Influence of husband support on complication during pregnancy and childbirth in Indonesia

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INFLUENCE OF HUSBAND SUPPORT ON COMPLICATION DURING PREGNANCY AND CHILDBIRTH IN INDONESIA

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ABSTRACT:

Background: High complication during pregnancy and childbirth and mortality is still an important problem in Indonesia. The maternal health is also one of the husband's responsibilities as a partner support in the family which could influence women's access to maternal health services and etheir health outcomes. At present, it is unclear whether involving men in maternal health can improve maternal outcomes. The objective of this study was to investigate the associations between socio-demographic factors, husband support and last pregnancy problems among married women (aged 15-49 years) in Indonesia.

Method: The data were obtained from the 2012 Indonesia Demographic and Health Survey (IDHS). Descriptive analysis and Multilevel logistic regression were implemented to assess differences in women who had partner support during their pregnancy and those who did not, and their pregnancy outcomes, controlling by region as the random effect parameter.

Results: There were 5,052 respondents. The majority of age at childbirth was 20-34 years old accounted for 70%. The educational level of both husband and wife were mostly in the secondary education (55.3% and 55.6%, respectively). A 53.0% of women were employed while almost all men had an occupation. It was found that husband accompanied women during antenatal care visit (74.4%) and during delivery (59.8%). This study yielded the 64.8% of the sample presented the maternal morbidity during pregnancy and at delivery. A multilevel model showed that there were significant positive effects of maternal age at delivery, maternal education, maternal occupation, husband support during pregnancy and at delivery toward maternal morbidity, after controlling the region.

Conclusion: Our results found that complication during pregnancy and childbirth was statistically significantly associated with husband support and maternal characteristic. This suggested that government policy regarding women's should emphasize the importance of women's education, and also indicated a potential role of spouse relationship in maternal health interventions.

Keywords: Maternal health, Women education, Husband support, Indonesia

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INTRODUCTION

The participation of the husband which related to reproductive health and reproductive behavior, is recognized that the key interventions for improving maternal health [1]. In many developing countries, men are key decision makers and leaders which often find their access to economic resources for women. Men' involvement affects the maternal health while it was designated nutritional status during pregnancy [2] and the chances of women who receive emergency obstetric care [3], which is significant unavoidable to maternal morbidity [2, 3].

In Indonesia, the percentage of complications of pregnancy in urban areas increased steadily from 43.3 to 57.1 in 2007 and 2012 respectively. While considering the trend in rural areas of complication during pregnancy and childbirth also increased from 35.4 to 48.7 in 2007 and 2012 [4-6]. The most common severe maternal illness included postpartum hemorrhage, blood transfusion, hysterectomy, cardiac arrest / failure of urinary or bowel. When comparing maternal death rates by countries in 2013. Indonesia has found that the maternal mortality

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rate was ranked 124th out of 181 countries. Furthermore, among the South-East Asia countries, Indonesia has the highest maternal mortality rate is the second after Laos [7].

Several studies have been suggested positive benefits of the participation of men in maternal health care in the developed and developing nations, which include increased access to services during pregnancy and after delivery mothers [8, 9]. Furthermore, partner supporting could encourage maternal to stop unhealthy practices such as alcohol consumption, smoking and eating diet that is not useful [10, 11] improved maternal mental health [12, 13], increasing opportunities of the use of contraception [14] and reducing anxiety and morbidity during delivery [14, 15]. However, the arguments of the disadvantages of being involved men have also been highlighted, such as the present of husband's anxiety at delivery will potentially increase a difficulty of labour [16, 17].

Evidence proofed that male involvement may be beneficial to maternal health; but the significance of the relationship is unclear. It also has been conjecture about the possible negative consequences, if men are engaged in maternal health care. Thus, this paper investigated to firstly the complication during pregnancy and childbirth differential across maternal characteristic in Indonesia. Secondly, to identify the existing complication during pregnancy and childbirth among Indonesia population and lastly, to study the impact of the being involved of men in maternal health outcomes of women.

MATERIALS AND METHODS

This paper applied the Indonesian Demographic Health Survey (IDHS) 2012 was provided by the DHS Program - ICF International. IDHS surveys are important survey which provide information on important health, nutrition, and demographic indicators in a specific country and are nationally representative. In Indonesia the IDHS elaborated by collaboration of National Statistic Board of Indonesia, Ministry of Health, National Population and Family Planning Board, MEASURE DHS - ICF International. The IDHS survey is a five year survey to collect characteristic of women age 15-49 years old about demographic and health which implemented multistage cluster random sampling. The first stage was performed to select the total of 1,840 census blocks (CBs) based on the 2010 Indonesian population census, then result a minimum of 43 CBs per provinces. At the second stage, on average 25 households were selected in each CB [6]. The IDHS 2012 was coverage 47,533 women age 15-49 eligible, and 96 percent were successfully interviewed. Due to this study focus on the effect of husband support thus the author selected only married women. Furthermore, we selected only last births from married women who gave birth within 2 years (2011 and 2012) preceding survey which approximately 5,052 women. The reason of selecting the subject for the last two years preceding survey is to eliminate recall bias. The IDHS survey provide three kinds of questionnaire, namely house hold questionnaire, women's questionnaire and man's questionnaire. This recent study retrieved the data from the women's questionnaire. The women's questionnaire included questions about demographic characteristics, their reproductive history, pregnancy, antenatal and postnatal care, as well as immunization and nutrition [6].

