Supplemental Material 1. Detailed information regarding covariate variables

| **Covariates Variable** | **Type of variable** | **Description** | **Measurement** | **Scale of measurement** |
| --- | --- | --- | --- | --- |
| Mother's age at pregnancy | Explanatory variable | Participant individual age as at the time of pregnancy. | Raw ages of participants recoded into “20-35” and “<20 or > 35”. | Nominal |
| Parity | Explanatory variable | The number of children born either as singletons or twins. | Raw total children ever born of participants recoded into “≤ 2 children” and “> 2 children”. | Nominal |
| Provider of antenatal care | Explanatory variable | The prenatal care of pregnant women is done by health workers. They include:Health workers1. General practitioner or obstetrician
2. Midwife and village midwife (Indonesia)
3. Nurse
4. Community volunteers such as barangay health workers (the Philippines), village health volunteers (Cambodia) dan auxiliary midwives (Myanmar)

Non-health workers1. Traditional birth attandant
2. Relative/friend
3. Other
 | Health workers, Non-health workers, or No visits. | Nominal |
| Smoking status | Explanatory variable | Participants smoking habits. The behavior usually involves smoking types of tobacco, kretek cigarettes, or other cigarettes, including consuming cigarettes every day and sometimes. | No smoking or Smoking | Nominal |
| Baby’s gender | Explanatory variable | The gender of a participant's last child. | Girl or Boy | Nominal |
| Birth spacing | Explanatory variable | The period between the birth of the last child and the previous child is measured in months. | Raw preceding birth interval (months) of participants recoded into “> 24 months” or “< 24 months” | Nominal |
| Mother's education level | Explanatory variable | Educational level of participant  | None, primary, secondary or graduate | Ordinal |
| Wealth index  | Explanatory variable | A composite indicator that divides the households into five categories and was derived using principal component analysis based on information from housing characteristics and ownership of household durable goods. | Poorest, poorer, middle, richer and richest | Ordinal |
| Area of residence | Explanatory variable | Participant type of place of residence. | Urban or Rural | Nominal |
| Socio-familial empowerment | Explanatory variable | Women's power balance within social networks and their freedom of mobility. As well as representing woman's familial and marital roles, the model also shows the household status in conflict situations and the negotiation (Malhotra et al. (2002)). | Following is the score of the participant’s answers to the questions:* Who usually makes decisions about visits to your family or relatives? (Q1)
* Who usually makes decisions about health care for yourself? (Q2)

Answers:1 = respondent2 = jointly3 = respondent and other4 = partner5 = someone else6 = other8 = don’t knowCode = 1 if Q1− Q2 = 1 or 2Code = 0 if Q1− Q2 = 3 − 8* Is a husband justified in hitting/beating his wife in the following situations? (Q3)
* goes out without telling him, (Q4)
* neglects the children, (Q5)
* argues with him, refuses sex, (Q6)
* or burns food (Q7)

Answers:0 = no1 = yesCode = 1 if Q3 − Q7 = 1 Code = 0 if Q3 − Q7 = 0recoded into “Discussion (completed 7 items)” or “No discussion (fewer than 7 items)” | Nominal |