 (2.5 to 5.7)	R
Emotional violence		
Yes	27.1 (18.1 to 38.4)	8.94 (6.21 to 12.87)
No	3.5 (2.2 to 5.8)	R
Physical violence		
Yes	29.7 (19.4 to 42.6)	7.50 (4.75 to 11.83)
No	3.7 (2.3 to 6.0)	R
Sexual violence		
Yes	43.8 (27.9 to 61.1)	15.10 (8.91 to 25.60)
No	3.9 (2.4 to 6.2)	R

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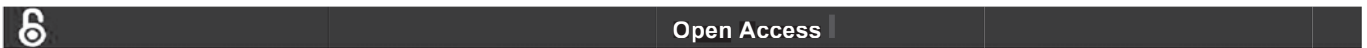


Table 2 Continued

Variables	Prevalence (95% CI)	Crude OR (95% CI)
Partner's controlling behaviour		
Yes	7.2 (5.0 to 10.1)	2.31 (1.76 to 3.03)
No	3.2 (1.7 to 6.1)	R
Intimate partner violence*		
Yes	32.6 (22.8 to 44.1)	9.32 (6.29 to 13.82)
No	3.5 (2.1 to 5.7)	R

*1US\$=RM3.89 (currency exchange on 3 February 2018); R=reference

similar screening tools with similar cut-off scores, but targeted women at different times during the postpartum period. Our nationwide study targeted women at 6–16 weeks post partum, while the Kelantan study targeted women at 4–6 weeks post partum. The difference in the prevalence might be due to the different screening timings. Longitudinal studies have reported that incidence rates decrease over the postpartum period.^{25 26}

Table 3 Multivariate analysis of the factors associated with probable postnatal depression (n=5727)

Variables	Wald X ² statistic	Adjusted OR (95% CI)	P values
Intimate partner violence			
Yes	5.141	2.34 (1.12 to 4.87)	0.023
No		R	
Emotional violence			
Yes	14.935	3.79 (1.93 to 7.45)	<0.001
No		R	
Unplanned pregnancy			
Yes	46.591	3.32 (2.35 to 4.69)	<0.001
No		R	
Lack of family support during confinement			
Yes	5.999	1.79 (1.12 to 2.87)	0.014
No		R	
Partner consumed alcohol			
Yes	5.351	1.59 (1.07 to 2.35)	0.021
No		R	
Household income			
<RM1500	12.438	2.99 (1.63 to 5.49)	<0.001
RM1500–RM3000	3.459	1.82 (0.97 to 3.41)	0.063
RM3001–RM5000	0.054	1.09 (0.53 to 2.23)	0.816
RM5001 and more		R	

Controlled for age, marital status, education level, occupation, ethnicity and partner's controlling behaviour. R=reference

Accordingly, the prevalence in this study was also lower than that reported by an earlier nationwide household survey conducted in Malaysia using a similar screening tool and target population. This earlier survey reported a prevalence of probable PND of 12.7%.²⁷ Another possible reason for the lower prevalence in this study was the reluctance of women to disclose their problem, possibly due to a fear of being stigmatised. The clinic environment may not have been conducive for conducting a study examining sensitive issues. PND and IPV are relatively hidden in our community, and it is possible that we would have observed a higher prevalence if we had been able to create awareness and desensitise the issues before beginning this study. However, the prevalence found by this study is comparable to that reported by a study in Indonesia (6.6%) among women at 6 weeks post partum that used a similar cut-off score as well as a study conducted in Singapore (6.8%) among a similar target group but that used a lower cut-off score.²

Association between IPV and probable PND

Our study demonstrated a significant association between probable PND and IPV (defined as a single occurrence of/ repeated physical and/or sexual violence). This finding concurs with previous studies that recorded the independent effect of IPV with PND.^{24 28–32} The effect of IPV on women's mental health was not related to the time of occurrence. Khalifa *et al* described a history of violence as the strongest determinant of PND,²⁸ while studies in France and Bangladesh have supported an association between PND and experiencing IPV before or during pregnancy.^{31 32} A prospective study among Norwegian mothers also showed higher risks of PND among women with a history of exposure to adult abuse, including sexual abuse.³³ We also recorded a strong association between emotional violence and the occurrence of probable PND, even after adjusting for partner's controlling behaviour and other confounding variables. The psychological effects of emotional violence on PND was more prominent than those of IPV, which has also been seen in other studies.^{34–37} Emotional violence has a negative impact on the emotional and mental health of women in the postpartum period and often contributes to physical or sexual violence.³⁸

Other factors associated with probable PND

Other than IPV, we also noted an increased likelihood of probable PND among mothers from low-income families, those with partners who consumed alcohol and those who experienced a lack of support during confinement. Financial difficulties have been identified as a risk factor for PND, independent of IPV.^{13 30 39} The association of PND with partner substance use was also observed in a Canadian study.³⁹ Substance use by husbands/partners is often associated with IPV, which may contribute to the PND problem in women.²⁸ Family support during confinement is very important in Asian communities. Our study demonstrated that a lack of family support during confinement is independently associated with an increased likelihood

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of PND. Our findings concur with other studies that have demonstrated similar associations.^{13 40 41} A study from China concluded that a lack of postnatal family support, particularly support from the husband, is an important risk factor for PND.⁴² We observed that marital status, the education level and occupation do not contribute directly to PND. As in many Asian countries, women in Malaysia are primarily expected to care for children and manage household chores, as prescribed by traditional gender roles, regardless of whether they are working.⁴³ These cultural norms may assign an inferior status to women and lead to misconceptions that may cause women to blame themselves, minimise abuse and prevent them from seeking help when abuse occurs. Perpetrators may manipulate cultural practices or religious teachings to make it seem as if it supports IPV. Many women struggle because they believe that their husbands have the right to beat them, a belief originating from misinterpreted religious teachings.⁴⁴ By contrast, women in Malaysia are more empowered, as evidenced by the increasing number of educated women and women in the workforce, and this may challenge the traditional view of gender roles.⁴³ The stronger affiliation to religion and its true teaching among Asians can have a protective effect against IPV, as religion promotes general commitment to family life, regards the institution of marriage highly and provides an understanding of women's rights.⁴⁴ Interestingly, a large prevalence study on IPV in Malaysia found that 83% of women who experienced IPV were assertive in seeking help for their survival in abusive relationships rather than continuing to suffer in silence.⁴⁵

Strengths and limitations

The main strength of our study is its use of large nationally representative data with robust methods. Moreover, the response rate was relatively high (85.9%) despite the sensitive nature of the issue. We also examined various sociodemographic and sociocultural factors. Most importantly, this study used an internationally recognised tool that was locally validated and data collectors received a standardised training. Nevertheless, our findings have several limitations. One of the limitations of this study was the cross-sectional nature of the study, which prevents the determination of temporal relationships between exposure to IPV and probable PND. Although this study adjusted for a substantial number of possible confounders, some important variables were not studied, such as birth complications, child morbidity and breast feeding. Additionally, we were only able to identify probable PND using a screening tool without further diagnostic confirmation process. It is also acknowledged that 'PND' is an umbrella term rather than a distinct psychological state. The term 'postpartum depression' encompasses several mood disorders that follow childbirth, including anxiety disorders, trauma and adjustment reactions.⁴⁶ This broad spectrum of perinatal mental health may be associated with different sets of risk factors that may or may not overlap with each other, thus confounding the outcome of this

study. Furthermore, the WHO tool used to identify IPV, while used widely, may not be exhaustive in terms of types of violence it identifies, which may have underestimated the prevalence of IPV in this study. However, despite these limitations, this study was able to provide a baseline and offers insight into the association between IPV and probable PND in Malaysia.

Conclusion and policy implications

Higher odds of probable PND were observed among women with a history of IPV. Women who were exposed to emotional violence, those with husbands who consumed alcohol, those with a lack of family support during confinement and those from low-income families were also at risk of PND. Pregnancy care and postnatal programmes must address issues related to PND and IPV as there is overwhelming evidence of adverse health effects for both the mother and child. Healthcare personnel must be professionally trained to detect and confidently communicate these issues. There must be a proper setting as well as trained personnel to provide help and proper counselling or referrals for these women. Issues pertaining to sexual and reproductive health, women's rights and violence should be incorporated into the well-established premarital course.⁴⁷ Courses on family values and parenting skills for young couples and parents could be another platform.

Acknowledgements The authors would like to thank the Director General of Health Malaysia for his permission to publish this article. The authors would also like to thank the Asia Pacific International Research and Education (ASPIRE) Network, for their contribution to the concept of this study.

Contributors NAA, UAS and TA were responsible for the study design and concept. NAA was responsible for the study conduct, respondent selection, study implementation, data analysis, data interpretation, drafting, critical revision and final approval of the manuscript. UAS, AR, MM and YYC were responsible for drafting, critical revision and final approval of the manuscript. NMK, MY, AAR, MO, FAAA and RJ were responsible for respondent recruitment, data collection, data entry, critical revision and final approval of the manuscript. FI and NI were responsible for data interpretation, critical revision and final approval of the manuscript.

Funding This study was supported by the Ministry of Health Research Grant (NMRR-15-2404-26677).

Competing interests None declared.

Patient consent Obtained.

Ethics approval Approval from the Medical Research and Committee, Ministry of Health Malaysia was obtained prior to the implementation of this study (NMRR-15-2404-26677).

Provenance and peer review Not commissioned; externally peer reviewed.

Data sharing statement The data used for this study are not publicly available. However, the data are available from the corresponding author on reasonable request and with permission of the Director General of Health Malaysia.

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Prevalence and Factors Associated with Intimate Partner Violence among Postpartum Women Attending Government Primary Health Care Clinics in Malaysia

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The Author(s) 2018

Abstract

Intimate partner violence (IPV) is an important gender-based, social, and public health problem that affects women worldwide, including women who are pregnant or have recently given birth. Studies have shown that violence against women often increases during pregnancy and the postpartum period. This study aims to examine lifetime and past-year prevalence of IPV among postpartum women in Malaysia, and to determine the socio-demographic as well as husband's/partner's behavioral factors associated with IPV exposure. This is a nationwide, cross-sectional and clinic-based study involving a total of 5727 women at 6 to 16 weeks postpartum, who attended randomly selected government health clinics between July to November 2016. Face-to-face interviews were conducted by trained female enumerators based on a pre-validated structured questionnaire, using mobile devices as data collection tools. Chi-squared tests and multivariable logistic regressions were used to investigate selected factors associated with IPV exposure. The lifetime and past-year prevalence of any form of IPV among postpartum women were 4.94% (95% CI [3.81,6.39]) and 2.42% (95% CI [1.74,3.35]) respectively, with the highest prevalence being emotional violence, followed by physical and sexual violence. Multivariable analysis showed that husband's/partner's behaviors, such as frequent alcohol use, drug use, fighting habits and controlling behaviour were significantly associated with both lifetime and past-year IPV (all $p < 0.001$ for past-year IPV). These findings suggest that prevention and intervention strategies for IPV should consider the prevention of substance use and reducing controlling behaviors by husband/partner, as well as raising awareness to build healthy relationships through education.

Keywords Intimate partner violence · Postpartum · Women · Prevalence · Factors · Malaysia

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Introduction

Intimate partner violence (IPV) is defined as any behavior within an intimate relationship or ex-relationship that causes physical, emotional (psychological) or sexual harm, including acts of physical aggression, psychological abuse, sexual coercion and controlling behaviors[^] (World Health Organization 2012). IPV is a major social and public health problem that affects women worldwide, including women who are pregnant or have recently given birth. The World Health Organization (WHO) fact sheet on violence against women reported that about one in three (35%) women worldwide have experienced either physical and/or sexual IPV or non-partner sexual violence in their lifetime (World Health Organization 2016). In low and middle-income countries of the Western Pacific Region, nearly a quarter (24.6%) of women reported experiencing violence by their intimate partners (World Health Organization, London School of Hygiene and Tropical Medicine, and South African Medical Research Council 2013). With regard to IPV during pregnancy, the prevalence ranged between 1% in Japan to 28% in Peru, while the majority of the other low- and middle-income countries surveyed showed a range between 4% and 12% (Garcia-Moreno et al. 2005).

In Malaysia, a national survey conducted by the Women's Aid Organization (WAO) in 1990 reported that 39% of women older than age 15 years suffered some form of violence and, furthermore, 68% of battered women were beaten while pregnant (Abdullah et al. 1995). A prevalence study done by Shuib et al. (2013) found that 8% of women in Peninsular Malaysia had experienced IPV in their lifetime, inferring that more than eight hundred thousand women in Malaysia who have likely experienced abuse. There has been an increasing trend in reported cases of violence in Malaysia such - from 3173 cases in 2010 to 4807 cases in 2014, 5014 cases in 2015, and 5796 cases in 2016 (Women's Aid Organization, 2017). A small scale study involving 710 female adult patients who attended primary health care clinics in Selangor, a state in Malaysia, revealed that 5.6% of the patients screened positive for domestic violence using the validated Women Abuse Screening Tool (WAST) (Yut-Lin and Othman 2008). More information about IPV such as causes and consequences of IPV against women, as well as barriers in management of IPV at primary care level, are limited and missing in the context of Malaysia. Hence, more research on the aforementioned aspects of IPV is needed in Malaysia in order to understand the factors associated with IPV, to enable policy makers plan for integrated programs as well as to further strengthen existing programs and services at primary care level for early detection, management and prevention of IPV.

Although violence affects women of all ages, studies have shown that violence often increases during pregnancy and the postpartum period (Martin et al. 2012;

Stewart et al. 2013). In this regard, several variables have been found to be risk factors, including socio-demographic characteristics (i.e., unmarried, with lower levels of education, or lower incomes), history of violent victimization and characteristics of violence perpetrators (current or former intimate partners) (Martin et al. 2012). In particular, persons who perpetuate violence against pregnant or postpartum women are found to be very likely to have problems with substance use, such as alcohol and illicit drugs (Nasir and Hyder 2003; Tzilos et al. 2010). Research has also shown that women who experienced IPV during pregnancy and the postpartum period are at higher risk for postpartum mental health problems, such as depression and post-traumatic stress disorder, and that these problems could influence women's reactions to their babies (Kendall-Tackett 2007). Moreover, women who are victims of IPV are more likely to engage in high-risk behaviors themselves, such as having multiple sex partners, and alcohol and drug abuse (CDC 2017). In view of the potential magnitude and diversity of the health problems and the fact that violence against women is preventable, appropriate measures should be taken to address the issue in a multisectoral and comprehensive way.

Despite the existence of a Violence and Injury Prevention Unit at the Ministry of Health (MOH) Malaysia since 2004, IPV and violence against women generally have been viewed as issues of lower priority compared to other key health issues within MOH (Colombini et al. 2012). In-depth interviews with policy makers revealed that the low priority and scarce attention given to IPV and MOH action at regional level are due to the lack of national prevalence data on violence against women (Colombini et al. 2012). Hence, it is important to obtain national data on prevalence of IPV and its associated factors in order to support development of policies and effective strategies against IPV in Malaysia. In this regard, the government health care setting is viewed as ideal for screening and implementing strategies to address IPV because of its wide coverage throughout the country. Considering the higher risk of IPV among women during pregnancy and the postpartum period, this study aims to determine the prevalence and factors associated with life-time and past-year IPV among postpartum women attending government primary health care clinics in Malaysia. This study describes socio-demographic factors and husband's/ partner's behaviors that are related to IPV experience in a national sample of postpartum women. This is the first nationwide study to explore the relationships of husband's/ partner's substance use, violence and controlling behaviors with IPV among postpartum women in Malaysia. We believe this study will provide baseline evidence towards developing appropriate interventions for prevention and management of IPV in Malaysia.

Methods

Study Sample

This cross-sectional study was targeted to women at 6 to 16 weeks postpartum who attended the selected government primary health care clinics between July and November, 2016. A two-stage cluster sampling design was employed in the selection of respondents. All 16 states within Malaysia were included in the sampling. Government health clinics within each state were selected from the sampling frame of all government primary care clinics (total 934 clinics) using systematic probability proportional to size sampling techniques. In total, 106 clinics were selected throughout Malaysia as the primary sampling units, and eligible postpartum women within the selected clinics were randomly selected as the secondary sampling units. Eligible respondents included postpartum women (6 to 16 weeks after childbirth) who were at least 18 years of age at time of the survey, gave informed consent to participate in this study, able to understand Bahasa Malaysia or English, and did not suffer from psychosis. Women who were very sick and could not be interviewed and those who did not give consent were excluded in this study. The sample size was calculated using a single proportion formula for the estimation of prevalence. Based on 8% as the estimated prevalence of IPV in Malaysia (Shuib et al. 2013), using an error bound of 5%, design effect of 2, and considering an anticipated non-response or drop-out rate of 20%, the final sample size needed was 6584 women. We ended up sampling a total of 6669 respondents in this study.

Survey Procedure

We used the bilingual (Bahasa Malaysia and English) WHO Multi-country Study on Women's Health and Life Events Questionnaire (World Health Organization 2000) which has been locally validated for use in Malaysia (Saddki et al. 2013). The respondents were interviewed by trained female nurses (enumerators) face-to-face on a one-to-one basis in private without the presence of their husband/partner at the selected government health clinics. Prior to conducting the survey, the enumerators were trained to conduct interviews specifically related to physical and sexual abuse. The questionnaire was installed on mobile devices and all answers from the respondents were digitally recorded. The survey procedure was approved by the Medical Research and Ethics Committee (MREC), Ministry of Health Malaysia (NMRR-15-2404-26677). Informed consent was sought and obtained from all the study participants and confidentiality was assured.

Measures

Outcome Variables

The outcome variables in this study were Blifetime IPV[^] and Bpast-year IPV[^]. BLifetime IPV[^] was defined as women's lifetime exposure to any of the three types of IPV – physical, emotional, and sexual violence by a current or former husband/partner. BPast-year IPV[^] was defined as women's exposure to physical, emotional and/or sexual violence by a current or former husband/partner in the past 12 months. BExperienced physical violence[^] was defined if a woman reported having ever experienced any act of violence from her current or former husband/partner, such as being slapped; had something thrown at her that could hurt; being pushed, grabbed, or had her hair pulled; being hit with a fist or something else that could hurt; being kicked, dragged or beaten up; being choked or burnt; or being threatened with or had a weapon (e.g., gun or knife) used against her. BExperienced emotional (psychological) violence[^] was defined if a woman's current or former husband/partner had ever in her lifetime insulted her or made her feel bad about herself; de-graded or humiliated her in front of others; threatened or made her scared (e.g., by the way he looks at her, shouts or breaks things); threatened to hurt her or somebody whom she cares about. BExperienced sexual violence[^] was defined if a woman reported having ever experienced any act of sexual violence from her current or former husband/partner, such as being physically forced to have sexual intercourse; had unwanted sexual intercourse because of fear of what her partner might do; or being forced to do something sexual that she found degrading or humiliating. All these questions related to violence had binary responses of Byes[^] or Bno[^]. Women's life-time and past-year exposure to any of the three types of violence by a current or former intimate partner were used as the outcome variables in logistic regression analysis.

Independent Variables

There were 13 independent variables in this study: 9 variables on socio-demographic characteristics and 4 variables on husband's/partner's behavioral factors. Socio-demographic variables included: i) age of respondents, grouped as 18–24, 25–29, 30–34, ≥35 years; ii) age of current husband/partner, grouped as 15–24, 25–29, 30–34, ≥35 years; iii) ethnicity of respondents, categorized as Malay, Chinese, Indian, 'Other Bumiputeras' (indigenous groups, local Sabahans and Sarawakians) and 'Others' (mostly foreigners, immigrants, both legal and illegal, residing in Malaysia); iv) marital status of respondents, categorized as currently married/has partner and not married/no current partner; v) educational status of respondents, categorized based on the Malaysian education system as no formal/primary education (those who had no

formal schooling or those who had completed six years of primary school), secondary education (those who had completed six years of primary school and five years of secondary school that made up total 11 years of formal schooling) and tertiary education (those with diploma or higher qualifications);

vi) educational status of current husband/partner, categorized as primary education, secondary education and tertiary education;

vii) working status of respondents, categorized as working and not working/housewife; viii) occupation of current husband/partner, categorized as professional, semi-skilled, unskilled/manual, army/police and others; and ix) household monthly income, grouped as less than RM1500, RM1501–RM3000, RM3001–RM5000, and RM5001 and more.

Husband's/partner's behavioral factors comprised of alcohol use, drug use, involvement in physical fights and controlling behaviors. Alcohol use by current husband/partner was categorized as never drinks alcohol, drinks occasionally (less than once a month) and frequently drinks (daily/weekly/monthly). For drug use by current husband/partner, women who reported that their current husband/partner used drugs daily, weekly, monthly or less than once a month were coded as *Byes*[^], while those who never used drugs were coded as *Bno*[^]. Husband's/partner's involvement in physical fights was categorized as *Byes*[^] or *Bno*[^] to the following question: *BSince you have known your current husband/partner, has your current husband/partner been involved in physical fights with another person?*[^] Controlling behavior was assessed by five questions asking the women whether their current (or last) husband/partner: a) did not permit them to meet their friends; b) tried to limit their contact with family; c) insisted on knowing where they were; d) were jealous if they talked with other men and e) accused them of unfaithfulness. All these questions had a binary outcome coded as *Byes*[^] and *Bno*[^]. Women who responded *Byes*[^] to one or more of the controlling behavior questions mentioned above were classified as having experienced controlling behavior from their current (or last) husband/partner.