The institutional research board of Institute for Population and Social Research (IRB-IPSR) - Mahidol University has been approved this study with the certificate of approval number COA. No. 2014/1-1-42, dated December 24, 2014.

The primary outcome of this study was complication during pregnancy and childbirth which referred to present or not present maternal complication either during pregnancy or at delivery. Maternal complication included premature labor, excessive hemorrhage, fever, convulsions and fainting [5, 6]. We recoded as 1 if the maternal complication is present and 0 if otherwise. The predictor variables were mother's age at delivery, women education, husband education, women occupation, husband occupation, husband accompany at antenatal care (ANC) visit, husband accompany at delivery and region. The mother's age at delivery was calculated from differentiate years of the mother date birth and the last child date birth. The first age group is less than 20 coded as 0; the 20-35 coded as 1 and the 35 and over coded as 2. The women and husband education were retrieved from the question the highest education level that ever achieved [6]. The education attainment was coded 0 for "no education"; 1 for "primary level"; 2 for "secondary level" 3 for "higher level". The women and husband occupation were derived from the question on the currently job of women and their spouse [6]. The occupation was coded as 0 for "do not work" while 1 for "work" (such as professional, technical, managers and administration, clerical, sales, service, agricultural worker, industrial worker, other). Husband accompany at ANC visit was derived from the item *"Did your husband/partner accompany you in any antenatal care visits during this pregnancy?* [6]; the answer of this question was coded as 1 if husband accompany at ANC visit and 0 if otherwise.

While the husband accompany at delivery was obtained from the question of "*Was your husband/partner with you when you delivered (yes / no)?*" [6]; the answer from respondent was coded as 1 if husband accompany at delivery and 0 if otherwise. The region in Indonesia comprises of 7 areas, namely Java and Bali, Kalimantan, Sumatra, Maluku, Sulawesi, Papua and Nusa Tenggara, which they were coded as 1 to 7, respectively.

Regarding the statistical analysis, frequency distribution was conducted to describe the mothers characteristics involved in this study. The percentage was calculated after the data was weighted by sample weight, urban-rural and provincial proportional sampling unit. The effect of predictor variables toward complication during pregnancy and childbirth were examined by implementing multilevel logistic regression with the random intercept by region. The multilevel logistic model was implemented the routine "xtmelogit" in Stata 12 to obtain estimates of the region effect [18]. The region could depict the development in term of socio-economic, public infrastructure, etc. [19]. Most of the infrastructure, such as road, health care service, and also some family planning program provided more and appropriate operated in some region that highly populated area, for example in Java and Sumatra. By contrast in some area always received less develop infrastructure. For this reason, focusing on regional development could be best predictor for inequality in regional factor, such as antenatal care utilization. Importantly the regional analysis contribute to planning programs by specifying the associated environmental and social characteristics that might have influenced the individual decision to seek health care [20].

Bivariate and multilevel logistic analysis was performed to fit the un-adjusted and adjusted odds ratios (AOR) with 95% Confidence Interval (CI) were extracted from the included studies. Adjusted measures of effects were used in preference where both were reported. *P-Values* less than 0.05 were deemed statistically significant.

RESULTS

Sample characteristic

As shown in Table 1, this study involved 5,052 married women in the reproductive age (15-49) and most of respondents were aged 20-34 year olds (68.6%). We found that most of the mother has education on the secondary school (55.3%) follows by primary school (29.1%). Secondary school in the Indonesian education system means the junior and senior high school [21]. Regarding husband education, this study articulated that husband education attainment has similar to the mother's education attainment. It was found that 55.6% of husbands have secondary education attainment. Moreover, Mother who has occupation (non-domestics job) was accounted for 45.2 % while most of the husband had a job (98.6%). The participation of the husband during the visit antenatal offered 74.4 percent of husbands and 59.8 percent of husband accompany at delivery. Considering region, it was found that most of the respondents reside at Java and Bali (57.0%) region follow by Sumatra (22.1%).

With regard to complication during pregnancy and childbirth were classified by maternal characteristic shown in Table 1. This study found the major characteristics which prone to complication during pregnancy and childbirth were mother age 20-34 years at delivery (72.0%), has secondary education (58.3%), husband's secondary education (58.8%), women who did not work outside home (51.8%) and husband who have occupation (98.9%), accompany by husband at antenatal care visit (79.7%) and at delivery (65.7%) and live in Java or Bali region (60.9%).

