

Supplementary Table S1: Definitions of the variables

No.	Variables (Operational definition)	Description	Type of variable
1	Antenatal code	<ul style="list-style-type: none"> • White • Green • Yellow • Red 	Categorical
2	Age	Maternal age in completed years	Interval
3	Ethnicity -according to paternal side	<ul style="list-style-type: none"> • Malay • Chinese • Indian • Others 	Categorical
4	Religion	<ul style="list-style-type: none"> • Islam • Buddha • Hindu • Christian • Others 	Categorical
5	Marital status	<ul style="list-style-type: none"> • Single • Married • Divorced • Widow 	Categorical
6	Education level - highest attained	<ul style="list-style-type: none"> • Primary education • Secondary education • Diploma/ Technical studies • Tertiary education • Never been to school /No schooling 	Categorical
7	Occupation	<ul style="list-style-type: none"> • Unemployed • Routine and manual occupations • Intermediate occupations • Higher level: managerial, administrative or professional 	Categorical
8	Duration of marriage	Duration of marriage in completed years	Interval
9	Husband occupation	<ul style="list-style-type: none"> • Unemployed • Routine and manual occupations • Intermediate occupations • Higher level: managerial, administrative or professional occupations 	Categorical
10	Combined household income	<ul style="list-style-type: none"> • <RM1000 • RM1000-RM5000 • RM5000-RM10,000 • >RM10,000 	Categorical

11	Smoking status -all types	<ul style="list-style-type: none"> • Yes, intensity – no of stick(s) • No • Ex-smoker 	Categorical
12	Alcohol status -all types	<ul style="list-style-type: none"> • Yes • No • Currently stopped 	Categorical
13	Husband practicing polygamy	<ul style="list-style-type: none"> • Yes • No 	Categorical
14	If polygamy, wife no	<ul style="list-style-type: none"> • 1 • 2 • 3 • 4 	Categorical
15	No of children	<ul style="list-style-type: none"> • 0 • 1 • 2 • 3 • 4 • >5 	Ordinal
16	Pre-pregnancy baby gender preference	<ul style="list-style-type: none"> • Male • Female • No preference 	Categorical
17	Antenatal care	<ul style="list-style-type: none"> • Government • Private • None 	Categorical
18	Planned pregnancy -Is the current pregnancy planned and not unexpected?	<ul style="list-style-type: none"> • Yes • No 	Categorical
19	Satisfied with marriage -self-report	<ul style="list-style-type: none"> • Yes • No 	Categorical
20	Marital problems -respondent's own perception of her marriage	<ul style="list-style-type: none"> • Yes • No 	Categorical
21	Period of marital problems	<ul style="list-style-type: none"> • Before child delivery • After child delivery 	Categorical
22	Stable relationship with husband - self-report	<ul style="list-style-type: none"> • Yes • No 	Categorical
23	Domestic violence -Self-report of physical or emotional abuse at home before marriage	<ul style="list-style-type: none"> • Yes • No 	Categorical
24	Domestic violence in this marriage and during pregnancy	<ul style="list-style-type: none"> • Yes • No 	Categorical

25	Relationship with parents -respondent's own perception of the relationship between the mother and her parents	<ul style="list-style-type: none"> • Yes • No 	Categorical
26	Relationship with parent in law - respondent's own perception of the relationship between her and her parent-in-law	<ul style="list-style-type: none"> • Yes • No 	Categorical
27	Underlying medical illness before pregnancy -Any underlying diabetes, hypertension, asthma or any other chronic illnesses	<ul style="list-style-type: none"> • Yes • No 	Categorical
28	Underlying medical illness during pregnancy -Hypertension, gestational diabetes etc.	<ul style="list-style-type: none"> • Yes • No 	Categorical
29	History of miscarriage -any history of abortion before 22 weeks in previous pregnancy	<ul style="list-style-type: none"> • Yes • No 	Categorical
30	Underlying mental illness -Diagnosed of having mental illness prior to pregnancy	<ul style="list-style-type: none"> • Yes • No 	Categorical
31	History of mental illness during pregnancy -Diagnosed of having mental illness during her current pregnancy	<ul style="list-style-type: none"> • Yes • No 	Categorical
32	History of mental illness during postpartum period -Diagnosed of having mental illness during her postpartum period	<ul style="list-style-type: none"> • Yes • No 	Categorical
33	Family history of mental illness -Is there any parents of 1 st degree relative being diagnosed of having mental illness?	<ul style="list-style-type: none"> • Yes • No 	Categorical
34	Inadequate help from spouse during postpartum period - respondent's own perception of inadequate support during postpartum period	<ul style="list-style-type: none"> • Yes • No 	Categorical
35	Inadequate help from other family members during postpartum period - respondent's own perception of inadequate support during postpartum period	<ul style="list-style-type: none"> • Yes • No 	Categorical
36	Inadequate help from others during postpartum period	<ul style="list-style-type: none"> • Yes 	Categorical