Statistical Analysis

A total of 5727 out of 6669 randomly selected women were successfully interviewed, giving a response rate of 85.9%. The frequency distributions of socio-demographic characteristics and husband's/partner's behaviors of the sample were analysed using descriptive statistics. The outcomes - experience of lifetime and past-year IPV - were analysed by socio-demographic profile and husband's/partner's behavioral factors. Chi-squared test was used to examine bivariate associations between the independent and outcome variables. Two separate multivariable logistic regression analyses were performed to explore factors associated with lifetime and past-year IPV. All variables in the bivariate analysis were included in the multivariable analysis because all those independent

variables have been demonstrated to be potential confounders through research literature search (Ali et al. 2014; Capaldi et al. 2012; Sabri et al. 2014) and are important to be included in the final adjusted model regardless of whether they are statistically significantly related to the outcome. All independent variables were tested for multicollinearity and interactions with each other. Results of multivariable analysis are reported as crude and adjusted odds ratios (ORs) and 95% confidence interval (CI). Adjusted ORs are provided in addition to crude ORs because we are taking into account the effects of all other dependent variables included in the analysis. A *p* value of <0.05 was considered statistically significant. All data analyses were done using complex sample module in the IBM Statistical Package of Social Sciences (SPSS) for Windows version 22.0 (IBM Corp., Armonk, NY, USA), taking into consideration the complexity of the sampling design. The *Bplan* for analysis[^] in the complex sample module was created based on the survey, or final weight, which is the product of design weight and non-response weight.

Results

Descriptive Statistics

Descriptive results in Table 1 shows that the majority of respondents were 25–34 years old (62.7%), of Malay ethnicity (67.9%), currently married/has partner (98.7%), and with secondary educational level (60.0%). The overall prevalence of lifetime and past-year IPV among postpartum women in this study were 4.94% (95% CI [3.81,6.39]) and 2.42% (95% CI [1.74,3.35]) respectively. Respondents aged 18–24 years reported a higher prevalence of lifetime and past-year IPV compared to those of older age. Respondents who were currently not married/ no current partner, of secondary educational level, and with a monthly household income of less than RM1500 showed a significantly higher prevalence of lifetime and past-year IPV compared to their respective counterparts. Both lifetime and past-year prevalence of IPV were also shown to be significantly higher among respondents whose current husband/partner frequently drink alcohol, ever used drugs, ever involved in physical fights and have controlling behaviors.

Table 2 shows the overall prevalence of any form of IPV (physical, emotional and/or sexual violence) experienced by women from their current or former partners in their lifetime and within the past 12 months, as well as lifetime and past-year prevalence of physical, emotional and sexual violence, individually. According to type of violence, emotional violence was the most prevalent type of violence, followed by physical and sexual violence.

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Table 1 Lifetime and past-year prevalence of IPV by socio-demographic characteristics and husband's/partner's behavioral factors among postpartum women attending government primary health care clinics in Malaysia, September to November, 2016

Variable	Total n (%)	Prevalence of lifetime IPV % (95% CI)	Chi-square (P value)	Prevalence of past-year IPV % (95% CI)	Chi-square (P value)
Overall	5727 (100)	4.94 (3.81–6.39)		2.42 (1.74–3.35)	
Age of respondents (years)			0.585		0.022
18–24	1043 (18.2)	6.10 (3.76–9.75)		4.40 (2.47–7.70)	
25–29	1842 (32.2)	4.42 (3.03–6.39)		2.17 (1.39–3.37)	
30–34	1749 (30.5)	4.94 (3.58–6.79)		2.01 (1.35–2.99)	
35 and above	1093 (19.1)	4.84 (3.17–7.33)		1.79 (0.92–3.44)	
Age of current husband/partner (years)			0.810		0.113
15–24	400 (6.8)	5.11 (2.43–10.42)		4.33 (1.85–9.80)	
25–29	1429 (23.9)	5.23 (2.97–9.04)		1.88 (1.14–3.08)	
30–34	1794 (32.2)	4.65 (3.41–6.31)		2.55 (1.72–3.78)	
35 and above	1951 (37.1)	4.11 (2.81–5.98)		1.85 (1.06–3.22)	
Ethnicity of respondents			0.144		0.486
Malay	3889 (67.9)	4.70 (3.55–6.20)		2.54 (1.83–3.51)	
Chinese	549 (9.6)	2.92 (1.51–5.55)		1.43 (0.60–3.38)	
Indian	262 (4.6)	8.35 (4.04–16.47)		4.64 (1.79–11.48)	
Other Bumiputeras	753 (13.1)	7.07 (3.70–13.12)		2.60 (0.65–9.79)	
Others	274 (4.8)	3.21 (1.33–7.57)		0.73 (0.28–1.90)	
Marital status of respondents			<0.001		<0.001
Married/ has partner	5654 (98.7)	4.53 (3.44–5.94)		2.20 (1.51–3.20)	
Unmarried/ no current partner	73 (1.3)	35.97 (19.02–57.33)		18.48 (9.96–31.71)	
Educational status of respondents			<0.001		<0.001
No formal/primary education	382 (7.2)	5.77 (3.02–10.75)		1.02 (0.36–2.88)	
Secondary education	3300 (60.0)	6.31 (4.89–8.10)		3.31 (2.35–4.65)	
Tertiary education	2045 (32.8)	2.29 (1.37–3.79)		1.11 (0.64–1.92)	
Educational status of current husband/partner			0.036		0.056
Primary education	351 (7.9)	7.52 (3.65–14.88)		3.41 (1.39–8.13)	
Secondary education	3439 (62.2)	5.08 (3.86–6.65)		2.56 (1.75–3.74)	
Tertiary education	1745 (29.9)	2.92 (1.77–4.76)		1.35 (0.84–2.18)	
Working status of respondents			0.012		0.071
Working	2807 (49.0)	3.73 (2.58–5.35)		1.94 (1.36–2.76)	
Not working/ housewife	2919 (51.0)	6.00 (4.52–7.93)		2.83 (1.89–4.21)	
Occupation of current husband/partner			0.232		0.123
Professional worker	1155 (22.6)	5.06 (3.02–8.33)		2.91 (1.25–6.67)	
Semi-skilled worker	1642 (28.9)	4.80 (2.82–8.03)		1.73 (1.13–2.63)	
Unskilled/ manual worker	1559 (27.2)	5.59 (4.12–7.56)		3.17 (1.99–5.01)	
Army/police	268 (4.7)	1.63 (0.47–5.43)		0.43 (0.10–1.82)	
Others	950 (16.6)	2.98 (1.83–4.84)		1.30 (0.62–2.69)	
Household monthly income			<0.001		0.001
Less than RM1500	1575 (27.5)	8.19 (5.94–11.19)		4.18 (2.67–6.50)	
RM1501 – RM3000	1879 (32.8)	4.28 (3.00–6.09)		1.95 (1.22–3.09)	
RM3001 – RM5000	1308 (22.9)	3.33 (1.85–5.91)		1.56 (0.84–2.90)	
RM5001 and more	958 (16.7)	2.26 (1.18–4.30)		1.09 (0.51–2.32)	
Alcohol use by current husband/partner			<0.001		<0.001
Never	4547 (82.2)	3.19 (2.37–4.28)		1.47 (1.03–2.11)	
Occasionally	591 (13.4)	5.65 (3.04–10.27)		0.93 (0.43–1.98)	
Frequently	223 (4.4)	16.35 (8.96–27.94)		10.36 (4.26–23.09)	

Table 1 (continued)

Variable	Total n (%)	Prevalence of lifetime IPV % (95% CI)	Chi-square (P value)	Prevalence of past-year IPV % (95% CI)	Chi-square (P value)
Drug use by current husband/partner					
No	5369 (99.3)	3.97 (2.99–5.26)	<0.001	1.89 (1.27–2.78)	<0.001
Yes	25 (0.7)	35.32 (14.25–64.21)		30.33 (11.39–59.61)	
Current husband's/partner's involvement in physical fights					
No	5200 (98.1)	3.15 (2.30–4.28)	<0.001	1.49 (1.02–2.16)	<0.001
Yes	96 (1.9)	51.24 (36.17–66.08)		28.72 (15.13–47.68)	
Current (or last) husband's/partner's controlling behaviors					
No	4195 (70.5)	2.33 (1.70–3.19)	<0.001	0.76 (0.50–1.16)	<0.001
Yes	1516 (29.5)	11.06 (8.31–14.56)		6.30 (4.08–9.61)	

Regression Results

Table 3 shows the results of both crude and adjusted odds ratios (ORs) identifying associations between each independent variable with lifetime and past-year IPV. Husband's/partner's behavioral factors significantly associated with a higher likelihood of lifetime IPV are frequent alcohol drinking (adjusted OR = 9.11, 95% CI [2.44, 34.04]), drug use (adjusted OR = 5.70, 95% CI [1.25, 26.07]), involvement in physical fights (adjusted OR = 23.48, 95% CI [8.65, 63.76]) and controlling behaviors (adjusted OR = 2.77, 95% CI [1.44, 5.33]). No significant association was observed with any of the socio-demographic factors in the adjusted model for lifetime IPV.

With regard to past-year IPV, Chinese women were significantly less likely to report experience of past-year IPV compared to Malay women (adjusted OR = 0.18, 95% CI [0.04, 0.82]). Postpartum women who were currently not married/ no current partner were significantly more likely to have experienced IPV in the past year compared to those who were currently married/ has partner (adjusted OR = 11.27, 95% CI [2.26, 56.17]). Other socio-demographic factors such as age, educational level and income level showed no significant associations with past-year IPV in the adjusted model. Similar to lifetime IPV, husband's/partner's behavioral factors were all significantly associated with a higher likelihood of women

experiencing past-year IPV - frequent alcohol drinking (adjusted OR = 10.37, 95% CI [2.96, 36.33]), drug use (adjusted OR = 9.55, 95% CI [3.48, 26.18]), involvement in physical fights (adjusted OR = 10.81, 95% CI [3.60, 32.49]) and controlling behaviors (adjusted OR = 5.90, 95% CI [2.70, 12.86]).

Discussion

In this paper, we present baseline findings about experience of IPV among a national sample of postpartum women attending government primary health care clinics in Malaysia. Our study showed that 4.94% of Malaysian postpartum women reporting ever experiencing IPV in their lifetime and 2.42% of postpartum women reporting IPV experience in the past 12 months. The lifetime prevalence reported in this study is lower compared to a previous lifetime IPV prevalence study in Peninsular Malaysia (8%) (Shuib et al. 2013). The lifetime IPV prevalence found is also lower than that reported in other neighbouring countries such as Singapore (9.2%) (Chan 2013) and Thailand (41.1%) (World Health Organization 2010). The prevalence of IPV against women varies widely across different countries and study populations. Both studies in Malaysia as well as the study in Thailand used the same questionnaire from the World Health Organization, while the

Table 2 Lifetime and past-year prevalence of any form of IPV, physical, emotional, and sexual violence among postpartum women attending government primary health care clinics in Malaysia, September to November, 2016

Types of IPV	Lifetime IPV		Past-year IPV	
	Number (n)	Prevalence % (95% CI)	Number (n)	Prevalence % (95% CI)
Any form of IPV	263	4.94 (3.81–6.39)	139	2.42 (1.74–3.35)
Physical	123	2.56 (1.86–3.52)	48	0.85 (0.60–1.21)
Emotional	198	3.67 (2.66–5.04)	106	1.76 (1.15–2.68)
Sexual	65	1.22 (0.85–1.74)	36	0.73 (0.45–1.16)

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Table 3 Crude and adjusted odds ratios (95% CI) for factors associated with lifetime and past-year IPV among postpartum women attending government primary health care clinics in Malaysia, September to November, 2016

Variable	Lifetime IPV		Past-year IPV	
	Crude OR (95% CI)	Adjusted OR (95% CI)	Crude OR (95% CI)	Adjusted OR (95% CI)
Age of respondents (years)				
18–24	1.28 (0.65–2.51)	0.52 (0.20–1.31)	2.52 (1.05–6.08)*	1.17 (0.32–4.31)
25–29	0.91 (0.56–1.48)	0.52 (0.24–1.15)	1.22 (0.65–2.28)	1.25 (0.41–3.80)
30–34	1.02 (0.68–1.55)	0.70 (0.38–1.30)	1.12 (0.60–2.12)	1.05 (0.39–2.82)
35 and above	1.00	1.00	1.00	1.00
Age of current husband/partner (years)				
15–24	1.26 (0.55–2.86)	1.55 (0.46–5.26)	2.40 (1.04–5.51)*	1.88 (0.41–8.53)
25–29	1.29 (0.66–2.49)	1.89 (0.71–5.04)	1.01 (0.49–2.08)	0.90 (0.28–2.96)
30–34	1.14 (0.71–1.79)	2.11 (0.95–4.10)	1.39 (0.75–2.55)	1.87 (0.69–5.05)
35 and above	1.00	1.00	1.00	1.00
Ethnicity of respondents				
Malay	1.00	1.00	1.00	1.00
Chinese	0.61 (0.30–1.26)	0.28 (0.04–1.95)	0.56 (0.22–1.43)	0.18 (0.04–0.82)*
Indian	1.85 (0.78–4.36)	1.04 (0.26–4.14)	1.87 (0.62–5.64)	1.39 (0.20–9.55)
Other Bumiputeras	1.54 (0.75–3.19)	0.51 (0.19–1.40)	1.03 (0.24–4.37)	0.51 (0.10–2.53)
Others	0.67 (0.28–1.63)	0.48 (0.12–1.94)	0.28 (0.10–0.79)*	0.21 (0.02–2.33)
Marital status of respondents				
Married/ has partner	1.00	1.00	1.00	1.00
Unmarried/ no current partner	11.83 (4.54–30.86)***	2.76 (0.31–24.56)	10.06 (4.21–24.02)***	11.27 (2.26–56.17)**
Educational status of respondents				
No formal/primary education	2.62 (1.17–5.86)*	1.79 (0.74–4.33)	0.92 (0.30–2.82)	0.91 (0.18–4.72)
Secondary education	2.88 (1.77–4.69)***	1.77 (0.89–3.51)	3.04 (1.76–5.26)***	1.64 (0.61–4.38)
Tertiary education	1.00	1.00	1.00	1.00
Educational status of current husband/partner				
Primary education	2.71 (1.04–7.02)*	2.62 (0.78–8.79)	2.58 (0.92–7.19)	2.52 (0.74–8.65)
Secondary education	1.78 (1.07–2.97)*	1.13 (0.59–2.17)	1.92 (1.18–3.13)**	1.57 (0.59–4.18)
Tertiary education	1.00	1.00	1.00	1.00
Working status of respondents				
Working	1.00	1.00	1.00	1.00
Not working/ housewife	1.65 (1.12–2.44)*	0.83 (0.48–1.44)	1.47 (0.97–2.24)	0.73 (0.33–1.59)
Occupation of current husband/partner				
Professional worker	1.00	1.00	1.00	1.00
Semi-skilled worker	0.95 (0.45–2.00)	0.95 (0.47–1.92)	0.59 (0.23–1.47)	0.82 (0.38–1.81)
Unskilled/ manual worker	1.11 (0.61–2.03)	1.22 (0.68–2.20)	1.09 (0.41–2.89)	1.85 (0.76–4.52)
Army/police	0.31 (0.07–1.31)	0.63 (0.11–3.55)	0.15 (0.03–0.79)*	0.17 (0.02–1.54)
Others	0.58 (0.28–1.20)	1.33 (0.55–3.24)	0.44 (0.13–1.42)	1.25 (0.25–6.38)
Household monthly income				
Less than RM1500	3.89 (1.84–8.07)***	1.03 (0.41–2.59)	3.97 (1.67–9.40)**	0.62 (0.17–2.26)
RM1501 – RM3000	1.93 (1.00–3.74)	1.49 (0.65–3.41)	1.81 (0.77–4.26)	0.86 (0.26–2.82)
RM3001 – RM5000	1.49 (0.78–2.84)	0.92 (0.32–2.61)	1.44 (0.55–3.82)	0.78 (0.23–2.62)
RM5001 and more	1.00	1.00	1.00	1.00
Alcohol use by current husband/partner				
Never	1.00	1.00	1.00	1.00
Occasionally	1.82 (0.92–3.61)	1.92 (0.50–7.31)	0.63 (0.26–1.50)	0.54 (0.15–1.92)
Frequently	5.93 (2.84–12.37)***	9.11 (2.44–34.04)***	7.73 (3.08–19.39)***	10.37 (2.96–36.33)***

Table 3 (continued)

Variable	Lifetime IPV		Past-year IPV	
	Crude OR (95% CI)	Adjusted OR (95% CI)	Crude OR (95% CI)	Adjusted OR (95% CI)
Drug use by current husband/partner				
No	1.00	1.00	1.00	1.00
Yes	13.20 (3.55–49.14)***	5.70 (1.25–26.07)*	22.65 (6.67–76.96)***	9.55 (3.48–26.18)***
Current husband's/partner's involvement in physical fights				
No	1.00	1.00	1.00	1.00
Yes	32.36 (16.57–63.19)***	23.48 (8.65–63.76)***	26.73 (11.58–61.71)***	10.81 (3.60–32.49)***
Current (or last) husband's/partner's controlling behaviors				
No	1.00	1.00	1.00	1.00
Yes	5.20 (3.44–7.86)***	2.77 (1.44–5.33)**	8.77 (4.91–15.68)***	5.90 (2.70–12.86)***

Note: OR = odds ratio; CI = confidence interval. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Multicollinearity and interactions were tested and not found in the two separate adjusted models for lifetime and past-year IPV

Singapore study used a different survey instrument, the International Violence Against Women Survey (IVAWS) Questionnaire. Different questionnaires used may yield different results due to differences in the scope and what is interpreted as IPV. In addition, our study only targeted post-partum women who had just given birth and were mostly still with their husband/partner at the time of the study. With the presence of newborn babies, they may want to forget about any IPV they had experienced earlier, hence the low prevalence of lifetime and past-year IPV in this study. Furthermore, the low prevalence of lifetime and past-year IPV found in this study may also be related to the fact that the sample was relatively young.

Similar to previous findings by Shuib et al. (2013), our study found emotional violence to be the most common type of violence, followed by physical and sexual violence. Emotional or psychological violence is observed to be more prevalent than physical and sexual violence. The low prevalence for violence in general, and sexual violence in particular, may be due to under-reporting. Cultural factors, social norms and beliefs that support IPV against women, stigma and fear of reporting may be the possible reasons for the low prevalence detected in this study (World Health Organization 2009). Furthermore, traditional male-dominated cultures perpetuate aggressive behavior in men and encourage submissive behavior in women in order to avoid confrontation, blame and stigmatization. Perceptions about women's inferiority and inequality also prevent those affected from speaking out and gaining support (Kalra and Bhurga 2013).

Previous studies have shown that socio-demographic factors, such as age, educational level, socio-economic status, and relationship/ marital status are associated with women's experiences of IPV (Kapiga et al. 2017; Lacey et al. 2016; Sabri et al. 2014). However, the associations have not been

consistent and there have been numerous factors influencing the risk of IPV. In our study, the final adjusted multivariable analysis model for factors associated with lifetime IPV showed that none of the socio-demographic variables is statistically significant. This finding contrasts with other studies which have reported IPV related to low educational status of women (Onigbogi et al. 2015) and the husbands/partners (Al Serkal et al. 2014; Laelago et al. 2014), and low socio-economic status of the family (Abeye et al. 2011). The current study did not find any significant relationships between educational level and income level with women's experience of lifetime and past-year IPV. It is possible that the lifetime and past-year IPV experiences captured in this study were mainly related to husband's/ partner's behaviors, such as alcohol drinking, drug use, involvement in physical fights and controlling behaviors, regardless of the socio-economic and demographic background of the women or their husband/partner (Wandera et al. 2015).

Of note, for IPV experience within the past 12 months, it was observed in the adjusted model that postpartum women who were currently unmarried/ no partner were more likely to report past-year IPV compared to those who were currently married/ has partner. We speculate that it is possible that the victims terminated their relationship with their previous husband/partner following the incidence of past-year IPV that they had experienced. However, we did not collect information to test this theory in our study. Among different ethnic groups, Chinese women were found to be less likely to report past-year IPV compared to Malay women. A majority of our respondents were Malays and the problem of abuse among Chinese victims may be more hidden due to Chinese cultural values in maintaining a good reputation of themselves and their family (Chan 2006).

The present study reveals that women who reported that their current husband/partner consumed alcohol frequently

were more likely to experience lifetime and past-year IPV compared to those women whose husband/partner never consumed alcohol. This finding is consistent with other studies (Mair et al. 2013; Testa et al. 2012). Nevertheless, it should be noted that evidence of a statistical association does not prove causality. Furthermore, alcohol consumption has been shown to not lead to a violent episode, per se, but to act as a situational factor that exacerbates conflicts between couples (Castro et al. 2017). The use of alcohol and subsequent intoxication may impair the ability to negotiate conflicts effectively, impair communication and bring about aggressive behavior which may contribute to IPV (Foran and O'Leary 2008).