Determinant factors of complication during pregnancy and childbirth

The multilevel logistic analysis revealed that mother's age at delivery, mother and husband education, husband accompany at ANC and at delivery are significantly effect to complication during pregnancy and childbirth at 0.01 significant level, While mother and husband occupation significantly effects to complication during pregnancy and childbirth at 0.05 significant level. The unadjusted and adjusted odds ratio of the model presented in Table 2;

Mother's age at delivery

The multilevel model yielded that adjusted odds ratio is higher for women aged more than 35 years old, on the other word, the older women are more like 2.24 times experience to complication during pregnancy and childbirth than mother's age less than 20 years old.

Mother education

The mother education significantly effect to the maternal morbidity. The higher education the more likely mother is identified experience maternal complication. This finding should interpret carefully. In the table 2, the adjusted odds ratio for mother who has higher education is 7.06, it does not mean that she was more prone to maternal complication, but she is more likely to make antenatal care visit and accordingly she was more likely been identified whether has complication or not compare to whom does not has education.

Table 1 Frequency of the selected variable for analysis (n= 5,052)

	Complication during pregnancy and childbirth			
	Yes	**No**	**Total**	**N**
Mother's age at most recent delivery				
<20	12.5	21.9	15.7	752
20-34	72.0	62.1	68.6	3,495
>=35	15.5	16.0	15.7	805
Mother education				
No education	1.0	4.0	2.1	151
primary	23.0	40.7	29.1	1,410
secondary	58.3	49.6	55.3	2,743
higher	17.7	5.7	13.6	748
Husband education				
No education	0.6	2.9	1.4	102
Primary	23.9	42.3	30.1	1,465
Secondary	58.8	49.4	55.6	2,810
Higher	16.7	5.5	12.9	675
Mother occupation				
Do not work	51.8	60.6	54.8	2,739
Work	48.2	39.4	45.2	2,313
Husband occupation				
Do not work	1.1	2.1	1.4	94
Work	98.9	98.0	98.6	4,958
ANC visit				
No	5.1	8.9	6.4	371
Yes	94.9	91.1	93.6	4,681
Husband accompany at ANC				
No	20.3	36.0	25.6	1,573
Yes	79.7	64.1	74.4	3,479
Husband support at delivery				
No	34.3	51.7	40.2	2,441
Yes	65.7	48.3	59.8	2,611
Region				
Java and Bali	60.9	49.4	57.0	1,348
Kalimantan	5.0	8.6	6.2	549
Sumatra	20.9	24.3	22.1	1,490
Maluku	1.0	1.4	1.1	276
Sulawesi	6.5	9.4	7.5	854
Papua	1.2	3.3	1.9	259
Nusa Tenggara	4.6	3.6	4.2	276
N	3,128	1,924		**5,052**

Table 2 The adjusted odds ratio of factors effect to complication during pregnancy and childbirth (n=5,052)

Characteristics	**Unadjusted odds ratios (95% CI)**		**Adjusted odds ratios (95% CI)**	
Mother's age at delivery (ref: < 20 years old)				
20-34	1.90**	(1.62-2.24)	1.69**	(1.42-2.00)
>35	1.83**	(1.49-2.24)	2.24**	(1.53-2.38)
Mother education (ref. no education)				
Primary	2.79**	(1.84-4.24)	2.27**	(1.47-3.53)
Secondary	6.37**	(4.22-9.61)	4.20**	(2.70-6.55)
Higher	16.10**	(10.31-25.1)	7.06**	(4.32-11.54)
Husband education (ref. no education)				
Primary	1.52	(0.98-2.35)	1.01	(0.62-1.63)
Secondary	3.09**	(2.00-4.77)	1.35	(0.83-2.19)
Higher	7.39**	(4.61-11.83)	1.99*	(1.17-3.38)
Mother occupation (ref. not work)	1.36**	(1.21-1.52)	1.14*	(1.00-1.29)
Husband occupation (ref. not work)	1.46	(0.96-2.21)	1.29**	(0.82-2.04)
ANC visit (ref. not visit)	2.33**	(1.87-2.92)	1.69**	(1.31-2.17)

Table 2 The adjusted odds ratio of factors effect to complication during pregnancy and childbirth (n=5,052) (Cont.)