	- respondent's own perception of inadequate support during postpartum period	<ul style="list-style-type: none"> • No 	
37	Inability to establish breast feeding -the inability to exclusively breast feed, requiring top up using formula milk	<ul style="list-style-type: none"> • Yes • No 	Categorical
38	No confidence to care for the child -the inability of the mother to care for the baby, thus being dependent on others	<ul style="list-style-type: none"> • Yes • No 	Categorical
39	Experienced stressful life events -any recent events, occurred during antenatal and postpartum period such as financial burden, passing of loved ones or events that are perceived as stressful by respondent	<ul style="list-style-type: none"> • Yes • No 	Categorical
40	Any cultural taboos observed during postnatal care that contribute to mother's stress	<ul style="list-style-type: none"> • Yes • No 	Categorical
41	With whom respondent observed postnatal care during confinement	<ul style="list-style-type: none"> • Parents • Parents in law • Husband • Confinement lady/ centre • Alone 	Categorical
42	Inadequate help to take care of new born at night - self-report	<ul style="list-style-type: none"> • Yes • No 	Categorical
43	Inadequate sleep/rest - respondent's own perception of inadequate sleep or rest during postpartum period	<ul style="list-style-type: none"> • Yes • No 	Categorical
44	Dissatisfied with body weight and appearance post delivery - respondent's own perception on the satisfaction of her body weight and appearance post delivery	<ul style="list-style-type: none"> • Yes • No 	Categorical
45	Intrapartum experience - respondent's own perception of having bad experiences during labour. E.g.: unbearable pain	<ul style="list-style-type: none"> • Yes • No 	Categorical
46	Mode of delivery	<ul style="list-style-type: none"> • SVD 	Categorical

		<ul style="list-style-type: none"> • Instrumental delivery • Planned caesarean section • Emergency caesarean section 	
47	Postnatal complication -experienced wound pain, wound breakdown, readmission to ward	<ul style="list-style-type: none"> • Yes • No • 	Categorical
48	Type of complication	List complication	Categorical
49	Readmission after discharge during postpartum period	<ul style="list-style-type: none"> • Yes • No 	Categorical
50	Outcome of the baby	<ul style="list-style-type: none"> • Alive • Gender • Birth weight • Twins • Gestational weight • Admission to ward • Medical complication 	Categorical
51	Edinburgh Postpartum Depression scale scoring (Less than 11 – no postpartum depression 11 or more – postpartum depression)	<p>Total score (range 0 - 30)</p> <ul style="list-style-type: none"> • Less than 11 – no postpartum depression • 11 or more – postpartum depression 	Interval Categorical
52	Depression anxiety stress scale (DASS) scoring	<p>Total scores (range 0-21)</p> <ul style="list-style-type: none"> • Depression <ul style="list-style-type: none"> - Mild: 6-7 - Moderate: 8-10 - Severe: 11-14 - Very severe: 15 to 21 • Anxiety <ul style="list-style-type: none"> - Mild: 5-6 - Moderate: 7-8 - Severe: 9-10 - Very severe: 11 to 21 • Stress <ul style="list-style-type: none"> - Mild: 8-9 - Moderate: 10-13 - Severe: 14-17 - Very severe: 18 to 21 	Interval Ordinal Ordinal Ordinal