Previous studies have shown a positive association between husband's/partner's drug use and IPV perpetration (Moore et al. 2008, 2011). In agreement with those studies, our study observed that current husband's/partner's drug use was significantly associated with higher odds of lifetime and past-year IPV among women. Similar to alcohol abuse, drug abuse may play a facilitative role in IPV by precipitating or exacerbating violence. It may be brought about by disruption of thinking process, manifestations of power, control, and hostile personality (Bennett and Bland 2008). Our findings suggest that drugs and alcohol abuse should be taken into account when designing interventions for addressing IPV and family problems. The underlying factors associated with drug abuse and the subsequent changes in personality or character that increase the likelihood of IPV needs to be further investigated.

Current husband's/partner's involvement in physical fights was found to be associated with a higher likelihood of experiencing lifetime and past-year IPV among women. This finding was supported by previous studies which have shown that male aggression or men who used violence to resolve conflicts with others are more likely to perpetrate IPV compared to men who did not resort to violence (Kiss et al. 2015; Owoaje and OlaOlorun 2012). A study has also shown that men with aggressive behavior tend to extend their violent behaviors to their partners (Balogun et al. 2012).

In addition, our study found that women who experienced current (or last) husband's/partner's controlling behavior have greater odds of suffering lifetime and past-year IPV. Controlling behavior is a known risk factor as reported in a study in Nigeria, where it was shown to be a precursor for IPV (Antai 2011). Another study in Pakistan by Ali et al. (2014) reported a prevalence of past year physical and sexual violence of 68.0%, and of these women, 51.6% experienced controlling behavior from their partners. This also restricts their ability to make their own decisions and to find solutions for their predicament (Ali et al. 2014). It appears that controlling behavior is not only a precursor for IPV, but also an underlying factor that may worsen the issue. A recent study by Roy Chowdhury et al. (2018) found that it is not the autonomous power of women, but a cooperative decision-making

environment in a marital relationship that reduces violence. This indicates that the couples should also be made aware and educated through individually or joint family counselling programs to avoid situations that may lead to IPV.

The issue of violence against women should continue to receive attention from all relevant stakeholders who have a role in its prevention and control. Several resolutions on the intensification of efforts to eliminate all forms of violence against women have been adopted by the United Nations outlining steps and standards in international law for the protection of women against violence (United Nations 2013). In 2014, the 67th World Health Assembly (WHA) adopted a resolution entitled 'Strengthening the role of the health system in addressing violence, in particular against women and girls, and against children' (World Health Organization 2014). As a signatory to these documents, Malaysia is committed to ensuring that steps are taken to address this issue, which requires policies and programs to be implemented based on scientific evidence. However, there is still insufficient data to support evidence-based primary prevention, as well as, for monitoring and evaluating intervention programs. In line with the public health approach to prevent violence against women, the Ministry of Health Malaysia is now focusing on training health personnel so that they are empowered to assess, counsel, refer and also advise in cases of abuse. The training includes awareness of the issue, laws on abuse, screening and early detection, proper use of local resources, as well as options for intervention. Besides that, the Ministry of Health Malaysia has established 'One Stop Crisis Centers' (OSCC) since 1993, which is a place for victims to seek treatment in a patient-centered setting with a multi-disciplinary team providing specialist care. To date, almost all government hospitals in Malaysia have established this service.

Prevention and early intervention will be the most effective strategies to reduce the incidence of IPV. Our findings have important implications for development of effective prevention strategies and policy formulation. There is a need to focus on empowering women and upgrading their socio-economic status. Efforts should also be made to reach out to men so as to discourage excessive alcohol intake and interpersonal violence, promoting healthy behaviors, and improving communication and understanding in relationships. It has been suggested that family history of violence may have a role in perpetration or victimization for IPV (Capaldi et al. 2012). Future research should look into the relationship between family history of violence and the risk of becoming a victim or perpetrator of violence. More studies are also needed to establish if factors such as education and awareness, socio-economic well-being, promotion of family values, moral standards, and religious education can have a positive effect in reducing IPV. Nevertheless, a general approach would be to develop social skills even before marriage, such as conflict resolution, communication, stress and time management. There may be a role for early education at schools and pre-marital courses.

Public awareness can be done via campaigns including the use of social media. The effectiveness of such broad preventive strategies remains questionable in view of the multi-factorial causes of IPV.

A study done by Oon et al. (2016) explored the coping mechanisms of women experiencing IPV in Malaysia and suggested that women seek help both from individuals (par-ents, siblings, friends) and authorities (hospital/health centre, police department, court, religious leaders) as part of their coping mechanisms in facing this problem. It is important to provide a supportive environment to support their help-seeking initiatives. The Ministry of Health currently focuses on establishing and improving services at the hospital-based One Stop Crisis Centres (OSCC). Emphasis is also placed on sensitising and training of the health clinic staff. Health clinics have been instructed to establish a multiagency team to review cases and take preventive measures. Such a multidisciplinary team, including clinical, psychiatric and counseling services, relevant NGO's, welfare and the police department, has been established at the hospital-based OSCC but currently not at all district-level health clinics. Respondents who have been vic-tims of IPV will want the opportunity to speak in private and in a comfortable setting. They must be confident that they will receive appropriate help in accessing the service. Front line staff at clinics must have the necessary information on the type of help that can be given and options available for the victims. These include when and where to refer clients, sources of legal advice, rights of victims, contacts of counselors, relevant NGOs in the area, shelter homes and options for treatment and legal action. A patient-centered service will increase the chances of victims reporting incidence of IPV. Such a service should ensure confidentiality, and not judge or discriminate but understand and empathise.

Strengths and Limitations

This is the first nationwide study to collect information on prevalence of lifetime and past-year IPV among postpartum women attending government primary health care clinics in Malaysia. The use of a locally validated instrument of the WHO multi-country study on violence against women enables international comparisons across different populations and countries. Additionally, the response rate was high (85.9%) despite the sensitive nature of the issue. However, several limitations should also be noted in this study. The cross-sectional study design prevents the establishment of cause-effect relationships between IPV exposure and explanatory variables. Because the data are cross-sectional, we cannot determine when the IPV occurred vis a vis their responses on their husband's/partner's behaviors. A different interview setting may also affect how questions are asked and how respondents answer. The higher prevalence found in other studies

were from household surveys, while our study was conducted in a clinic-based setting. In a clinic-based setting, there may be time constraints for both the enumerators and the respondents. From the respondent's perspective, time constraints and reluctance to divulge details to health clinic staff whom they regularly see might affect their disclosure. The setting may play an important role in terms of the accuracy of the information obtained as it may affect the focus that can be given by the respondents who initially came for their scheduled postnatal visits. Only women were interviewed and the potential for biased responses on their husband's/partner's behavioral characteristics cannot be discounted. Additionally, these variables were not measured based on a validated scale. Moreover, there is possibility of under-reporting of the true extent of the problem due to sensitivity of the violence issue. Finally, there may be also a strong possibility of under-reporting of drug use because of its illegal nature, and of alcohol use among Malays, who are Muslims, because of religious proscription, more so since most respondents were Malays. Hence, the actual magnitude of the problem may be higher than reported.

Conclusion

Although our study found a low prevalence of lifetime and past-year IPV among postpartum women in Malaysia, this study provides important information that IPV could be related to husband's/partner's behaviors which should be addressed to reduce its incidence. Alcohol and drug abuse are behaviors that can be modified. Controlling behaviors may be reduced by improving communication and understanding in a relationship. The findings of this study suggest the need to include the husbands/partners in the IPV prevention strategies. The incidence of IPV among women in Malaysia is most likely to be underreported considering the sensitivity of this issue and the fear of being stigmatized. Education and promotion of awareness regarding IPV should be intensified so that women are more willing to express their problems since violence, particularly emotional violence, may not be very obvious. This is important so that measures can be taken early to avoid escalation of violence and complications. Further longitudinal research to better understand the wide range of factors related to IPV in women, its health consequences and health-seeking behavior is also needed.

Acknowledgements The authors would like to thank the Director General of Health Malaysia for his permission to publish this paper. We acknowledge the Asia-Pacific International Research and Education (ASPIRE) Network for their contributions to the study concept. Our thanks also go to the staffs of the government health care clinics, for their assistance in data collection; and the study participants, for their willingness to participate in this survey.

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5. PHASE 2

5.1 Multicentre Double-blind Parallel-group Randomized controlled trial of cognitive-behavioural interventions for postnatal depression: A study protocol

Abstract

Background

Primary care clinics provide a suitable platform for managing postnatal depression. However, with the scarcity of specialists at primary care settings, the involvement of nurses in the management should be considered. This study protocol describes a randomized controlled trial of an intervention for management of postnatal depression provided by trained nurse and medical doctor in comparison to treatment by medical doctor alone at primary care clinics.

Methods

This is a two-group double-blind randomized controlled trial (RCT) to be conducted in six primary care clinics. Women register at these clinics will be screened at 4 to 24 weeks post-partum using the self-administered Edinburgh Postnatal Depression Scale for symptoms of depression. Those who scored 12 or more, and/or positive for the question on suicidal behaviour, will be interviewed by a trained Research Assistant using MINI International Neuropsychiatric Interview, a diagnostic interview tool. Those with mild to moderate depression will be invited to participate in this study, while severe depressed cases will be referred to a Family Medicine Specialist for appropriate management. With prior informed consent, eligible women will be randomized into either the control group - managed by medical doctor alone, or the intervention group - managed by both medical doctor and trained nurse. At baseline, sociodemographic profile and depression level and severity using locally validated self-administered Beck's Depression Index-Malay (BDI-Malay) and Automatic Thought Questionnaire-Malay (ATQ-Malay), will be collected. Women in both groups will be follow-up weekly for six weeks. Depression level and severity will be assessed again using BDI-Malay and ATQ-Malay at Weeks 3 and 6. Medical doctors involved in this study will be given a standard refresher course based on Clinical Practice Guideline on management of depression, while nurses will be trained using the brief cognitive-behavioural therapy (CBT) module comprising 6 modules for 6 weekly sessions.

Discussion

This study compares the effectiveness of managing postnatal depression by medical doctor augmented with brief-CBT by a trained nurse against the usual management by medical doctor. Results from this double-blind RCT will be useful for planning postnatal depression management at primary care level.

Trial Registration: [ClinicalTrials.gov NCT03196726](https://clinicaltrials.gov/ct2/show/study/NCT03196726). Registered on 22 June 2017.

Keywords

Postnatal depression, Brief-CBT, EPDS, MINI, BDI-Malay, ATQ-Malay

All items from the Trial Registration data set
ClinicalTrials.gov Identifier: NCT03196726

Background

Postnatal depression (PND), which affects both mother and child [1,2], is considered a major public health problem. Generally, PND presents within four to six weeks postpartum and manifests as low mood, anhedonia, forgetfulness, irritability, anxiety, sleep disturbance, and poor functioning [3].

Globally, one in ten women suffers from postnatal depression [4]. The prevalence is higher in developing countries, ranging from 4.9% to 50.8% [5]. In Malaysia, based on a recent nation-wide community-based survey, the prevalence of PND among women 6-16 weeks post-partum was 12.7% [6]. Studies have shown evidence of relationships between PND and various factors, such as young age, low socioeconomic status, lack of education, marital conflict, psychological factors such as antenatal depression, stressful life event, and partner factors such as alcoholism, lack of support and intimate partner violence [5,7].

Early intervention for PND has consistently proven to be effective in improving maternal health and the mother-infant relationship [8,9]. However, as most of the intervention studies were done in high-income countries, such evidence cannot be applied to middle-income countries, such as Malaysia, due to resource constraints. Intervention programs in middle- and low-income countries should be based on local evidence on effectiveness, feasibility, acceptability and cultural appropriateness.

In Malaysia, perinatal mental health is largely a neglected area; there is no routine screening or adequate service providing treatment in primary care setting. This is not surprising, as even in high-income countries, more than 50% of people in the community diagnosed with major depression are not treated due to absent and limited access to mental health care [10]. Despite the availability of effective treatment, the treatment gap is worse in low and middle income countries due to financial and human resource constraints [11]. To address the treatment gap, the 2001 World Health Report outlined recommendations highlighting that mental health treatment should be accessible in primary care settings [12]. In Malaysia, maternal healthcare in primary care setting is excellently focused on physical aspects, immunisation and growth surveillance for the infants but lacking in integration of maternal mental health services [13]. At primary care clinics, known locally as Health Clinics, medical doctors lead the management of any medical problems in the postnatal period, with Family Physicians managing referred cases and providing supervisory roles. Women may be referred to mental health services in the tertiary care with psychiatrists, but the inconveniences related to transportation, cost, child care and stigma may frequently result in refusal or non-compliance.

The capacity to enhance and expand ways of treating perinatal mental disorders effectively at an early stage in the primary care requires task shifting which involves engaging human resources, generally non mental health professional, in the care of mental health disorders [14]. With the implementation of patient-centred care, nurses are the back-bone in the management of postnatal mothers at the primary care setting. In addition, with limited number of Family Physicians and medical doctors available at Health Clinics, it is important to involve nurses in the management of PND [15].

Cognitive behavioural therapy (CBT) is a short-term, goal-oriented psychotherapy treatment that is a suitable psychological intervention at primary care settings. Its hands-on practical approach to problem-solving can be applied in less than an hour. Studies have shown that CBT is effective in managing postnatal depression [16,17]. Furthermore, it is preferable to pharmacotherapy for breastfeeding mothers due to the

potential side effect of antidepressants. Currently in Malaysia CBT is commonly practised by clinical psychologists, psychiatrists and counsellors. However, the shortage of these professions all over the country creates an urgent need to train nurses especially at primary care level. Most nurses are trained in basic counselling, but not in CBT.

This paper presents the protocol for a RCT on managing postnatal depression at primary care clinics. This randomized controlled trial aims to assess the effectiveness of brief CBT by nurses as an adjunct to standard management by medical doctors compared to the standard management by medical doctors alone. We hypothesise that a structured adjunct brief CBT will be superior to standard management by medical officers in the treatment of PND.

Methods

Study Design

The design is a double blind, parallel RCT. Both the participants and medical doctors are blinded to the treatment type received and provided. A Research Assistant per site, in charge of all participants' file, will be the one responsible for arranging dates for sessions at the clinic. Brief CBT will be administered by trained nurses. The brief-CBT intervention session will be conducted at the Health Clinics where the mothers are registered with. The study will address this question: Is the brief-CBT managed by nurses an effective adjunct treatment for postnatal depressive mothers?

Study sites

Six health clinics within Kuala Lumpur, Putrajaya and Shah Alam were selected for this study. List of all clinics involved are available on Clinical Trials website; ClinicalTrials.gov Identifier: NCT03196726. These six clinics have all levels of healthcare providers - nurses, medical doctors and Family Physician - which is ideal for this RCT.

Eligibility criteria

Women at 4-24 weeks postpartum and diagnosed as having postnatal depression will be recruited from postnatal mothers registered for care at these six clinics. Only those with mild to moderate depression will be eligible to participate in this study. Those with severe depression are not eligible and will be referred to the Family Physician in the respective clinics. Intervention using brief CBT will only be provided by trained nurses. The nurses will be given 5-days training conducted by two clinical psychologists, two psychiatrists and one Family Medicine Specialists with more than 5 years experienced in CBT, using the CBT manual published locally [18].

Interventions

All participants with postnatal depression will be managed by in-house medical doctors using the readily available Clinical Practice Guidelines [19]. Those in the intervention group will be given brief-CBT by the trained nurses. The brief-CBT or Tiara-Murni module is developed at the beginning of the study, based on cognitive and behavioral approaches, known as cognitive-behavioral therapy (CBT) as an intervention for mental health problems in the family [18]. It consists six weekly sessions with different objectives. In general, this module focusses on helping depressed mothers to identify their negative thinking, modify their distorted perception and make behavioural changes to manage their negative emotion. Two essential components are the mother-child and husband-wife relationships.

In the module, the first session, psychoeducation on postnatal depression will be highlighted, including the cause, risk factors, symptoms and impact of the illness. Second session covers two main components in behavioural strategies; breathing exercise and stress management technique using 5-senses. Meanwhile, the third session will explore further on cognitive strategies. Three areas that will be discussed are identifying cognitive distortion, challenging negative thoughts and technique to increase self-esteem by highlighting a person's good qualities or strengths in life. The fourth and fifth sessions will focus on relationships with partner and baby, respectively. Communication skill is the challenging part in dealing with both baby and spouse, therefore this component will teach applied skills to mothers. The final session in this module, participants will be guided on techniques to prevent relapse and handling future occurrence of depression. The format used in this module includes; health education, exercise and discussion, role-play, reading material and homework practice. At the end of each session, participant will be quizzed on their understanding, and the knowledge and skills imparted in the previous session will be revised at the beginning of the new session. It is expected that, after all sessions are completed, participants will get a better understanding of depression, its symptoms, their negative thoughts and dysfunctional behavior. They are also expected to gain skills to control negative emotions, minimize distractions and negativity, and also will have better coping skills to deal with both spouse and baby.

Participant will be discontinued from the trial if their condition worsening; severe depression or develop psychosis. They will be referred to Psychiatrist at the referral hospital for appropriate management.

Several strategies were employed to improve the adherence to the scheduled sessions, such as; appointment dates and times were arranged to suit both participants and doctors/nurses and participants were reminded of the appointment dates through phone messages. Working participants were given 'time-slip' to ensure allowed to be absence from work for the few hours during appointment days with similar time-slip for the partner/spouse when applicable.

Outcome measures

The primary outcome is the level of depression, based on Beck's Depression Inventory-Malay (BDI-Malay) [20] and Automatic Thought Questionnaire-Malay (ATQ-Malay) [21]. The assessment will be done at three points: baseline (during recruitment), at the third visit and after completed the sixth session at the last visit.

Participant timeline

Participants will be recruited at 4-24 weeks postpartum and those eligible and consented to involve in this study will be follow-up weekly for six visits. Detail timeline is shown in Figure 1.

Sample size

Sample size was calculated using PS Software based on the results of a RCT on GP management of postnatal depression, with and without adjunctive counselling [22]. To detect a true difference in means-adjusted post-study BDI score of 5.7, with standard deviation 7.3, power of 0.8, Type 1 error of 0.05, with 1:1 ratio of control: experimental group, we will need 27 participants in each arm.

Recruitment

All eligible women will be screen as part of additional service provided in these clinics, and those found as having postnatal depression will be given pamphlet on postnatal depression to create awareness and encourage them to involve in this study.

Methods

Assignment of interventions

Women at 4-24 weeks post-partum will be screened for probable postnatal depression using the Edinburgh Postnatal Depression Scale, EPDS, which has been locally validated [23]. The study found that as cut-off score of 11.5, the Malay version of EPDS had the sensitivity of 72.7% and specificity of 92.6%. Thus, in the study, women who score 12 and above, or score other than '0' for the question on suicidal risk, will be considered as having probable PND. Thus, to confirm the PND, those women will be then interviewed by a trained Research Assistant using the locally validated MINI International Neuropsychiatric Interview [22]. Those who score five or more will be considered as having postnatal depression.

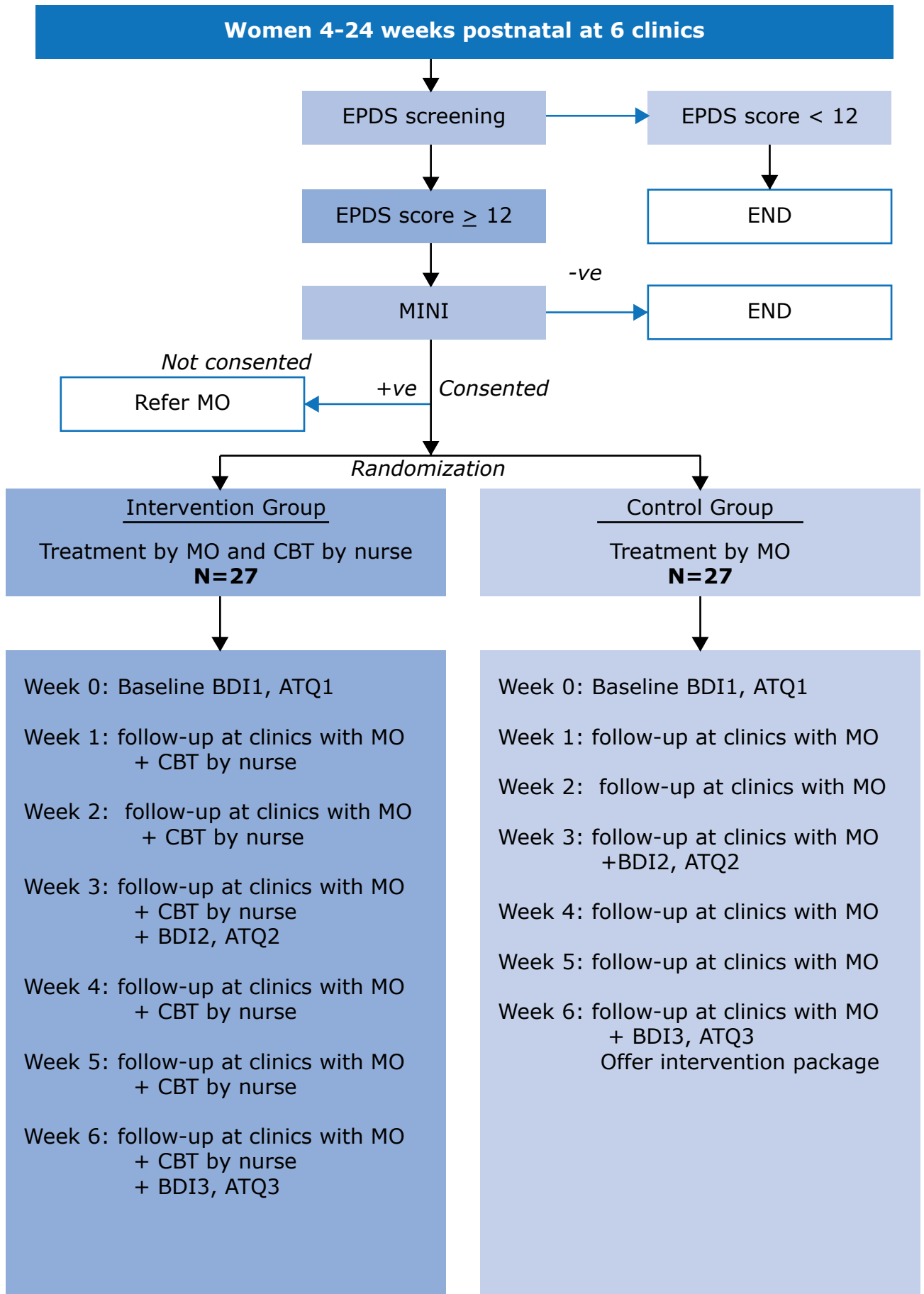
The women confirmed with MINI as having postnatal depression will be invited to join this study. A pamphlet and information sheet explaining about this RCT will be given to them. Those who consent to participate in this study will be randomised into either intervention or control group. The administration of randomisation sequences will be done using opaque identical envelopes contain card "01" for intervention and "02" for control. The concealment of the envelopes was done externally by independent researchers who are not directly involved in this study. The type of randomization that will be utilized in this study is fixed randomize allocation with simple randomization. Women with PND who refuse to join this study will be referred to in-house medical doctor for further management. Sociodemographic profile of the women who refuse to participate will be collected for analysis of possible bias.

Administrative files will be open for each participant. The files will be managed by the research assistant who will not be blinded. The research assistant, one per site, will assign the participant to either intervention or control group based on the chosen envelope and will arrange for the date and time of subsequent visits to avoid contamination between those two groups. The women and the medical doctors who managed them will both be blinded.

Data collection methods

At baseline, the research assistants will interview the participants on their socio-demographic background; age, ethnicity, occupation, marital status, and household income. History on type of delivery will also be asked. Assessment of depressive level at baseline will be done using two locally validated tools; Beck's Depression Inventory-Malay (BDI-Malay) and Automatic Thoughts Questionnaire-Malay (ATQ-Malay) [20, 21]. Mukhtar & Tian found that BDI-Malay has good psychometric properties with Cronbach's α ranging from 0.71 to 0.91 [20]. Validity study of ATQ-Malay demonstrated a Cronbach's alpha coefficient of 0.83 to 0.93 [21]. Only those with BDI score of 10 to 30, with mild to moderate depression, will be invited to participate in this study.

Participants in both groups will be given weekly appointments for a total of six visits. Assessment of depressive level will be done at week 3 and week 6. At the end of week 6, those in the control group will be offered to receive the intervention package. Figure 1 summarises the trial consort diagram.



Data management and Statistical analysis plan

Data will be key-in by the responsible Research Assistant into excel format and will be merged by the statistician and converted into SPSS software. Personal information of the participants will be removed from the database with only unique identifier number will be used for each participant. Original files will be kept at the clinics together with the medical records to ensure safekeeping and continuity of care.

Data analysis will be conducted by the in-house statistician following CONSORT standards. Analysis will be conducted based on intention to treat analysis (ITT). Imputation for missing data will be run with adjustment for baseline characteristics. The differences in mean depression score will be analysed using standard parametric t-tests.

Discussion

Early treatment of PND can prevent long-term sequelae to the women and family, particularly the infants [25]. However, many women, particularly those who breastfed their infants, are reluctant to take anti-depressants due to potential side-effects to the infants [26]. Thus, the non-pharmacological treatments should be made available. Further, studies have demonstrated the efficacy of psychological therapy for PND [27, 28]. Evidence Report and Systematic Review for the US Preventive Services Task Force support this evidence and suggested that CBT was found as beneficial for pregnant and postpartum women who screened to be depressed [29]. However, issue of publication bias was also noted [30].

To the best of our knowledge, there is no study done in Malaysia investigating the adjunctive effect of CBT to the management of PND. Thus, the outcome of this RCT exploring management of postnatal depression using brief-CBT as adjunctive to treatment by medical doctors in primary care, will provide robust evidence for developing a new multi-disciplinary team approach at primary care settings in Malaysia.

Abbreviation

PND	- Postnatal depression
RCT	- Randomised Controlled Trial
EPDS	- Edinburgh Postnatal Depression Scale
MINI	- MINI International Neuropsychiatric Interview
BDI	- Beck's Depression Index
ATQ	- Automatic Thoughts Questionnaire
CBT	- Cognitive behavioural therapy
CPG	- Clinical Practice Guidelines

Declaration**Ethical approval and trial governance**

This study was planned in accordance with the Declaration of Helsinki and we have received ethical approval from the Ministry of Health Research and Ethic Committee (MREC), NMRR-15-2404-26677, and approval from the State Health Department for all six sites. The research team will ensure that the study is conducted ethically and ensure that the Clinical Practice Guideline for management of Depression is observed at all times.

All eligible respondents will be given detailed explanation of the study together with a Patient Information Sheet. Only those who consent to participate in the trial will be randomised for the study. Those who do not consent will be referred through established channel of referral for appropriate management. Participants in the control group will be offered the intervention package at the end of the sixth session to avail the non-treatment group of any advantages that the Intervention may have received. Those who develop severe depression in the course of follow-up will be dropped from the study and referred to a Psychiatrist for further management.

Consent for publication

Not applicable

Availability of data and material

The data that support the findings of this study are available from the Director General of Health Malaysia but restrictions apply to the availability of these data, which were used under license for the current study, and so are not publicly available. Data are however available from the authors upon reasonable request and with permission of the Director General of Health Malaysia.

Competing interests

The authors declare no competing interest

Funding

This study is supported by the Ministry of Health Malaysia Research Grant

Authors' contributions

NAA, UAS, and TA were responsible in designing the concept of this study. NAA was responsible in developing protocol and hold the research grant. BMN provided statistical expertise in the methodology including sample size calculation and randomization. FM led the intervention package team in developing module and training for Brief Cognitive Behavioural Therapy. UAS, FM, BB, NAR and AAS involved in the training and supervision at sites during implementation. All authors contributed to the refinement of the study protocol, review and approved the final manuscript.

Acknowledgements

The authors wish to thank the Director General of Health Malaysia for his permission to publish this study.

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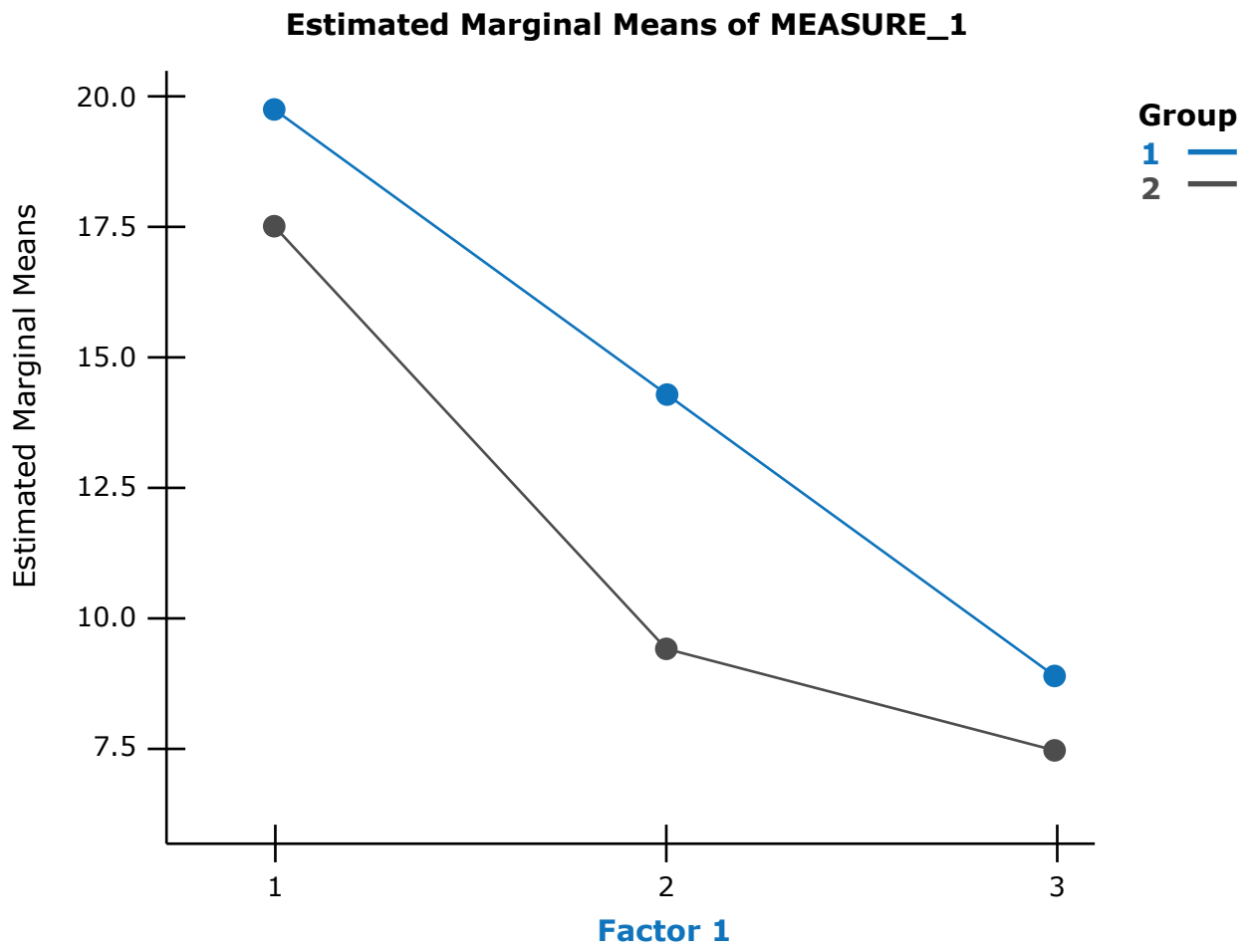
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5.2 FINDINGS

Table 1: Baseline characteristic of participants

	intervention (n=41)	control (n=40)	t/ chi-square	p-value
Means screening EPDS (SD)	15.34 (2.74)	15.50 (2.24)	-0.218	0.777
Mean mother age (SD)	29.24 (5.26)	29.23 (5.26)	0.016	0.987
Race				
Malay	38 (50.0%)	38 (50.0%)	1.988	0.370
Chinese	0 (0.0)	1 (100.0%)		
Indian	3 (75.0%)	1 (25.0%)		
Occupation				
Government	10 (58.8%)	7 (41.2%)	0.908	0.635
Private	11 (44.0%)	14 (56.0%)		
Housewife	15 (48.4%)	16 (51.6%)		
Husband occupation				
Government	13 (48.1%)	14 (51.9%)	0.060	1.000
Private	22 (51.2%)	21 (48.8%)		
Household income group				
Lowest	24 (52.2%)	22 (47.8%)	0.130	0.937
Moderate	8 (47.1%)	9 (52.9%)		
Highest	1 (50.0%)	1 (50.0%)		
Child birthweight				
Low birth weight	6 (75.0%)	2 (25.5%)	2.250	0.260
Normal weight	30 (46.9%)	34 (53.1%)		
Number of children				
1	17 (53.1%)	15 (46.9%)	0.161	0.922
2	11 (52.4%)	10 (47.6%)		
>2	12 (48.0%)	13 (52.0%)		
Complication during pregnancy				
No	31 (47.7%)	34 (52.3%)	1.459	0.347
Yes	8 (66.7%)	4 (33.3%)		
Complication after/ during birth				
No	33 (47.8%)	36 (52.2%)	2.118	0.263
Yes	6 (75.0%)	2 (25.0%)		



6. APPENDIX 1

6.1 Questionnaire Phase 1

SEKSYEN A – RESPONDEN DAN HUBUNGAN DENGAN KOMUNITI <i>SECTION A – RESPONDENT AND COMMUNITY</i>		
A01	Berapakah umur puan (berdasarkan harijadi terakhir)? <i>How old are you (based on last birthday)?</i>	<input type="text"/> Tahun / Years
A02	Di mana puan tinggal? <i>Where do you live?</i>	Alamat _____ _____
A03	Adakah puan mempunyai nombor telefon? Jika ada, sila nyatakan: <i>Do you have a contact number/telephone number? If available, please state:</i>	
	R/H: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
	H/P: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
A04	Berapa lama puan telah tinggal secara berterusan dalam komuniti ini? <i>How long have you been living continuously in this community?</i> <i>* jika kurang sebulan, tuliskan sebagai '0 tahun, 1 bulan' / if less than a month, write as '0 year, 1 month'</i> <i>* komuniti adalah kejranaan / kawasan tempat tinggal puan / community is the neighborhood / area where you live</i> <i>* tinggal secara berterusan bermaksud sekurang-kurangnya 2 minggu / living continuously is at least 2 weeks</i>	<input type="text"/> Tahun / Years <input type="text"/> Bulan / Months
A05	Apakah bangsa puan? <i>What is your ethnicity?</i>	1. Melayu / Malays 2. Cina / Chinese 3. India / Indian 4. Iban 5. Bidayuh 6. Lain-lain Bumiputera Sarawak Kadazan 7. Dusun 8. Lain-lain Bumiputera Sabah 9. Orang asal 10. Lain-lain / Others
A06	Apakah agama puan? <i>What is your religion?</i>	1. Islam / Muslim 2. Buddha / Buddhist 3. Hindu / Hinduism 4. Kristian / Christian

		<p>5. Agama lain / <i>Other religion</i></p> <p>6. Tiada amalan agama tertentu / <i>No specific religion</i></p>
A07	<p>Apakah bahasa ibunda puan? <i>What is your mother tongue?</i></p>	<p>1. Bahasa Melayu / <i>Malay language</i> Dialek Cina / <i>Chinese Dialect</i></p> <p>2. Bahasa Tamil / <i>Tamil language</i></p> <p>3. Bahasa Inggeris / <i>English</i></p> <p>4. Lain-lain Bahasa / <i>Other language</i></p>
A08	<p>Bolehkah puan membaca dalam Bahasa Malaysia <i>Can you read in Bahasa Malaysia</i> * sekurang-kurangnya satu ayat penuh / <i>at least one full sentence</i></p>	<p>1. Ya / <i>Yes</i></p> <p>2. Tidak / <i>No</i></p>
A09	<p>Bolehkah puan menulis dalam Bahasa Malaysia? <i>Can you write in Bahasa Malaysia?</i></p>	<p>1. Ya / <i>Yes</i></p> <p>2. Tidak / <i>No</i></p>
A10	<p>Apakah tahap pendidikan tertinggi yang puan capai? <i>What is the highest level of education that you achieved?</i></p>	<p>1. Sekolah Rendah</p> <p>2. <i>Primary School</i></p> <p>3. Sekolah Menengah</p> <p>4. <i>Secondary School</i></p> <p>5. Pengajian tinggi (Kolej atau Universiti) <i>Higher education (College or University)</i></p> <p>6. Tiada pendidikan / <i>No formal education</i></p>
A10a	<p>Berapa tahun di sekolah rendah? <i>How many years in primary school?</i></p>	<input type="text"/> Tahun / <i>Years</i>
A10b	<p>Berapa tahun di sekolah menengah? <i>How many years in secondary school?</i></p>	<input type="text"/> Tahun / <i>Years</i>
A10c	<p>Berapa tahun di kolej atau universiti? <i>How many years in college or university?</i></p>	<input type="text"/> Tahun / <i>Years</i>
A11	<p>Berapakah anggaran pendapatan keluarga sebulan? <i>How much is your family estimated income per month?</i></p>	<p>RM <input type="text"/></p>
A12	<p>Berapakah perbelanjaan bulanan keluarga puan? <i>How much is your family monthly expenses?</i> * termasuk makanan, elektrik, bekalan air, pengangkutan, sewa / <i>including food, electric, water supply, transportation, rent</i></p>	<p>RM <input type="text"/></p>
A13	<p>Adakah puan mempunyai pekerjaan yang bergaji? <i>Do you have a paying job?</i></p>	<p>1. Ya, saya bekerja untuk sebuah syarikat atau organisasi / <i>Yes, I work for a company or organization</i></p> <p>2. Ya, saya mempunyai perniagaan sendiri / <i>Yes, I have my own business</i></p> <p>3. Tidak / <i>No</i></p>

A14	Adakah puan mudah melawat mana-mana ahli keluarga kandung yang tidak tinggal bersama puan (yang sepatutnya boleh dilawati)? <i>Are any of your biological family members whom you don't live with, but are available, that you can easily see/visit them?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> Tiada ahli keluarga yang tidak tinggal bersama / <i>No family living apart</i>
A15	Berapa kerap puan berjumpa atau bercakap dengan ahli keluarga kandung yang tidak tinggal bersama puan? <i>How often do you see or talk to a member of your biological family who you don't live with?</i>	<ol style="list-style-type: none"> 1. Setiap hari / <i>Every day</i> 2. Sekurang-kurangnya seminggu sekali / <i>At least once a week</i> 3. Sekurang-kurangnya sebulan sekali / <i>At least once a month</i> 4. Sekurang-kurangnya setahun sekali / <i>At least once a year</i> 5. Tidak pernah/jarang / <i>Never/hardly ever</i>
A16*	Biasanya, bolehkah puan bergantung kepada ahli keluarga untuk mendapatkan sokongan sekiranya puan memerlukan bantuan atau mempunyai masalah? <i>When you need help or have a problem, can you usually count on family members for support?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tiada ahli keluarga lain / <i>No other family</i>
A17	Selain dari ahli keluarga, sekiranya puan memerlukan bantuan atau mempunyai masalah, siapakah yang akan puan temui/hubungi? <i>Other than family members, who else might you go to when you need help or have a problem?</i> * pilih yang berkenaan / <i>choose any related answer</i>	<ol style="list-style-type: none"> 1. Orang tua di kampung (dewasa yang lebih tua dengan pengalaman hidup) / <i>Village elder (older adult with life experience)</i> 2. Jiran / <i>Neighbour</i> 3. Kawan termasuk kawan sekerja / <i>Friend including office mate</i> 4. Ketua Kampung (pemimpin kampung) / <i>Village head (village leader)</i> 5. Majikan / <i>Employer</i> 6. Organisasi Bukan Kerajaan / <i>Non-government organisations</i> 7. Bantuan atas talian (telefon atau emel) / <i>Online help (telephone or email)</i> 8. Tidak dapatkan bantuan / <i>Do not get any help</i>
A18*	Adakah kini puan berkahwin atau mempunyai pasangan (lelaki atau wanita)? <i>Are you currently married or do you have a male/female partner?</i>	<ol style="list-style-type: none"> 1. Ya, berkahwin / <i>Yes, married</i> 2. Tidak, tapi pernah berkahwin / <i>No, but used to be married</i> 3. Ya, ada pasangan / <i>Yes, had partner</i> 4. Tidak, tapi pernah ada pasangan / <i>No, but used to have partner</i> 5. Tidak pernah berkahwin/ tiada pasangan / <i>Never married/ no partner</i>
A19	Adakah puan bermadu?	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i>

	<i>Are you in a polygamous marriage?</i>	2. Tidak / No
A20	Termasuk puan, berapa ramai isteri suami puan? <i>How many wives does your husband have, including yourself?</i>	1. Dua / Two 2. Tiga / Three 3. Empat / Four
A21	Puan isteri ke berapa? <i>Which number wife are you?</i>	1. Pertama / First 2. Kedua / Second 3. Ketiga / Third 4. Keempat / Fourth
A22	Jika pernah berkahwin, bagaimana hubungan tersebut berakhir? (merujuk kepada perkahwinan terakhir) <i>If you used to be married, how did the relationship end? (refer to last marriage)</i>	1. Berceraai / Divorced 2. Berpisah / Separated/broken up 3. Balu / Widowed
A23	Jika bercerai atau berpisah, siapakah yang memulakan perceraian /perpisahan? <i>If divorced or separated/broken up, who initiated the divorce/separation?</i>	1. Puan / You 2. Suami/Pasangan / Husband/partner 3. Kedua-dua / Both 4. Orang lain / Other people
A24	Berapa kali puan telah berkahwin atau tinggal bersama pasangan (termasuk pasangan semasa)? <i>How many times have you been married or lived with a partner (including current partner)?</i>	<input type="text"/> Kali / times
A25	Siapa yang memilih pasangan semasa atau terakhir puan? <i>Who chose your current or most recent partner?</i>	1. Puan memilih pasangan puan / You chose your partner 2. Keluarga puan memilih pasangan puan / Your family chose your partner 3. Pasangan puan memilih puan / Your partner chose you 4. Keluarga pasangan puan yang memilih puan / Your partner's family chose you 5. Puan dan pasangan puan memilih antara satu sama lain / You and your partner chose each other 6. Lain-lain / Other
A25a	Lain-lain, nyatakan: / Others, please state:	_____
A26	Jika puan tidak memilih pasangan puan sendiri, bagaimana perasaan puan tentang keputusan itu? <i>If you did not choose your own partner, how did you feel about the decision?</i>	1. Saya gembira dengan pilihan ini / I was happy with the choice 2. Ia bukan apa yang saya boleh memilih tetapi boleh diterima / It is not what I would have chosen but it was acceptable 3. Saya terpaksa berkahwin dengan pasangan saya / I was forced to marry

		<i>my partner</i>
A27	Adakah perkahwinan puan melibatkan mas kahwin <i>Did your marriage involve dowry/bride price payment?</i>	<ol style="list-style-type: none"> 1. Ya- Mas kahwin (bayaran daripada keluarga wanita kepada lelaki atau keluarga lelaki) / <i>Yes – Dowry (payment from woman’s family to man or man’s family)</i> 2. Ya - Harga pengantin perempuan (bayaran daripada keluarga lelaki kepada wanita atau keluarga wanita) / <i>Yes – Bride price (payment from man’s family to woman or woman’s family)</i> 3. Tiada / <i>No</i> 4. Tidak tahu / <i>Don’t know</i> Tidak berkenaan / <i>Not applicable</i>

SEKSYEN B – KESIHATAN UMUM DAN SIKAP
SECTION B – GENERAL HEALTH AND ATTITUDE

BA1*	Secara am, bagaimanakah puan menilai tahap kesihatan puan? <i>Generally, how would you rate your health?</i>	1. Sangat baik / <i>Very good</i> 2. Baik / <i>Good</i> 3. Sederhana / <i>Moderate</i> 4. Tidak baik / <i>Bad</i> 5. Sangat tidak baik / <i>Very bad</i>
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***Sepuluh (10) soalan berikut terdiri daripada Edinburgh Postnatal Depression Scale (EPDS)**

** The next 10 questions comprise the Edinburgh Postnatal Depression Scale (EPDS)*

DIJAWAB SENDIRI / SELF-ADMINISTERED		
EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS) DENGAN SKALA PEMARKAHAN <i>EDINBURGH POSTNATAL DEPRESSION SCALE (EPDS) WITH MARKING SCALES</i>		
<p>Sila BULATKAN jawapan yang paling hampir bagi menggambarkan apa yang puan telah rasakan DALAM MASA 7 HARI YANG LALU dan sekadar hari ini sahaja <i>Please CIRCLE the closest answer to picture what you felt DURING THE LAST 7 DAYS and not only today.</i></p>		
DALAM MASA 7 HARI YANG LALU: / DURING THE LAST 7 DAYS:		
B01	Saya dapat ketawa dan melihat kelucuan pada sesuatu perkara <i>I have been able to laugh and see the funny side of things</i> <input type="radio"/> Sebanyak mana biasa / <i>As much as usual</i> <input type="radio"/> Kurang daripada biasa / <i>Less than normal</i> <input type="radio"/> Sangat kurang daripada biasa / <i>Lesser than normal</i> <input type="radio"/> Tiada langsung / <i>Not at all</i>	0 1 2 3
B02	Saya menanti dengan penuh harapan bagi mendapat kenikmatan apabila melakukan sesuatu perkara <input type="radio"/> <i>I have looked forward with enjoyment to things</i> [0] Sebanyak mana biasa / <i>As much as possible</i> <input type="radio"/> Agak kurang daripada biasa / <i>Less than normal</i> <input type="radio"/> Sangat kurang daripada biasa / <i>Lesser than normal</i> <input type="radio"/> Tiada langsung / <i>Not at all.</i>	0 1 2 3
B03	Saya menyalahkan diri sendiri secara tidak sepatutnya apabila sesuatu yang tidak kena terjadi <i>I have blamed myself unnecessarily when things went wrong.</i> <input type="radio"/> Ya, sepanjang masa / <i>Yes, most of the time</i> <input type="radio"/> Ya, kadang kala / <i>Yes, sometimes</i> <input type="radio"/> Jarang sekali / <i>Not very often</i> <input type="radio"/> Tidak pernah / <i>Never</i>	3 2 1 0

B04	<p>Saya berasa risau atau bimbang tanpa sebab <i>I feel worried with no reason.</i></p> <ul style="list-style-type: none"> ○ Tidak langsung / <i>None</i> ○ Amat jarang sekali / <i>Very seldom</i> ○ Ya, kadang kala / <i>Yes, sometimes</i> ○ Ya, sangat kerap / <i>Yes, too often</i> 	<p>0 1 2 3</p>
B05	<p>Saya berasa takut atau panik tanpa sebab <i>I feel scared or panicked for no good reason.</i></p> <ul style="list-style-type: none"> ○ Ya, sangat kerap / <i>Yes, very often</i> ○ Ya, kadang kala / <i>Yes, sometimes</i> ○ Jarang sekali / <i>Seldom</i> ○ Tidak pernah / <i>Not at all</i> 	<p>3 2 1 0</p>
B06	<p>Saya dibebani oleh terlalu banyak masalah <i>I was burdened with a lot of problems.</i></p> <ul style="list-style-type: none"> ○ Ya, kebanyakan masa saya tidak berupaya menanganinya langsung / <i>Yes, most of the time I have not been able to cope at all</i> ○ Ya, kadangkala saya tidak berupaya menanganinya seperti biasa / <i>Yes, sometimes I have not been coping as well as usual</i> ○ Tidak, kebanyakan masa saya berupaya menanganinya dengan baik / <i>No, most of the time I am able to deal with it</i> ○ Tidak, saya berupaya menangani semua masalah dengan baik pada setiap masa / <i>No, most of the time I am able to deal with it at all times</i> 	<p>3 2 1 0</p>
B07	<p>Saya berasa sungguh sedih sehingga saya mengalami kesukaran untuk tidur <i>I feel so sad until I have a hard time to sleep.</i></p> <ul style="list-style-type: none"> ○ Kebanyakan masa / <i>Most of the time</i> ○ Kadang – kadang / <i>Sometimes</i> ○ Jarang – jarang sekali / <i>Seldom</i> ○ Tidak pernah / <i>Never</i> 	<p>3 2 1 0</p>
B08	<p>Saya berasa sedih atau serabut <i>I have felt so sad or miserable.</i></p> <ul style="list-style-type: none"> ○ Ya, kebanyakan masa / <i>Yes, most of the time</i> ○ Ya, agak kerap / <i>Yes, quite often</i> ○ Jarang – jarang sekali / <i>Not very often</i> ○ Tidak pernah / <i>Never</i> 	<p>3 2 1 0</p>
B09	<p>Saya berasa sangat sedih sehingga saya menangis <i>I feel so sad until I cried.</i></p> <ul style="list-style-type: none"> ○ Ya, kebanyakan masa / <i>Yes, very frequently</i> ○ Ya, agak kerap / <i>Yes, quite often</i> ○ Hanya sekali sekala / <i>Only occasionally</i> ○ Tidak pernah / <i>Never</i> 	<p>3 2 1 0</p>
B10	<p>Pernah terlintas di fikiran saya keinginan untuk mencederakan diri sendiri <i>The thought of harming myself has occurred to me.</i></p> <ul style="list-style-type: none"> ○ Ya, kebanyakan masa / <i>Yes, quite often</i> ○ Ya, agak kerap / <i>Yes, sometimes</i> ○ Amat jarang sekali / <i>Hardly ever</i> 	<p>3 2 1</p>

	o Tidak pernah / <i>Never</i>	0
B10a	Kira jumlah skor untuk soalan B01 hingga B10 <i>Calculate the total of score for questions B01 to B10</i>	Jumlah skor / Total of score <input type="text"/>
B10b	PENTING! Responden perlu dirujuk kepada pakar sekiranya jumlah skor yang diperolehi adalah 11 dan ke atas ATAU jawapan kepada soalan B10 adalah selain daripada pilihan jawapan 'TIDAK PERNAH'. IMPORTANT! Respondent need to be referred to specialist, if total score is 11 and above OR the answer of question B10 is other than 'NEVER'	1. Ya, responden perlu dirujuk / <i>Yes, respondent need to be referred</i> 2. Tidak / <i>No</i>
<p>3 soalan seterusnya berkenaan penilaian bunuh diri disesuaikan dari WHO World Mental Health (WMH) Composite International Diagnostic Interview (CIDI) <i>The next 3 questions on suicide assessment were adapted from the WHO World Mental Health (WMH) Composite International Diagnostic Interview (CIDI)</i>⁵</p>		
B11*	Pernahkah puan serius berfikir tentang membunuh diri? <i>Have you ever seriously thought about committing suicide?</i>	1. Ya. Kurang dari 30 hari yang lalu / <i>Yes. Less than 30 days ago.</i> 2. Ya. Diantara 1 hingga 12 bulan yang lalu / <i>Yes. Between 1 to 12 months ago.</i> 3. Ya. Lebih dari setahun yang lalu / <i>Yes. More than a year ago.</i> 4. Tidak / <i>No</i>
B11a	Nyatakan berapa hari: <i>State how many days:</i>	<input type="text"/> Hari / Days
B11b	Nyatakan berapa bulan: <i>State how many months:</i>	<input type="text"/> Bulan / Months
B11c	Nyatakan berapa tahun: <i>State how many years:</i>	<input type="text"/> Tahun / Years
B12	Pernahkah puan membuat rancangan untuk membunuh diri, atau mengambil langkah-langkah untuk menyediakan rancangan ini? <i>Have you ever made a plan for committing suicide, or even taken steps to prepare for this plan?</i>	1. Ya. Kurang dari 30 hari yang lalu / <i>Yes. Less than 30 days ago.</i> 2. Ya. Diantara 1 hingga 12 bulan yang lalu / <i>Yes. Between 1 to 12 months ago.</i> 3. Ya. Lebih dari setahun yang lalu / <i>Yes. More than a year ago.</i> 4. Tidak / <i>No</i>
B12a	Nyatakan berapa hari: <i>State how many days:</i>	<input type="text"/> Hari / Days
B12b	Nyatakan berapa bulan: <i>State how many months:</i>	<input type="text"/> Bulan / Months

B12c	Nyatakan berapa tahun: <i>State how many years:</i>	<input type="text"/> Tahun / Years
B13	Adakah puan pernah cuba membunuh diri? <i>Have you ever attempted suicide?</i>	<ol style="list-style-type: none"> 1. Ya. Kurang dari 30 hari yang lalu / <i>Yes. Less than 30 days ago.</i> 2. Ya. Diantara 1 hingga 12 bulan yang lalu / <i>Yes. Between 1 to 12 months ago.</i> 3. Ya. Lebih dari setahun yang lalu / <i>Yes. More than a year ago.</i> 4. Tidak / <i>No</i>
B13a	Nyatakan berapa hari: <i>State how many days:</i>	<input type="text"/> Hari / Days
B13b	Nyatakan berapa bulan: <i>State how many months:</i>	<input type="text"/> Bulan / Months
B13c	Nyatakan berapa tahun: <i>State how many years:</i>	<input type="text"/> Tahun / Years
<p>PENTING! Berdasarkan jawapan pada soalan B11/B12/B13, jika salah satu jawapan 'ya', responden perlu dirujuk kepada pakar. <i>IMPORTANT!</i> According to the answer for question B11/B12/B13, if any 'yes', respondent need to be referred to specialist.</p>		
<p>Soalan kesihatan yang lain <i>Other general health questions</i></p>		
B14*	Dalam masa 12 bulan yang lepas, pernahkah puan menjalani pembedahan (selain dari "caesarean section")? <i>Within the past 12 months, have you had surgery? (Other than caesarean section)</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
B15	Dalam masa 12 bulan yang lepas, pernahkan puan bermalam di hospital kerana sakit (selain dari bersalin)? <i>Within the past 12 months, have you ever spent the night in hospital due to illness (apart from maternity)?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
B15a	Nyatakan berapa malam di hospital: <i>State how many nights in hospital:</i>	<input type="text"/> Malam / Nights
B16	Adakah puan merokok sekarang? <i>Do you currently smoke?</i>	<ol style="list-style-type: none"> 1. Ya, setiap hari / <i>Yes, everyday</i> 2. Ya, tetapi tidak setiap hari / <i>Yes, but not everyday</i> 3. Tidak merokok / <i>Do not smoke</i>

B18	Adakah puan minum alkohol sekarang? Berapa kerapkah puan minum alkohol? <i>Do you drink alcohol? How often do you drink alcohol?</i>	<ol style="list-style-type: none"> 1. Ya, setiap hari atau hampir setiap hari / <i>Yes, everyday or almost everyday</i> 2. Ya, sekali atau dua kali seminggu <i>Yes, once or twice a week</i> 3. Ya, 1-3 kali sebulan / <i>Yes, 1-3 times a month</i> 4. Ya, kurang dari 1 kali sebulan / <i>Yes, less than once a month</i> 5. Ya, 1-2 kali setahun / <i>Yes, 1-2 times a year</i> 6. Tidak, tapi pernah minum (lebih dari 1 tahun) / <i>No, but used to (more than a year ago)</i> 7. Tidak pernah / <i>Never</i>
B19	Dalam masa 4 minggu yang lepas, adakah puan minum alkohol? <i>Within the last 4 weeks, did you drink alcohol?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
B19a	Berapa banyak puan minum dalam sehari? <i>How much you drink in a day?</i>	<input style="width: 50px; height: 20px; border: 1px solid black;" type="text"/> Minuman / Drinks
B20	Dalam masa 12 bulan yang lepas, pernahkah puan mengalami masalah berkaitan dengan pengambilan alkohol? <i>Within the past 12 months, have you ever had problems associated with alcohol consumption?</i> <i>* pilih semua yang berkaitan / select all related</i>	<ol style="list-style-type: none"> 1. Masalah kewangan (belanja terlalu banyak untuk alkohol)/ <i>Financial problems (spent too much on alcoholic drinks)</i> 2. Masalah kesihatan selepas minum alkohol atau keesokan harinya/ <i>Health problems after drinking or the next day</i> 3. Konflik dengan keluarga atau kawan, termasuk pasangan / <i>Conflict with family, friends, partner/partner</i> 4. Masalah dengan pihak berkuasa (pemilik bar/polis/dll.) / <i>Problems with authorities (bar owners, police, etc)</i> 5. Lain-lain / <i>Others</i> 6. Tiada masalah / <i>No problem</i>

***Lima belas (15) soalan berikut adalah berkaitan dengan sikap yang diadaptasi dari : Givens et al. (2007). Ethnicity and preferences for depression treatment. *General Hospital Psychiatry*, 29(3),182-191.⁴**

Senario (Dikecualikan jika responden memahami konsep kemurungan)/
Scenario is excluded if respondent understands the concept of depression

Seorang wanita baru melahirkan seorang bayi. Suaminya tidak menjaga atau membantu beliau di dalam melakukan kerja rumah. Ahli keluarga yang lain juga tiada untuk membantunya. Suami beliau kerap keluar minum bersama kawan dan pulang lewat ke rumah. Wanita itu telah meminta dan bertelingkah supaya suaminya berada lebih kerap di rumah. Beliau menyedari yang beliau berasa sedih, tidak berguna dan sering menangis. Beliau mengalami sakit kepala, tiada selera makan, tiada keinginan untuk berbual

dengan kawan dan ahli keluarga, atau menjaga anaknya. Beliau berasa letih dan tidak boleh tidur walaupun ada peluang / *A women just delivered a baby. Her husband does not take care or help her with house work. Other family members are not around help her either. The husband often goes out drinking with his friends and comes home late. She has asked and argued with the husband to be home more frequently. She realises that she feels sad, useless, and often cries. She has headaches, loss of appetite, no desire to talk with friends or family members, or look after her child. She feels tired and is not able to sleep even when she has the opportunity to do so.*

Kami cuba untuk memahami apa yang puan fikirkan kemungkinan penyebab kemurungan . Sila kongsi pandangan puan mengenai kenyataan berikut dengan BULATKAN pilihan jawapan.

We are trying to understand what you think is the possible cause of depression. Please share your opinions regarding the following statements by CIRCLING the appropriate answer.

1. Sangat tidak setuju / *Strongly disagree*
2. Tidak setuju / *Disagree*
3. Tidak pasti / *Unsure*
4. Setuju / *Agree*
5. Sangat setuju / *Strongly agree*

Kepercayaan terhadap kemurungan
Perception towards depression

B21*	Perubahan kimia/ biologi di dalam otak menyebabkan kemurungan <i>Chemical/ biological changes in the brain causes depression</i>	1	2	3	4	5
B22	Sebahagian ubat berkesan merawat kemurungan <i>Some medications are effective in treating depression</i>	1	2	3	4	5
B23	Ubat anti kemurungan selalunya menyebabkan ketagihan <i>Anti-depressant medications often causes addictions</i>	1	2	3	4	5
B24	Untuk kebanyakan orang, kaunseling sangat berkesan sebagai rawatan kemurungan <i>For most people, counselling is an effective treatment for depression</i>	1	2	3	4	5
B25	Kaunseling menimbulkan terlalu banyak perasaan negatif seperti kemarahan atau kesedihan <i>Counselling brings about too many negative feelings such as anger or sadness</i>	1	2	3	4	5
B26	Sembahyang, amalan agama atau meditasi boleh membantu menyembuhkan kemurungan <i>Praying, religious practice or meditation can help cure depression</i>	1	2	3	4	5

Halangan terhadap rawatan kemurungan

<i>Obstructions to treatment for depression</i>						
B27	Sekiranya saya mengalami kemurungan, saya tidak mahu majikan atau ahli keluarga mengetahui yang saya menerima rawatan profesional untuk masalah emosi saya <i>If I am suffering from depression, I don't want my employer or family members to know I am receiving professional treatment for my emotional problems</i>	1	2	3	4	5
B28	Sekiranya saya mengalami kemurungan, saya berasa malu jika kawan mengetahui saya menerima rawatan profesional untuk masalah emosi saya / <i>If I am suffering from depression, I feel embarrassed if my friends knew I am receiving professional treatment for my emotional problems</i>	1	2	3	4	5
B29	Sekiranya saya mengalami kemurungan, keluarga saya akan berasa malu/kecewa <i>If I am suffering from depression, my family will feel ashamed/ disappointed</i>	1	2	3	4	5
Pilihan Rawatan / Choice of treatment						
B30	Sekiranya saya mengalami kemurungan, saya akan dapatkan rawatan <i>If I am suffering from depression, I will get treatment .</i>	1	2	3	4	5
B31	Sekiranya saya mengalami kemurungan, saya memilih untuk berjumpa dengan anggota kesihatan profesional yang sama jantina dengan saya <i>If I am suffering from depression, I choose to seek a health professional that is the same gender as me</i>	1	2	3	4	5
B32	Sekiranya saya mengalami kemurungan, saya memilih untuk berjumpa dengan anggota kesihatan profesional yang sama bangsa dengan saya. <i>If I am suffering from depression, I choose to seek a health professional with the same ethnicity as me.</i>	1	2	3	4	5
B33	Sekiranya anggota kesihatan profesional memaklumkan yang saya mengalami kemurungan, saya dapat menerimanya <i>If health care professionals advise that I suffer from depression, I can accept it .</i>	1	2	3	4	5
B34	Saya berpendapat saya mempunyai kemurungan pada masa ini <i>I think I have depression at this time.</i>	1	2	3	4	5

B35	Jika ya, saya rasa saya memerlukan rawatan kemurungan pada masa ini <i>If yes, I think I need treatment for depression at this time.</i>	1	2	3	4	5
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Pilihan cara rawatan / Choice of treatment method						
Setiap orang mengalami tekanan emosi atau kesusahan di sesuatu ketika dalam kehidupan. Kami ingin mengetahui pilihan puan berkaitan jenis bantuan yang paling puan suka pada masa tersebut <i>Everyone experiences emotional distress or hardship at some point in life. We want to know your options in relation to the type of help you prefer the most at that time.</i>						
B36*	Pernahkah puan mengalami tekanan emosi dalam kehidupan puan? <i>Have you suffered emotional distress/hardship in your life?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>				
B37	Pernahkah puan cuba mendapatkan bantuan untuk kemurungan atau masalah emosi? <i>Have you ever tried to get help for depression or emotional problems?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>				
B38	Jika Ya kepada soalan (B37), apa yang telah puan lakukan? <i>If yes to question (B37), what have you tried?</i>	1. Berusaha sendiri / <i>Help yourself</i> 2. Dapatkan bantuan dari orang lain / <i>Get help from others</i>				
B38a	Jika berusaha sendiri (pilih semua yang berkaitan) <i>If help yourself (choose all that is relevant)</i>	1. Sembahyang atau meditasi / <i>Prayer or meditation</i> 2. Lebihkan tidur / <i>Get more sleep</i> 3. Menjerit sekuatnya atau baling sesuatu / <i>Scream loudly or throw something</i> 4. Tunggu sehingga keadaan menjadi lebih baik / <i>Wait until things got better</i> 5. Lain-lain / <i>Others</i>				
B38b	Jika dapatkan bantuan dari orang lain (pilih semua yang berkaitan) <i>If get help from others (choose all that is relevant)</i>	1. Ubatan untuk emosi dan tekanan saya / <i>Medications for my emotions and stress</i> 2. Bercakap dengan ahli ulama / paderi (pastor, rabbi, minister, priest, monk, fortune teller, spiritual healer) / <i>Speak with members of the clergy / priest (pastor, rabbi, minister, monk, fortune teller, spiritual healer)</i> 3. Dapatkan sokongan emosi daripada kawan atau ahli keluarga / <i>Get emotional help from friends or family</i> 4. Berbincang dengan doktor saya /				

		<p><i>Discuss with my doctor</i></p> <p>5. Berjumpa dengan anggota kesihatan profesional (kaunselor, psikologis, pakar psikiatri, atau pekerja sosial) / <i>Meet with health care professionals (counsellors, psychologist, psychiatrist, or social workers)</i></p> <p>6. Menghadiri kelas atau mesyuarat berkumpul dengan perawat / <i>Attend classes or group meetings with healthcare personnel</i></p> <p>7. Kumpulan bantuan sendiri/sokongan / <i>Self-help groups</i></p> <p>8. Akupuntur / <i>Acupuncture</i></p> <p>9. Lain-lain / <i>Others</i></p>
B39	<p>Untuk mengendalikan tekanan emosi puan, kemungkinan besar puan akan sanggup mencuba: <i>To handle your emotional stress/ hardships, you would most likely try:</i></p>	<p>1. Tidak melakukan apa-apa / <i>Do not do anything</i></p> <p>2. Berusaha sendiri / <i>Help yourself</i></p> <p>3. Dapatkan bantuan dari orang lain / <i>Get help from others</i></p>
B39a	<p>Jika berusaha sendiri (pilih semua yang berkaitan) <i>If help yourself (choose all that is relevant)</i></p>	<p>1. Sembahyang atau meditasi / <i>Prayer or meditation</i></p> <p>2. Lebihkan tidur / <i>Get more sleep</i></p> <p>3. Menjerit sekuatnya atau baling sesuatu / <i>Scream loudly or throw something</i></p> <p>4. Tunggu sehingga keadaan menjadi lebih baik / <i>Wait until things got better</i></p> <p>5. Lain lain / <i>Others</i></p>
B39b	<p>Jika dapatkan bantuan dari orang lain (pilih semua yang berkaitan) <i>If get help from others (choose all that is relevant)</i></p>	<p>1. Ubatan untuk emosi dan tekanan saya / <i>Medications for my emotions and stress</i></p> <p>2. Bercakap dengan ahli ulama /paderi (pastor, rabbi, minister, priest, monk, fortune teller, spiritual healer) / <i>Speak with members of the clergy / priest (pastor, rabbi, minister, monk, fortune teller, spiritual healer)</i></p> <p>3. Dapatkan sokongan emosi daripada kawan atau ahli keluarga / <i>Get emotional help from friends or family</i></p> <p>4. Berbincang dengan doktor saya / <i>Discuss with my doctor</i></p> <p>5. Berjumpa dengan anggota kesihatan profesional (kaunselor, psikologis, pakar psikiatri, atau pekerja sosial) / <i>Meet with health care professionals (counsellors, psychologist, psychiatrist, or social workers)</i></p>

		<ol style="list-style-type: none">6. Menghadiri kelas atau mesyuarat berkumpul dengan perawat / <i>Attend classes or group meetings with healthcare personnel</i>7. Kumpulan bantuan sendiri/sokongan / <i>Self-help groups</i>8. Akupuntur / <i>Acupuncture</i>9. Lain-lain / <i>Others</i>
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SEKSYEN C: KESIHATAN REPRODUKTIF
SECTION C: REPRODUCTIVE HEALTH

C01*	Adakah semua anak puan mempunyai ayah kandung yang sama, atau ayah kandung yang berlainan? <i>Do all your children have the same biological father or different biological fathers?</i>	<ol style="list-style-type: none"> 1. Seorang ayah / <i>One father</i> 2. Lebih daripada seorang ayah / <i>More than one father</i> 3. Tidak tahu, tiada jawapan / <i>Don't know, no answer</i>
C02	Berapa daripada anak puan mendapat sokongan kewangan daripada ayah mereka? <i>How many of your children receive financial support from their father?</i>	<ol style="list-style-type: none"> 1. Tiada / <i>None</i> 2. Sesetengah / <i>Some</i> 3. Semua / <i>All</i> 3. Tidak berkenaan / <i>Not applicable</i>
C03	Adakah puan pernah mempunyai kandungan kembar dua? <i>Have you ever been pregnant with twins?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C03a	Nyatakan berapa kali: <i>State how many times:</i>	<input type="text"/> Kali / <i>Times</i>
C04	Adakah puan pernah mempunyai kandungan kembar tiga? <i>Have you ever been pregnant with triplets?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C04a	Nyatakan berapa kali: <i>State how many times:</i>	<input type="text"/> Kali / <i>Times</i>
C05	Adakah puan pernah ada keguguran? <i>Have you ever had a miscarriage?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C05a	Nyatakan berapa kali: <i>State how many times:</i>	<input type="text"/> Kali / <i>Times</i>
C06	Adakah puan pernah ada kelahiran mati? <i>Have you ever had a stillbirth?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C06a	Nyatakan berapa kali: <i>State how many times:</i>	<input type="text"/> Kali / <i>Times</i>
C07	Adakah puan pernah mengugurkan kandungan? <i>Have you ever had an abortion?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C07a	Nyatakan berapa kali: <i>State how many times:</i>	<input type="text"/> Kali / <i>Times</i>
C08	Adakah puan pernah menggunakan apa-apa kaedah untuk mengelakkan mengandung? <i>Do you ever use any methods to avoid pregnancy?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> Tidak / <i>No</i>

C09	Apakah KAEDAH UTAMA yang puan pernah guna? <i>What is the PRIMARY METHOD that you ever use?</i>	<ol style="list-style-type: none"> 1. Pil / <i>Pill</i> 2. Suntikan / <i>Injections</i> 3. Implan / <i>Implants</i> 4. Alat dalam rahim (ADR) / <i>Intra uterine contraceptive device(IUCD)</i> 5. Diafragma / <i>Diaphragm</i> 6. Kaedah kalendar/lendir / <i>Calendar/mucus</i> 7. Kondom / <i>Condoms</i> 8. Kaedah pensterilan lelaki / <i>Male sterilisation</i> 9. Herba / <i>Herbs</i> 10. Kaedah azal / <i>Withdrawal</i> 11. Lain lain / <i>Others</i>
C09a	Nyatakan: / <i>Please state:</i>	_____
C10	Adakah suami/pasangan terkini/ terakhir tidak setuju menggunakan apa-apa kaedah pencegahan kandungan? <i>Does your current/ last partner/ husband do not agree with using any birth control methods?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C11	Bagaimanakah suami/pasangan terkini/ terakhir puan memberitahu puan bahawa beliau tidak setuju menggunakan kaedah-kaedah ini? (Cara yang paling kerap) <i>How does your current/ last partner/ husband tells you that he does not agree with these methods? (The most frequent methods)</i>	<ol style="list-style-type: none"> 1. Berkomunikasi secara baik / <i>Communicate calmly</i> 2. Menjerit/ menunjukkan kemarahan / <i>Scream/ show anger</i> 3. Mengugut untuk memukul puan / <i>Threaten to hit you</i> 4. Mengugut untuk meninggalkan puan/ mengusir puan dari rumah / <i>Threaten to leave you or throw you out of the house</i> 5. Memukul puan / <i>Hit you</i> 6. Memusnahkan/membuang kaedah tersebut / <i>Destroy or throw the method away</i> 7. <i>Destroy or throw the method away</i> 8. Lain-lain/ <i>Others</i>
C12*	Adakah puan pernah menggunakan kondom dengan pasangan terkini/terakhir puan untuk mengelakkan penyakit? <i>Have you ever used a condom with your current/ last partner to avoid diseases?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C13	Adakah puan pernah meminta suami/ pasangan terkini/ terakhir menggunakan kondom untuk mengelakkan penyakit? <i>Have you ever asked your current/ last partner/</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>

	<i>husband to use a condom to avoid diseases?</i>	
C14	<p>Adakah suami/pasangan terkini/ terakhir puan tidak bersetuju menggunakan kondom untuk elakkan jangkitan penyakit?</p> <p><i>Does your current/ last partner/ husband objects to use a condom to avoid an infection?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
C15	<p>Bagaimana suami/pasangan terkini/ terakhir puan memberitahu puan bahawa beliau tidak setuju menggunakan kondom?</p> <p><i>How does your current/ last partner/ husband tell you that he does not agree with using a condom?</i></p>	<ol style="list-style-type: none"> 1. Berkomunikasi secara baik / <i>Communicate calmly</i> 2. Menjerit/ menunjukkan kemarahan / <i>Scream/show anger</i> 3. Mengugut untuk memukul puan / <i>Threaten to hit you</i> 4. Mengugut untuk meninggalkan puan/ mengusir puan dari rumah / <i>Threaten to leave you or throw you out of the house</i> 5. Memukul puan / <i>Hit you</i> 6. Merosakkan atau membuang kondom tersebut / <i>Destroy or throw the condom away</i> 7. Menuduh saya sebagai wanita yang tidak baik/tidak setia / <i>Accuse me as a woman that is not good/ disloyal</i> 8. Tidak mengambil berat hal ini/ mengetawakan saya / <i>Do not care about the matter/ laugh at me</i> 9. Bercakap ia tidak diperlukan / <i>Say that it is not needed</i> 10. Lain-lain/ <i>Others</i>

SEKSYEN D: KANAK-KANAK**SECTION D: CHILDREN**

D01	Bilakah tarikh terakhir puan bersalin? Nyatakan tarikh. <i>When was your last child birth? Please state date.</i>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> <div style="border: 1px solid black; width: 40px; height: 20px; margin: 0 auto;"></div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Hari/Day Bulan/Month Tahun/Year </div>
D02*	Adakah kandungan puan yang terakhir dirancang atau tidak? <i>Was your last pregnancy planned or not planned?</i>	<ol style="list-style-type: none"> 1. Dirancang / <i>Planned</i> 2. Tidak Dirancang / <i>Not planned</i>
D03	Siapakah yang menjaga puan semasa puan berpantang anak terakhir? <i>Who took care of you during your last confinement period?</i> <i>* Boleh menjawab lebih dari satu jawapan / more than one answer allowed</i>	<ol style="list-style-type: none"> 1. Diri sendiri / <i>Self</i> 2. Suami / <i>Husband</i> 3. Ibu kandung / <i>Biological mother</i> 4. Ibu mertua / <i>Mother-in-law</i> 5. Ibu tiri / <i>Step mother</i> 6. Saudara mara sendiri / <i>Own relatives</i> 7. Saudara mara suami / <i>Husband's relatives</i> 8. Penjaga semasa berpantang / <i>Confinement lady</i> 9. Pembantu rumah / <i>Domestic helper</i> 10. Lain-lain / <i>Others</i> 11. Tidak berpantang / <i>Not observing confinement</i>
D04	Semasa mengandung kali terakhir, bagaimana perasaan Puan terhadap kandungan tersebut? <i>During your last pregnancy, how did you feel about it?</i>	<ol style="list-style-type: none"> 1. Mahu mengandung pada masa itu / <i>Wanted to be pregnant at that time</i> 2. Mahu mangandung dalam masa depan / <i>Wanted to be pregnant in the future</i> 3. Tidak mahu mempunyai anak / <i>Did not want to have children</i> 4. Tidak kisah / <i>Did not care</i> 5. Tidak tahu / <i>Don't know</i>
D05	Semasa mengandung kali terakhir, bagaimana perasaan suami/ pasangan Puan terhadap kandungan tersebut? <i>During your last pregnancy, how was your husband's / current partner's feeling towards the pregnancy?</i>	<ol style="list-style-type: none"> 1. Mahu puan mengandung pada masa itu / <i>Wanted me to be pregnant at that time</i> 2. Mahu puan mangandung dalam masa depan / <i>Wanted me to be pregnant in the future</i> 3. Tidak mahu mempunyai anak / <i>Did not want to have children</i> 4. Tidak kisah / <i>Don't care</i> 5. Tidak tahu / <i>Don't know</i>
D06	Semasa mengandung kali terakhir, adakah suami/pasangan puan menunjukkan minat dalam penjagaan antenatal semasa puan mengandung?	<ol style="list-style-type: none"> 1. Tiada minat / <i>No interest</i> 2. Menghalang puan / <i>Stop you</i> 3. Menggalakkan puan / <i>Encourage you</i>

	<i>Did your husband/ current partner show interest in antenatal care during your pregnancy?</i>	
D07	Adakah suami/pasangan puan mempunyai pilihan jantina anak tersebut? <i>Did your husband/ current partner have a sex preference for the child?</i>	1. Lelaki / Boy 2. Perempuan / Girl 3. Tidak / No
D08	Semasa puan mengandung kali terakhir, adakah puan minum alkohol? <i>During your last pregnancy, did you drink alcohol?</i>	1. Ya / Yes 2. Tidak / Tidak 3. Tidak tahu/ingat / Don't know / remember
D09	Semasa puan mengandung kali terakhir, adakah puan menghisap rokok/ produk tembakau lain? <i>During your last pregnancy, did you smoke cigarettes/ use any other tobacco products?</i>	1. Ya / Yes 2. Tidak / No 3. Tidak tahu / ingat / Don't know / remember
D10	Adakah berat anak puan ditimbang sejurus selepas dilahirkan? <i>Was this child weighed at birth?</i>	1. Ya / Yes 2. Tidak / No 3. Tidak tahu / ingat / Don't know / remember
D11	Berapakah berat anak puan? / <i>What was your child's weight?</i>	1. Dari Ingatan / <i>self-report</i> 2. Dari buku rekod / <i>from record</i> 3. Tidak tahu / ingat / <i>Don't know / remember</i>
D11a	Nyatakan dalam kg: / <i>State in kg:</i>	<input type="text"/> kg
D11b	Nyatakan dalam kg: / <i>State in kg:</i>	<input type="text"/> kg
D12	Adakah puan berasa bahawa masa pantang selepas bersalin berfaedah kepada puan? <i>Do you feel that a confinement period benefited you?</i>	1. Ya / Yes 2. Tidak / No 3. Tidak pasti / <i>Not sure</i>
D13	Adakah puan berpantang selepas bersalin kali terakhir? <i>Did you observed confinement period after your last child birth?</i>	1. Ya / Yes 2. Tidak / No
D13a	Berapa lama masa berpantang itu? <i>How long was the confinement period?</i>	<input type="text"/> Hari / Days
D14	Adakah puan mengikut masa berpantang ini	1. Kehendak saya / <i>My requirement</i>

	<p>disebabkan kehendak ahli keluarga atau sendiri, atau kedua-duanya?</p> <p><i>Did you observed the confinement period due to the requirements of a family member or yourself, or both?</i></p>	<p>2. Kehendak keluarga / <i>Family's requirement</i></p> <p>3. Kedua-duanya / <i>Both</i></p>
D15	<p>Semasa berpantang, apakah tradisi/ amalan yang puan ikut?</p> <p><i>During the confinement period, what traditions did you follow?</i></p> <p>* Boleh menjawab lebih dari satu jawapan / <i>Can be answered more than one answer</i></p>	<p>1. Pemakanan tertentu / <i>Foods eaten / not eaten</i></p> <p>2. Aktiviti dilarang / <i>Activities are prohibited</i></p> <p>3. Pelawat dilarang / <i>Visitors are prohibited</i></p> <p>4. Baring di atas tilam panas / <i>Stay on hot bed</i></p> <p>5. Ahli keluarga dan kawan-kawan menziarahi / <i>Family and friends will visit to play cards and drink</i></p> <p>6. Minum minuman herba panas dengan / tanpa alkohol / <i>Drink special hot herbal drink with or without alcohol</i></p> <p>7. Mandi air panas / <i>Hot water bath</i></p> <p>8. Berurut / <i>Massage</i></p> <p>9. Bengkung / <i>Corset</i></p> <p>10. Bertangas / <i>Herbal steam</i></p> <p>11. Bertungku / <i>Hot steam</i></p> <p>12. Lain-lain / <i>Others</i></p> <p>13. Tidak berpantang / <i>Not observing confinement</i></p>
D16	<p>Bagaimanakah puan menyusui anak ini?</p> <p><i>How do you feed this child?</i></p>	<p>1. Menyusu badan sahaja / <i>Breastfeeding only</i></p> <p>2. Menyusu botol sahaja / <i>Bottle feeding only</i></p> <p>3. Kedua-dua susu badan dan botol / <i>Both breast-feeding and bottle-feeding</i></p>
D17	<p>Adakah susah mendapat susu formula dan / atau air bersih yang secukupnya?</p> <p><i>Is it hard to get sufficient milk formula and / or clean water?</i></p>	<p>1. Ya / <i>Yes</i></p> <p>2. Tidak / <i>No</i></p>

SEKSYEN E: PASANGAN SEMASA ATAU TERKINI
SECTION E: HUSBAND OR CURRENT PARTNER

EA1	Berdasarkan soalan A18, adakah responden mempunyai suami/pasangan ketika ini? <i>Based on question A18, is respondent currently has husband/partner?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
E01	Berapakah umur suami/pasangan puan? <i>How old is your husband/partner?</i>	<input type="text"/> tahun / <i>years</i>
E02	Bilakah tarikh lahir suami/pasangan anda? <i>What is your husband/partner date of birth?</i>	<input type="text"/> <input type="text"/> <input type="text"/> Hari/Day Bulan/Month Tahun/Year
E03	Apakah bangsa suami/pasangan puan? <i>What is your husband's/partner's ethnicity?</i>	1. Melayu / <i>Malays</i> 2. Cina / <i>Chinese</i> 3. India / <i>Indian</i> 4. Iban 5. Bidayuh 6. Lain-lain Bumiputera Sarawak 7. Kadazan 8. Dusun 9. Lain-lain Bumiputera Sabah 10. Orang asal 11. Lain-lain / <i>Others</i>
E04	Apakah agama suami/pasangan puan? <i>What is your husband/partner's religion?</i>	1. Islam / <i>Muslim</i> 2. Buddha / <i>Buddhist</i> 3. Hindu / <i>Hinduism</i> 4. Kristian / <i>Christian</i> 5. Agama lain / <i>Other religion</i> 6. Tiada amalan agama tertentu / <i>No specific religion</i>
E05	Bolehkan suami/pasangan puan membaca dan menulis? <i>Can your husband/partner read and write?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> <input type="text"/>
E06	Adakah suami/pasangan puan pernah bersekolah? <i>Has your husband/partner ever attended school?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
E07	Apakah tahap tertinggi pendidikan suami/pasangan puan? <i>What is your husband's/ partner's highest level of education?</i>	1. Sekolah Rendah 2. <i>Primary School</i> 3. Sekolah Menengah 4. <i>Secondary School</i> 5. Pengajian tinggi (Tingkatan 6/Kolej/Universiti) 6. <i>Higher education (Form 6/College/University)</i>

E07a	Berapa tahun di sekolah rendah? <i>How many years in primary school?</i>	<input type="text"/> Tahun / Years
E07b	Berapa tahun di sekolah menengah? <i>How many years in secondary school?</i>	<input type="text"/> Tahun / Years
E07c	Berapa tahun di kolej atau universiti? <i>How many years in college or university?</i>	<input type="text"/> Tahun / Years
E08	Apakah status pekerjaan suami/pasangan puan? <i>What is your husband's/ partner's occupational status?</i>	<ol style="list-style-type: none"> 1. Bekerja / Working 2. Mencari kerja/ tidak bekerja / Looking for a job/not working 3. Bersara / Retired 4. Belajar / Studying
E09	Jika tidak bekerja, bilakah pekerjaan yang terakhir suami/pasangan puan tamat? <i>If not working, when did your husband's/ partner's last job end?</i>	<ol style="list-style-type: none"> 1. Dalam 4 minggu lalu / Within the last 4 weeks 2. 4 minggu hingga 12 bulan lalu / Last 4-12 months 3. Lebih dari 12 bulan yang lalu / More than 12 months ago 4. Tidak pernah berkerja / Has never worked
E10	Apakah jenis pekerjaan yang suami/pasangan puan biasa lakukan? <i>What type of work does your husband/partner usually do?</i>	<ol style="list-style-type: none"> 1. Professional / Professional 2. Separa mahir / Semi-skilled 3. Tidak mahir/manual / Unskilled/manual 4. Tentera/polis / Army/police 5. Lain-lain / Others
E10a	Sila nyatakan: / Please state:	_____
E11	Apakah sektor pekerjaan suami/pasangan puan? <i>Which sector does your husband/partner work?</i>	<ol style="list-style-type: none"> 1. Kerajaan / Government 2. Swasta / Private 3. Kerja Sendiri / Own business
E12	Adakah suami/pasangan puan minum minuman beralkohol? <i>Does your husband/partner drink alcoholic drinks?</i> Berapa kerapkah suami/pasangan puan minum minuman beralkohol? <i>How often does your husband/partner drink alcohol?</i>	<ol style="list-style-type: none"> 1. Ya, setiap hari / Yes, everyday 2. Ya, sekali hingga dua kali seminggu / Yes, once to twice a week 3. Ya, 1-3 kali sebulan / Yes, 1-3 times a month 4. Ya, kurang dari sekali sebulan / Yes, less than once a month 5. Tidak pernah / Never 6. Tidak tahu / Don't know
E13	Dalam 12 bulan yang lepas, berapa kerapkah puan melihat suami/pasangan puan mabuk? <i>In the last 12 months, how often do you see your husband drunk?</i>	<ol style="list-style-type: none"> 1. Ya, kebanyakan hari / Yes, most days 2. Ya, sekali seminggu / Yes, once a week 3. Ya, sekali sebulan / Yes, once a month 4. Ya, kurang dari sekali sebulan / Yes, less than once a month

		<p>5. Ya, hanya semasa pesta keraian / <i>Yes, only when there is a festival</i></p> <p>6. Tidak pernah / <i>Never</i></p>
E14	<p>Dalam 12 bulan yang lepas, pernahkah puan mengalami mana-mana masalah berikut berkaitan dengan pengambilan alkohol suami/pasangan puan?</p> <p><i>In the last 12 months, have you had any problems involving your husband's/partner's drinking alcoholic drinks?</i></p> <p>* Boleh pilih lebih dari satu jawapan / <i>more than one answer allowed</i></p>	<p>1. Tiada masalah / <i>No problem</i></p> <p>2. Masalah kewangan / <i>Financial problems</i></p> <p>3. Masalah keluarga / <i>Family problems</i></p> <p>4. Lain-lain / <i>Others</i></p>
E15	<p>Adakah suami puan menggunakan dadah?</p> <p><i>Does your husband/partner used drug?</i></p> <p>Berapa kerapkah suami/pasangan puan menggunakan dadah?</p> <p><i>Does your husband/partner use drugs?</i></p>	<p>1. Ya, setiap hari / <i>Yes, everyday</i></p> <p>2. Ya, sekali hingga dua kali seminggu / <i>Yes, once to twice a week</i></p> <p>3. Ya, 1-3 kali sebulan / <i>Yes, 1-3 times a month</i></p> <p>4. Ya, kurang dari sekali sebulan / <i>Yes, less than once a month</i></p> <p>5. Tidak pernah / <i>Never</i></p> <p>6. Tidak tahu / <i>Don't know</i></p>
E16	<p>Sejak puan mengenali suami/pasangan puan, pernahkah suami/pasangan puan terlibat didalam pergaduhan fizikal dengan individu lain?</p> <p><i>Since you have known your husband/partner, has your husband/partner been involved in physical fights with another person?</i></p>	<p>1. Ya / <i>Yes</i></p> <p>2. Tidak / <i>No</i></p> <p>3. Tidak tahu / <i>Don't know</i></p>
E17	<p>Dalam tempoh 12 bulan yang lepas, berapa kalikah suami/pasangan puan terlibat dengan pergaduhan fizikal?</p> <p><i>In the last 12 months, how many times did your husband/partner get into physical fights?</i></p>	<p>1. Sekali atau dua kali / <i>Once or twice a week</i></p> <p>2. Beberapa(3-5 kali) / <i>A few times(3-5 times)</i></p> <p>3. Banyak kali (lebih dari 5 kali) / <i>Many times(more than 5 times)</i></p> <p>4. Tidak tahu / <i>Don't know</i></p>
E18	<p>Pernahkah suami/pasangan puan menjalinkan hubungan seks dengan wanita lain (selain madu) semasa masih bersama dengan puan?</p> <p><i>Did your husband/partner have sexual relationships with other women (besides other wives) while still with you?</i></p>	<p>1. Ya / <i>Yes</i></p> <p>2. Mungkin / <i>Maybe</i></p> <p>3. Tidak / <i>No</i></p> <p>4. Tidak tahu / <i>Don't know</i></p>
E19	<p>Adakah suami/pasangan puan mempunyai anak bersama wanita lain selain madu semasa bersama puan?</p> <p><i>Did your husband/partner have children with other women besides other wives while still with you?</i></p>	<p>1. Ya / <i>Yes</i></p> <p>2. Tidak / <i>No</i></p> <p>3. Mungkin / <i>Maybe</i></p> <p>4. Tidak tahu / <i>Dont know</i></p>

SEKSYEN F: RESPONDEN DAN PASANGANNYA**SECTION F: RESPONDEN AND PARTNER**

Soalan berikutnya adalah mengenai hubungan dengan pasangan yang terkini atau pasangan terdahulu (tidak tinggal bersama pada masa ini)

Next questions are about your relationship with your current partner or previous partners.

F01*	Adakah puan dan pasangan sekarang/ terakhir membincangkan tentang apa yang berlaku <u>kepadanya</u> sepanjang hari? <i>Do you and your last/ current partner discuss what happens <u>to him</u> during the day?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak tahu / <i>Do not know</i>
F02	Adakah puan dan pasangan terkini/ terakhir membincangkan tentang apa yang berlaku <u>kepada puan</u> sepanjang hari? <i>Do you and your last/ current partner discuss what happens <u>to you</u> during the day?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak tahu / <i>Do not know</i>
F03	Adakah puan dan pasangan terkini/ terakhir membincangkan tentang <u>kegusaran atau perasaannya</u> ? <i>Do you and your last/ current partner discuss about his <u>worries or feelings</u>?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak tahu / <i>Do not know</i>
F04	Adakah puan dan pasangan terkini/ terakhir membincangkan tentang <u>kegusaran atau perasaan</u> puan? <i>Do you and your last/ current partner discuss about your <u>worries or feelings</u>?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak tahu / <i>Do not know</i>
F05	Berapa kerapkah puan dan pasangan terkini/ terakhir bertengkar? <i>How often do you and your last/ current partner argue?</i>	1. Tidak pernah / <i>Never</i> 2. Jarang-jarang / <i>Rarely</i> 3. Kadangkala / <i>Sometimes</i> 4. Kerap / <i>Often</i>
F06	Secara am, adakah benar pasangan terkini/ terakhir puan cuba menghalang puan berjumpa rakan-rakan? <i>In general, is it true that your last/ current partner has tried to stop you from meeting your friends?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F07	Secara am, adakah benar pasangan terkini/ terakhir puan menghadkan perhubungan dengan keluarga kandung puan? <i>In general, is it true your last/ current partner limits your relationship with your biological family?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F08	Secara am, adakah benar pasangan terkini/ terakhir puan bertegas untuk mengetahui dimanakah puan setiap masa?	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>

	<i>In general, is it true that your last/ current partner insists to know where you are at all times?</i>	
F09	Secara am, adakah benar pasangan terkini/ terakhir puan tidak mempedulikan puan dan melayan puan seperti puan tidak wujud? <i>In general, is it true that your last/ current partner ignores you and treats you like you do not exist?</i>	1. Ya / Yes 2. Tidak / No
F10	Secara am, adakah benar pasangan terkini/ terakhir puan menjadi marah jika puan bercakap dengan lelaki lain? <i>In general, is it true that your last/ current partner becomes angry if you speak with another man?</i>	1. Ya / Yes 2. Tidak / No
F11*	Secara am, adakah benar pasangan terkini/ terakhir puan berprasangka yang puan tidak setia? <i>In general, is it true that your last/ current partner has suspected you of being unfaithful?</i>	1. Ya / Yes 2. Tidak / No
F12	Secara am, adakah benar pasangan terkini/ terakhir puan mahu puan meminta kebenarannya sebelum mendapatkan penjagaan kesihatan untuk puan? <i>In general, is it true that your last/ current partner wants you to ask his permission before seeking health care for yourself?</i>	1. Ya / Yes 2. Tidak / No
F13	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menghina</u> puan atau membuat puan berasa <u>teruk tentang diri sendiri</u> ? <i>At any time, has your current partner or any partner before this <u>insulted you or made you feel bad about yourself</u>?</i>	1. Ya / Yes 2. Tidak / No
F14	Adakah ini (perkara F13) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F13) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas / No within last 12 months
F15	Jika berlaku dalam 12 bulan yang lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
F16	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>merendahkan</u> atau <u>memalukan</u> puan dihadapan <u>orang lain</u> ? <i>At any time, has your current partner or any</i>	1. Ya / Yes 2. Tidak / No

	<i>partner before this <u>degraded or humiliated you in front of others?</u></i>	
F17	Adakah ini (perkara F16) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F16) happen within the last 12 months?</i>	1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F18	Jika berlaku dalam 12 bulan yang lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F19	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>melakukan perkara untuk mengugut atau menakut-nakutkan puan</u> (contoh: dengan cara dia melihat puan, menjerit atau memecahkan barang)? <i>At anytime, has your current partner or any partner previously do things to threaten or make you scared (example: by the way he looks at you, shouts or break things)?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F20	Adakah ini (perkara F19) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F19) happen within the last 12 months?</i>	1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F21	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F22*	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>mengugut untuk mencederakan puan atau seseorang yang puan ambil berat?</u> <i>At any time, has your current partner or any partner previously <u>treatened to hurt you or somebody whom you cared about?</u></i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F23	Adakah ini (perkara F22) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F22) happen within the last 12 months?</i>	1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F24	Jika berlaku dalam 12 bulan yang lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>

F25	<p>Pernahkan pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menampar puan atau membaling sesuatu pada puan yang boleh mencederakan puan?</u> <i>At any time, has your current partner or any partner before this <u>slapped or thrown something at you that could hurt you?</u></i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F26	<p>Adakah ini (perkara F25) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F25) happen within the last 12 months?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F27	<p>Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i></p>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F28	<p>Pernahkan pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menolak atau menarik puan, atau menarik rambut puan?</u> <i>At any time, has your current partner or any partner before this <u>pushed or grabed you or pulled your hair?</u></i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F29	<p>Adakah ini (perkara F28) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F28) happen within the last 12 months?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F30	<p>Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i></p>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F31*	<p>Pernahkan pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>memukul puan dengan tumbukannya atau sesuatu yang lain yang boleh mencederakan puan?</u> <i>At any time, has your current partner or any partner previously <u>beat you with his fist or anything else that could hurt you?</u></i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F32	<p>Adakah ini (perkara F31) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F31) happen within the last 12 months?</i></p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F33	<p>Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku?</p>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i>

	<i>If it happened in the last 12 months, how often did this happen?</i>	3. Banyak kali / Many times
F34	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>menendang, mengheret atau membelasah puan?</u> <i>At any time, has your current partner or any partner previously <u>kicked, dragged or beaten you?</u></i>	1. Ya / Yes 2. Tidak / No
F35	Adakah ini (perkara F34) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F34) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas / No within last 12 months
F36	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
F37	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>mencekik atau membakar/mencucuh puan dengan sengaja?</u> <i>At any time, has your current partner or any partner <u>previously choked or burnt you on purpose?</u></i>	1. Ya / Yes 2. Tidak / No
F38	Adakah ini (perkara F37) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F37) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas / No within last 12 months
F39	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / Once 2. Beberapa kali / Several times 3. Banyak kali / Many times
F40	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>mengancam puan menggunakan pistol, pisau atau apa-apa senjata lain?</u> <i>At any time, has your current partner or any partner previously <u>threatened you using a gun, knife or any other weapon?</u></i>	1. Ya / Yes 2. Tidak / No
F41	Adakah ini (perkara F40) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F40) happen within the last 12 months?</i>	1. Ya / Yes 2. Tidak dalam 12 bulan lepas / No within last 12 months

F42	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happend in the last 12 months, how often did this happen?</i>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F43*	Pernahkah pada bila-bila waktu, pasangan puan yang sekarang atau mana-mana pasangan sebelum ini <u>memaksa puan secara fizikal untuk hubungan seks bila puan tidak mahu?</u> <i>At any time, has your current partner or any partner previously <u>physically forced you to have sexual intercourse when you did not want to?</u></i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F44	Adakah ini (perkara F43) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F43) happen within the last 12 months?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F45	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F46	Pernahkah puan <u>mengadakan hubungan seksual yang puan tidak inginkan</u> dengan pasangan puan yang sekarang atau sebelumnya <u>kerana takut</u> apa yang mungkin pasangan puan lakukan? <i>Have you ever entered into an <u>unwanted sexual relationship</u> with your partner or any partner previously <u>because of fear</u> of what your partner might do?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F47	Adakah ini (perkara F46) berlaku dalam tempoh 12 bulan yang lepas? <i>Did this (item F46) happen within the last 12 months?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within last 12 months</i>
F48	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	<ol style="list-style-type: none"> 1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F49	Pernahkah pasangan puan memaksa puan untuk melakukan sesuatu hubungan seksual yang puan berasa ianya menjatuhkan maruah atau memalukan? <i>Has your partner forced you to do something sexual that you feel is degrading or humiliating?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F50	Adakah ini (perkara F49) berlaku dalam tempoh 12 bulan yang lepas?	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak dalam 12 bulan lepas / <i>No within</i>

	<i>Did this (item F49) happen within the last 12 months?</i>	<i>last 12 months</i>
F51	Jika berlaku dalam 12 bulan lepas, berapa kerapkah ini berlaku? <i>If it happened in the last 12 months, how often did this happen?</i>	1. Sekali / <i>Once</i> 2. Beberapa kali / <i>Several times</i> 3. Banyak kali / <i>Many times</i>
F52*	Pernahkah puan <u>ditampar, dipukul atau dibelasah</u> oleh mana-mana pasangan semasa mengandung? <i>Have you ever been <u>slapped, hit or beaten</u> by any partner during pregnancy?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F52a	Nyatakan berapa kali: / <i>State how many times:</i>	<input type="text"/> Kali / <i>times</i>
F53	Pernahkah puan <u>ditumbuk atau ditendang di perut semasa mengandung</u> ? <i>Have you ever been <u>punched or kicked in the belly during pregnancy</u>?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F54	Semasa mengandung kali terakhir yang mana Puan dipukul, adakah orang yang memukul itu adalah ayah kepada kandungan itu? <i>During the most recent pregnancy in which you were beaten, was the person who beaten you, the father of the child?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F55	Adakah puan tinggal bersama orang itu ketika kejadian? <i>Were you staying with that person during the incident?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F56	Adakah orang ini melakukan perkara yang sama sebelum puan mengandung? <i>Did this person do the same things before you were pregnant?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
F57	Adakah kekerapan keganasan berubah ketika puan mengandung? <i>Did the frequency of violence change when you were pregnant?</i>	1. Semakin kurang ketika mengandung / <i>Less during pregnancy</i> 2. Sama / <i>Same</i> 3. Semakin teruk semasa mengandung / <i>Getting worse during pregnancy</i>
F58	Bilakah puan mula tinggal bersama dengan suami/pasangan puan yang sekarang? <i>When did you start living together with your latest husband/partner?</i> <i>* jika tidak tinggal bersama pada masa ini tuliskan '01/01/1945' / if do not stay together, write '01/01/1945'</i>	<input type="text"/> <input type="text"/> <input type="text"/> Hari/Day Bulan/Month Tahun/Year

F59*	Adakah pasangan puan yang sekarang, mendera puan secara fizikal atau seksual? <i>Does your current partner abuse you physically or sexually?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak tinggal bersama pasangan / <i>Do not live with partner</i>
F60	Jika pernah didera, bilakah kali pertama ia berlaku? <i>If you have a history of having been abused, when was the first time it happened?</i>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Hari/Day Bulan/Month Tahun/Year </div>
F61	Jika pernah didera, bilakah kali terakhir ia berlaku? <i>If you have a history of having been abused, when was the last time it happened?</i>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Hari/Day Bulan/Month Tahun/Year </div>
F62	Adakah pasangan puan yang dahulu, menzalimi puan secara fizikal atau seksual? <i>Did your previous partner abuse you physically or sexually?</i>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i> 3. Tidak mempunyai pasangan dahulu / <i>Do not have any previous partner</i>
F63	Jika pernah didera, bilakah kali pertama ia berlaku? <i>If you have a history of having been abused, when was the first time it happened?</i>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Hari/Day Bulan/Month Tahun/Year </div>
F64	Jika pernah didera, bilakah kali terakhir ia berlaku? <i>If you have a history of having been abused, when was the last time it happened?</i>	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 50px; height: 25px; display: flex; align-items: center; justify-content: center;"> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Hari/Day Bulan/Month Tahun/Year </div>

SEKSYEN G: KECEDERAAN**SECTION G: INJURY**

Saya ingin mengetahui dengan lebih lanjut tentang kecederaan yang puan alami dari mana-mana perbuatan pasangan puan yang telah kita pertanyakan. Kecederaan bermaksud apa-apa bahaya fizikal termasuk luka, terseliuh, kelecuman, patah tulang atau gigi atau apa-yang seperti itu.

I would like to know more about the injuries that you have suffered resulting from any action from your partner that we have asked previously. Injury means any physical injuries including wounds, sprains, burns, broken bone or teeth or anything similar to these injuries.

G01*	Pernahkah puan tercedera akibat daripada perbuatan oleh (mana-mana) suami/pasangan puan? <i>Have you ever been injured due to the actions (any of) your husband/partner?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
G02	Dalam hidup puan, berapa banyak kalikah puan dcederakan oleh (mana-mana) suami/pasangan puan? <i>In your life, how many times have you been injured by (any of) your husband/partner?</i>	1. Sekali/dua / <i>Once/twice</i> 2. Beberapa kali (3-5) / <i>Several time(3-5)</i> 3. Banyak kali (lebih dari 5) / <i>Many times (more then 5)</i>
G03	Adakah ini berlaku dalam 12 bulan yang lepas? <i>Did this happen within the past 12 months?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
G04	Apakah jenis kecederaan yang puan pernah hadapi? (Pilih semua yang berkenaan) <i>What is the type of injury that you have already suffered? (Choose all that applies)</i> * Boleh menjawab lebih dari satu jawapan / <i>multiple answers allowed</i>	1. Luka, tikaman, gigitan / <i>Wound, stab, bite</i> 2. Calar, melecet, lebam / <i>Scratches, abrasions, bruises</i> 3. Terseliuh, terkehel sendi / <i>Sprain, dislocation of joints</i> 4. Terbakar / <i>Burnt</i> 5. Kecederaan tembus, luka yang dalam, terkoyak / <i>Penetrating injuries, deep wounds, lacerations</i> 6. Kecederaan gegendang telinga, kecederaan mata / <i>Eardrum injuries, eye injuries</i> 7. Patah / <i>Broken</i> 8. Kecederaan dalaman / <i>Internal injuries</i> 9. Lain-lain / <i>Others</i>
G05	Dalam hidup puan, pernahkah puan tidak sedarkan diri (pengsan) disebabkan apa yang dilakukan oleh (mana-mana) suami/pasangan puan? <i>In your life, have you ever lost consciousness due to what (any of) your husband/partner has done to you?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>

G06	Pernahkah ini berlaku dalam 12 bulan yang lepas? <i>Did this happen in the past 12 months?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
G07	Sepanjang hayat puan, pernahkah puan dimasukkan ke wad disebabkan kecederaan ini? <i>In your life, have you ever been hospitalized due to injury?</i> <i>*kecuali wad pemerhatian / except for observational ward</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
G08	Jika pernah dimasukkan ke wad, berapa malam? <i>If ever been admitted, how many nights?</i>	<input type="text"/> Malam / <i>Nights</i>
G09	Adakah puan memberitahu anggota kesihatan tentang penyebab sebenar kecederaan puan? <i>Did you tell health workers about the real cause of your injury?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>

**SEKSYEN H: IMPAK & CARA MENANGANI MASALAH/
SECTION H: IMPACT & WAYS TO DEAL WITH PROBLEMS**

<p>HA1 *</p>	<p>Adakah responden terlibat dengan keganasan rumah tangga? <i>Is respondent involved in domestic violence?</i> PENTING! Responden perlu dirujuk kepada pakar sekiranya terdapat keganasan rumah tangga. IMPORTANT! Respondent need to be referred to specialist, if there are any domestic violence.</p>	<ol style="list-style-type: none"> 1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
<p>H01</p>	<p>Adakah situasi berikut lebih berkemungkinan membawa kepada keganasan suami/pasangan? <i>Is there a particular situation that is more likely to lead to your husband's/partner's violence?</i> * <i>Pilih semua yang berkaitan / Select all that apply</i></p>	<ol style="list-style-type: none"> 1. Tiada sebab tertentu / <i>There is no particular reason</i> 2. Apabila dia mabuk / <i>When he was drunk</i> 3. Apabila dia dibawah pengaruh dadah / <i>When he was under the influence of drug</i> 4. Masalah kewangan / <i>Financial problem</i> 5. Kesukaran di tempat kerja / <i>Difficulties at work</i> 6. Apabila dia tiada pekerjaan / <i>When he had no job</i> 7. Tiada makanan di rumah / <i>There is no food at home</i> 8. Masalah dengan keluarganya atau keluarga puan / <i>Problems with his family and your family</i> 9. Puan mengandung / <i>You are pregnant</i> 10. Dia merasa cemburu terhadap puan / <i>He was jealous of you</i> 11. Puan menolak seks / <i>You refuse sex</i> 12. Puan tidak taat / <i>You do not obey</i> 13. Puan mengalami ketidakupayaan / <i>You have a disability</i> 14. Lain-lain / <i>Others</i>
<p>H02</p>	<p>Sejauh manakah tingkahlaku suami/ pasangan puan terhadap puan memberi kesan kepada kesihatan fizikal dan mental puan? <i>How much does you husband's/partner's actions towards you affect your physical and mental health?</i></p>	<ol style="list-style-type: none"> 1. Tiada kesan / <i>No effect</i> 2. Sedikit / <i>Less</i> 3. Banyak / <i>Many</i>
<p>H03</p>	<p>Adakah tingkahlaku suami/pasangan puan mengganggu pekerjaan puan atau aktiviti yang menghasilkan pendapatan puan? <i>How does the behavior of your partner husband/partner's interfere with your job or your income-generating activities?</i></p>	<ol style="list-style-type: none"> 1. Tidak berkaitan (tidak bekerja) / <i>Not applicable (no work)</i> 2. Pekerjaan tidak terganggu / <i>Work is not interrupted</i> 3. Pasangan mengganggu pekerjaan / <i>Partner interfere with work</i>

	<p><i>* Pilih semua yang berkaitan / Select all that apply</i></p>	<p>4. Tidak dapat menumpukan perhatian / <i>Could not concentrate</i></p> <p>5. Tidak dapat bekerja/cuti sakit / <i>Unable to work/sick leave</i></p> <p>6. Hilang keyakinan di atas keupayaan sendiri / <i>Loss of confidence in own ability</i></p> <p>7. Lain-lain / <i>Others</i></p>
H04	<p>Siapakah yang telah puan beritahu mengenai tingkahlaku suami/pasangan? <i>Who have you told about the behavior of your husband/partner?</i></p> <p><i>* Pilih semua yang berkaitan / Select all that apply)</i></p>	<p>1. Tiada / <i>No one</i></p> <p>2. Kawan-kawan / <i>Friends</i></p> <p>3. Ibumama / <i>Parents</i></p> <p>4. Adik beradik / <i>Siblings</i></p> <p>5. Pakcik atau makcik / <i>Uncle or aunt</i></p> <p>6. Keluarga suami/pasangan / <i>Your husband's/ partner's family</i></p> <p>7. Anak-anak / <i>Child</i></p> <p>8. Jiran / <i>Neighbor</i></p> <p>9. Polis / <i>Police</i></p> <p>10. Doktor/anggota kesihatan / <i>Doctor/health worker</i></p> <p>11. Ahli agama / <i>Religious members</i></p> <p>12. Kaunselor / <i>Counselor</i> Organisasi bukan kerajaan (NGO) atau pertubuhan wanita / <i>Non-Governmental Organization(NGO) or Women's organization</i></p> <p>13. Pemimpin setempat / <i>Local leaders</i> Lain-lain / <i>Others</i></p>
H05	<p>Adakah sesiapa cuba membantu puan? <i>Did anyone try to help you?</i></p> <p><i>* Pilih semua yang berkaitan / select all that apply</i></p>	<p>1. Tiada / <i>None</i></p> <p>2. Kawan-kawan / <i>Friends</i></p> <p>3. Ibumama / <i>Parents</i></p> <p>4. Adik beradik / <i>Siblings</i></p> <p>5. Pakcik atau makcik / <i>Uncle or aunt</i></p> <p>6. Keluarga suami/pasangan / <i>Your husband's/ partner's family</i></p> <p>7. Anak-anak / <i>Child</i></p> <p>8. Jiran / <i>Neighbor</i></p> <p>9. Polis / <i>Police</i></p> <p>10. Doktor/anggota kesihatan / <i>Doctor/health worker</i></p> <p>11. Ahli agama / <i>Religious members</i></p> <p>12. Kaunselor / <i>Counselor</i></p> <p>13. Organisasi bukan kerajaan (NGO) atau pertubuhan wanita / <i>Non-Government Organization(NGO) or women's organization</i></p> <p>14. Pemimpin setempat / <i>Local leaders</i></p> <p>15. Lain-lain / <i>Others</i></p>

H06	Adakah puan pernah mendapatkan bantuan pihak polis? <i>Did you ever try to get police help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H07	Adakah puan pernah ke hospital atau pusat kesihatan untuk mendapatkan bantuan? <i>Have you ever been to a hospital or health center to get help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H08	Adakah puan pernah ke pusat khidmat nasihat guaman/perundangan untuk mendapatkan bantuan? <i>Have you ever been to legal advice/legal assistance centres to seek help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H09	Adakah puan pernah ke mahkamah untuk mendapatkan bantuan? <i>Have you ever gone to court to get help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H10	Adakah puan pernah ke tempat perlindungan untuk mendapatkan bantuan? <i>Have you ever gone to shelters to seek help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H11	Adakah puan pernah menemui pemimpin setempat untuk mendapatkan bantuan? <i>Have you ever gone to local leaders to seek help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H12	Adakah puan pernah ke Pertubuhan Wanita untuk mendapatkan bantuan? <i>Have you ever gone to women's organization to seek help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H13	Adakah puan pernah menemui ahli agama untuk mendapatkan bantuan? <i>Have you ever gone to religious members for help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H14	Adakah puan pernah pergi kemana-mana tempat lain (selain yang telah dinyatakan) untuk mendapatkan bantuan? <i>Have you ever gone anywhere else (other than mentioned) for help?</i>	1. Ya / <i>Yes</i> 2. Tidak / <i>No</i>
H15	Apakah sebab-sebab puan tidak mendapatkan bantuan (Pilih semua yang berkenaan) <i>What are the reasons that you did not get help ? (Choose all that apply)</i>	1. Tidak tahu/tiada jawapan / <i>Don't know/no answer</i> 2. Takut kepada ancaman/akibat/lebih keganasan / <i>Scared of threats/consequences/more violence</i> 3. Keganasan adalah normal/tidak serius / <i>Violence is normal/not serious</i> 4. Malu/segan/takut tidak dipercayai atau dipersalahkan / <i>Ashamed/unsure/</i>

		<p><i>afraid of not being trusted or blamed</i></p> <p>5. Percaya/rasa tidak akan dibantu/mengetahui adawanita lain tidak dibantu / <i>Believe/feel will not be helped/knowing other women were not helped</i></p> <p>6. Takut ia akan mengakhiri perhubungan / <i>Afraid it would end the relationship</i></p> <p>7. Takut kehilangan anak-anak / <i>Afraid of losing the children</i></p> <p>8. Memburukkan nama keluarga / <i>Bring disgrace to the family</i></p> <p>9. Tidak berkenaan / <i>Not applicable</i></p>
H16	<p>Adakah sesiapa yang puan lebih suka untuk mendapatkan bantuan? (Pilih semua yang berkenaan)</p> <p><i>Is there anyone you prefer to get help from? (Choose all that apply)</i></p>	<p>1. Tiada / <i>None</i></p> <p>2. Keluarga / <i>Family</i></p> <p>3. Ibu puan / <i>Your mother</i></p> <p>4. Ibu pasangan puan / <i>Mother in-law</i></p> <p>5. Pusat kesihatan / <i>Health center</i></p> <p>6. Polis / <i>Polis</i></p> <p>7. Ahli agama / <i>Religious members</i></p> <p>8. Pemimpin setempat / <i>Local leaders</i></p> <p>9. Lain-lain / <i>Others</i></p>
H17	<p>Adakah puan pernah meninggalkan rumah walaupun hanya satu malam kerana tingkahlaku suami/pasangan puan?</p> <p><i>Have you ever left home even for one night because of your husband's/partner's actions?</i></p>	<p>1. Ya / <i>Yes</i></p> <p>2. Tidak / <i>No</i></p>
H18	<p>Jika pernah meninggalkan rumah, berapa kali?</p> <p><i>If ever left home, how many times?</i></p>	<p><input type="text"/> Kali / times</p>

7. APPENDIX 2

Sila **TANDAKAN** (/) pada pilihan jawapan yang paling hampir bagi menggambarkan apa yang anda telah rasakan **DALAM MASA 7 HARI YANG LALU** dan bukan sekadar hari ini sahaja. Sila jawab kesemua soalan (10 pernyataan). Terima kasih

Dalam masa 7 hari yang lalu:

1. Saya dapat ketawa dan melihat kelucuan pada sesuatu perkara
 - Sebanyak mana biasa
 - Kurang daripada biasa
 - Sangat kurang daripada biasa
 - Tiada langsung

2. Saya menanti dengan penuh harapan bagi mendapatkan kenikmatan apabila melakukan sesuatu perkara
 - Sebanyak mana biasa
 - Agak urang daripada biasa
 - Sangat kurang daripada biasa
 - Tiada pernah langsung

3. Saya menyalahkan diri sendiri secara tidak sepatutnya apabila sesuatu yang tidak kena terjadi
 - Ya, sepanjang masa
 - Ya, kadangkala
 - Jarang sekali
 - Tiada pernah

4. Saya berasa risau atau bimbang tanpa sebab
 - Tidak langsung
 - Amat jarang sekali
 - Ya, kadangkala
 - Ya, sangat kerap

5. Saya berasa takut atau panik tanpa sebab
 - Ya, sangat kerap
 - Ya, kadangkala
 - Jarang sekali
 - Tiada pernah

6. Saya dibebani oleh terlalu banyak masalah
 - Ya, kebanyakan masa saya tidak berupaya menanganinya langsung
 - Ya, kadangkala saya tidak berupaya menanganinya seperti biasa
 - Tidak, kebanyakan masa saya berupaya menanganinya sengan baik
 - Tidak, saya berupaya menangani semua masalah dengan baik pada setiap masa

7. Saya berasa sungguh sedih sehingga saya mengalami kesukaran untuk tidur
 - Kebanyakan masa
 - Kadang-kadang
 - Jarang-jarang sekali
 - Tidak pernah

8. Saya berasa sedih atau serabut
 - Ya, kebanyakan masa
 - Ya, agak kerap
 - Jarang-jarang sekali
 - Tidak pernah

9. Saya berasa sangat sedih sehingga saya menangis

- Ya, kebanyakan masa
- Ya, agak kerap
- Hanya sekali sekala
- Tidak pernah

10. Pernah terlintas di fikiran saya keinginan untuk mencederakan diri sendiri

- Ya, kebanyakan masa
- Ya, agak kerap
- Amat jarang sekali
- Tidak pernah

7.2 Mini-International Neuropsychiatric Interview (MINI)

No	Soalan / Question	Respon / Response
A1	Adakah anda sentiasa merasa murung atau sedih, pada kebanyakan hari, hampir setiap hari, sepanjang dua minggu yang lepas? <i>Have you been consistently depressed or down, most of the day, nearly every day, for the past two weeks?</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
A2	Dalam dua minggu yang lepas, adakah anda kurang minat dalam kebanyakan perkara atau rasa kurang seronok melakukan perkara yang biasanya anda nikmati sebelum ini? <i>In the past two weeks, have you been less interested in most things or less able to enjoy the things you used to enjoy most of the time?</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
	ADAKAH A ATAU B DIKODKAN YA? <i>IS A OR B CODED YES?</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
A3	Sepanjang dua minggu lepas, bila anda merasa murung atau tidak mempunyai minat: <i>Over the past two weeks, when you felt depressed or uninterested:</i>	
a	Adakah selera anda berkurangan atau bertambah hampir setiap hari? Adakah berat badan berkurangan atau bertambah tanpa anda cuba menurun atau menambahkan berat badan (iaitu, dengan $\pm 5\%$ berat badan atau ± 3.5 kg dalam satu bulan untuk individu yang beratnya 70 kg)? JIKA YA UNTUK SALAH SATU, MASUKKAN KOD 'YA'. <i>Was your appetite decreased or increased nearly every day? Did your weight decrease or increase without trying intentionally (i.e., by $\pm 5\%$ of body weight or ± 8 lbs. or ± 3.5 kgs., for a 160 lb./70 kg. person in a month)? IF YES TO EITHER, CODE YES.</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
b	Adakah anda mengalami masalah tidur hampir setiap malam? (sukar untuk tidur, terjaga di tengah malam, terjaga lebih awal dari sepatutnya atau tidur secara berlebihan)? <i>Did you have trouble sleeping nearly every night (difficulty falling asleep, waking up in the middle of the night, early morning waking or sleeping excessively)?</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
c	Adakah anda bercakap atau bergerak lebih perlahan dari biasa atau resah gelisah atau sukar untuk duduk diam pada kebanyakan hari? <i>Did you talk or move more slowly than normal or were you fidgety, restless or having trouble sitting still almost every day?</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
d	Adakah anda rasa letih atau tidak bertenaga pada kebanyakan hari? <i>Did you feel tired or without energy almost every day?</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
e	Adakah anda rasa tidak berguna atau rasa bersalah pada kebanyakan hari? <i>Did you feel worthless or guilty almost every day</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes
f	Adakah anda susah untuk menumpukan perhatian atau sukar membuat keputusan pada kebanyakan hari? <i>Did you have difficulty concentrating or making decisions almost every day</i>	<input type="checkbox"/> Tidak / No <input type="checkbox"/> Ya / Yes

g	Adakah anda berulang kali terfikir untuk mencederakan diri anda, rasa ingin membunuh diri atau merasakan lebih baik anda mati? <i>Did you repeatedly consider hurting yourself, feel suicidal, or wish that you were dead?</i>	<input type="checkbox"/>	Tidak / No Ya / Yes
	ADAKAH 5 ATAU LEBIH JAWAPAN (A1-A3) DIKODKAN YA? <i>ARE 5 OR MORE ANSWERS (A1-A3) CODED YES?</i>		

7.3 Beck Depression Inventory (BDI)

BECK DEPRESSION INVENTORY-MALAY

Firdaus Mukhtar & Tian PS Oei (2008) Exploratory and Confirmatory Factor Validation and Psychometric Properties of Beck Depression for Malays (BDI-Malay) in Malaysia, Malaysian Journal of Psychiatry E-Journal, Vol. 17, No.1

Soal-selidik ini mengandungi 21 kumpulan pernyataan. Setelah anda membaca semua kumpulan pernyataan ini dengan teliti, bulatkan nombor (0, 1, 2, 3) yang terdapat disebelah setiap pernyataan yang menerangkan bagaimana perasaan anda pada minggu lepas, termasuk hari ini. Sekiranya pernyataan di dalam kumpulan itu memberi jumlah yang samarata, **bulatkan salah satu**. Pastikan anda baca pernyataan untuk setiap kumpulan tersebut dengan teliti sebelum membuat keputusan.

<p>1 Kesedihan</p> <p>0 Saya tak rasa sedih</p> <p>1 Saya rasa sedih</p> <p>2 Saya kesedihan sepanjang masa dan sukar meredakannya</p> <p>3 Saya sangat sedih atau tak gembira sehingga tak mampu menanggungnya lagi</p> <p>2 Pesimis</p> <p>0 Saya tak rasa lemah semangat mengenai masa depan</p> <p>1 Saya rasa lemah semangat tentang masa depan</p> <p>2 Saya rasa tiada apa yang hendak diharapkan</p> <p>3 Saya rasa masa depan saya mengecewakan dan keadaan takkan bertambah baik</p> <p>3 Kegagalan Lalu</p> <p>0 Saya tak rasa saya seorang yang gagal</p> <p>1 Saya rasa saya dah gagal lebih dari orang biasa</p> <p>2 Apabila terkenangkan masa lalu, saya hanya nampak banyak kegagalan</p> <p>3 Saya rasa saya seorang manusia yang benar-benar gagal</p> <p>4 Hilang Kepuasan</p> <p>0 Saya dapat kepuasan daripada perkara yang pernah saya lakukan</p> <p>1 Saya tak seronok seperti dulu</p> <p>2 Saya tak dapat kepuasan sebenar daripada apa sahaja</p> <p>3 Saya tak puas hati atau bosan dengan segalanya.</p> <p>5 Rasa Bersalah</p> <p>0 Saya tak rasa begitu bersalah</p> <p>1 Saya rasa bersalah sekali-sekala sahaja</p> <p>2 Saya rasa agak bersalah hampir setiap masa</p> <p>3 Saya rasa bersalah sepanjang masa</p>	<p>6 Rasa Dihukum</p> <p>0 Saya tak rasa saya sedang dihukum</p> <p>1 Saya rasa saya mungkin dihukum</p> <p>2 Saya percaya saya akan dihukum</p> <p>3 Saya rasa saya sedang dihukum</p> <p>7 Tidak suka diri sendiri</p> <p>0 Saya tak rasa kecewa dengan diri saya</p> <p>1 Saya kecewa dengan diri saya</p> <p>2 Saya rasa meluat dengan diri saya</p> <p>3 Saya benci diri saya</p> <p>8 Kritik diri sendiri</p> <p>0 Saya tak rasa saya lebih teruk daripada orang lain</p> <p>1 Saya sentiasa mencari kelemahan dan kesilapan diri sendiri</p> <p>2 Saya menyalahkan diri saya setiap kali berlaku kesilapan</p> <p>3 Saya menyalahkan diri sendiri atas setiap perkara buruk yang berlaku</p> <p>9 Fikir untuk bunuh diri</p> <p>0 Saya tak terfikir untuk bunuh diri</p> <p>1 Saya ada terfikir untuk bunuh diri, tapi saya tak akan melakukannya</p> <p>2 Saya ingin bunuh diri</p> <p>3 Saya akan bunuh diri jika berpeluang</p> <p>10 Menangis</p> <p>0 Saya tak menangis lagi daripada kebiasaannya</p> <p>1 Saya kerap menangis sekarang daripada biasa</p> <p>2 Saya kini menangis sepanjang masa</p> <p>3 Saya biasanya boleh menangis, tapi kini saya tak dapat menangis walaupun saya mahu</p>
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11 Sakit hati

- 0 Saya tidak lagi sakit hati seperti sebelum ini
- 1 Saya lebih mudah meradang atau sakit hati daripada biasa
- 2 Saya rasa sakit hati sepanjang masa
- 3 Saya tak lagi rasa sakit hati dengan perkara yang selalunya menyakitkan hati saya sebelum ini

12 Hilang minat

- 0 Saya tak hilang minat terhadap orang lain
- 1 Saya kurang minat terhadap orang lain berbanding dulu
- 2 Saya hampir hilang minat terhadap orang lain
- 3 Saya tak berminat langsung dengan orang lain

13 Sukar buat keputusan

- 0 Saya cuba buat keputusan sebaik mungkin
- 1 Saya lebih sering menanguh urusan membuat keputusan
- 2 Saya sukar buat keputusan berbanding dulu
- 3 Saya tidak lagi mampu membuat keputusan

14 Tak berguna

- 0 Saya tak kelihatan teruk berbanding dulu
- 1 Saya risau kelihatan tua atau tak menarik
- 2 Saya rasa ada perubahan kekal pada penampilan saya yang membuat saya kelihatan kurang menarik
- 3 Saya percaya saya kelihatan hodoh

15 Hilang tenaga

- 0 Saya boleh bekerja dengan baik seperti biasa
- 1 Ia mengambil usaha yang lebih untuk memulakan sesuatu kerja
- 2 Saya harus memaksa diri saya untuk buat sesuatu
- 3 Saya tak boleh lansung membuat apa-apa kerja

16 Perubahan tidur

- 0 Saya boleh tidur macam biasa
- 1 Saya tak tidur nyenyak seperti biasa dan sukar untuk tidur semula
- 2 Saya terjaga 1-2 jam awal daripada biasa dan sukar untuk tidur semula
- 3 Saya bangun awal beberapa jam daripada biasa dan tak boleh tidur semula

17 Terganggu

- 0 Saya tak rasa letih lebih dari biasa
- 1 Saya lebih mudah letih dari biasa
- 2 Saya letih ketika melakukan apa saja
- 3 Saya terlalu letih untuk buat apa sahaja

18 Perubahan selera

- 0 Selera makan saya tak seteruk dulu
- 1 Selera makan saya tak sebagus seperti selalu
- 2 Selera makan saya makin teruk
- 3 Saya langsung tak ada selera

19 Masalah berat badan

- 0 Saya tak hilang banyak berat badan akhir-akhir ini
- 1 Saya hilang berat badan lebih dari lima paun
- 2 Saya hilang berat badan lebih dari 10 paun
- 3 Saya hilang berat badan lebih dari 15 paun

20 Risau keadaan fizikal

- 0 Saya tak lagi bimbangkan kesihatan saya lagi seperti kebiasaannya
- 1 Saya risau masalah fizikal seperti sengal dan kesakitan; perut sebu; atau sembelit
- 2 Saya risau dengan masalah fizikal ini hingga sukar untuk memikirkan perkara lain
- 3 Saya sangat risau dengan masalah fizikal saya sehinggakan langsung tak dapat fikir hal lain

7.4 Automatic Thoughts Questionnaire (ATQ)

AUTOMATIC THOUGHTS QUESTIONNAIRE- MALAY

Oei, T.P.S, & Mukhtar, Firdaus (2007) Exploratory and confirmatory factor analysis and psychometric properties of Automatic Thoughts Questionnaire-Malay, Hong Kong Journal of Psychiatry, Vol. 18, 3, 92-100

Arahan:

Tersenarai di bawah adalah pelbagai jenis fikiran yang terlintas di kepala seseorang. Sila baca fikiran tersebut dan tentukan berapa kerap anda ada terlintas fikiran tersebut pada beberapa minggu yang lepas. Sila baca setiap item dengan teliti dan bulatkan jawapan yang berkenaan mengikut skala ini (1- tak ada langsung); 2- kadang-kadang; 3- agak kerap; 4- selalu dan 5- sepanjang masa)

1	Saya tak bagus	1	2	3	4	5
2	Kenapa saya tak pernah berjaya?	1	2	3	4	5
3	Tak ada siapa memahami saya	1	2	3	4	5
4	Saya tak rasa saya boleh teruskan hidup	1	2	3	4	5
5	Tak ada apa yang bagus lagi	1	2	3	4	5
6	Saya tak boleh tahan lagi	1	2	3	4	5
7	Saya tak boleh nak memulakan apapun	1	2	3	4	5
8	Kenapa dengan saya?	1	2	3	4	5
9	Saya tak boleh buat apa pun	1	2	3	4	5
10	Saya mahu melenyapkan diri	1	2	3	4	5
11	Apa yang tak kena dengan saya?	1	2	3	4	5
12	Saya seorang yang malang	1	2	3	4	5
13	Masa depan saya tak tentu arah	1	2	3	4	5
14	Saya rasa tidak berdaya	1	2	3	4	5
15	Mesti ada yang tak kena dengan diri saya	1	2	3	4	5
16	Ia memang tak berbaloi	1	2	3	4	5
17	Saya tak boleh siapkan apa pun	1	2	3	4	5