Characteristics	Unadjusted odds ratios (95% CI)		Adjusted odds ratios (95% CI)	
Husband accompany on ANC (ref. not accompany)	1.98**	(1.74-2.26)	1.25**	(1.08-1.45)
Husband accompany on delivery (ref. not accompany)	1.96**	(1.73-2.21)	1.30**	(1.14-1.49)
Region (ref. Java and Bali)				
Kalimantan	0.44**	(0.36-0.54)	0.54**	(0.43-0.67)
Sumatra	0.60**	(0.51-0.70)	0.64**	(0.54-0.75)
Maluku	0.49**	(0.38-0.64)	0.61**	(0.46-0.82)
Sulawesi	0.50**	(0.42-0.60)	0.65**	(0.54-0.80)
Irian Jaya	0.30**	(0.23-0.39)	0.51**	(0.37-0.70)
Nusa Tenggara	1.03**	(0.77-1.38)	1.33**	(0.98-1.81)
Constanta			0.11**	(0.05-0.22
Wald chi2(df)				565.72 (19)
Probability > Chi2				0.000

*Significant at 0.05; ** Significant at 0.01; ref. =reference

Husband education

The model shows that the higher spouse education the more likely women identified experienced maternal morbidity. The adjusted odds ratio of husband with higher education is 1.99. This finding implies, that a higher education husband education a more likely promote his wife to antenatal visit than those who has lower education.

Women occupation

Either unadjusted model or adjusted model, this study found that women occupation significantly determine to complication during pregnancy and childbirth at 0.05 significant level. A woman with occupation is more likely 1.14 times than women who do not. Women with occupation are more likely to being independently to make antenatal care compare to those who do not have occupation.

Husband occupation

Similar to the finding on the husband education section, women whose husbands have occupation are more likely to experience to complication during pregnancy and childbirth 1.29 times than those who do not have occupation. Husband with occupation might be give possibility to their wives to access to health service, accordingly women will more likely to be identified their maternal problem.

Antenatal care visit

The antenatal care visit is make possible a women to be diagnostic their maternal problem [22]. Mothers participating ANC found the illness experience of mother was 1.69 times greater than those who did not visit ANC. This may be because mothers who underwent health providers are likely to be identified if they have any problems of the mother. In this segment will describe a mother who visited prenatal cares tend to be diagnosed if they have maternal problem.

Husband accompany on antenatal care

This finding articulated that husband accompany on ANC visit significantly effect to maternal complication. Women who accompanied by their husband is 1.25 times experiencing maternal complication. It suppose a women have already experienced on complication during pregnancy and childbirth, the maternal complication are already there, in turn husband give more attention on their spouse health thus they will be motivated to make maternal checkup at health services.

Husband accompany at delivery

This study found obviously that husband support at delivery significantly effect to complication during pregnancy and childbirth. Women whose husband accompany at delivery are more likely 1.30 times to have complication during pregnancy and childbirth.

DISCUSSION

Our studies suggests that factors is highly associated with complication during pregnancy and at delivery were mother's age at delivery, mother and husband education, mother and husband occupation, husband accompany at ANC and at delivery. Higher education in both women and spouse was associated with increased odds of maternal morbidity. Even if a husband had a high education level but his unwillingness to care about maternal health remains a major problem. If a man is aware of problems that may occur during pregnancy, pregnancy complications may be reduced for maternal health [23]. According to the study in Nepal [24] found husband had high education but negatively effect to maternal mortality. Due to husband did not understand the maternal risks even they had high education. The government can assist by providing more and better

community health facilities and by encouraging husbands to be more supportive through educational programs.

Regarding occupation, woman and spouse who had job were more likely to have morbidity than no job. Full time working was associated with higher levels of psychological morbidity. The work environment may put the mother's health directly at risk for respiratory and lung diseases, such as asthma, chronic bronchitis, and lung [25]. Work in occupations that involve repetitive, boring tasks, low rewards with low prestige, and minimal control over one's work life is associated maternal complication [26]. According to the study in Nepal presented employment women tent to less using maternal health service than non-working women. The reason may because working women in Nepal related with poverty. Due to stress loads can be quite high amongst working mothers. Housework is still considered the woman's domain. Working women shoulder additional responsibility of the work place as well as at their domestic front. Similar to study of Banda in 2012 [19] found women who work fulltime have relationship with the depressive symptoms during pregnancy more than part-time.

Discussing the antenatal care visit, mother who had ANC visit was more likely to experience complication during pregnancy and childbirth than those did not attend ANC due to their maternal problem are not diagnosed. Furthermore, women who were accompanied by their husband during antenatal care and at delivery had higher experiencing complication during pregnancy and childbirth than other. It is probably husband involvement during antenatal care and at delivery, it could be increased male dominance in decision making [16, 17], and it is also plausible that some complications increase when husband become anxious in delivery room [27].

LIMITATION OF THE STUDY

Concerning to the maternal complication at pregnancy and at delivery which has a lot of type with difference severity, the result of current study might not a direct effect to the maternal complication but it is a proxy social determinant. Thus it should be prudent in applying this result for clinical study.

CONCLUSION

The biological factor, such as age at delivery, is positively related to the maternal morbidity. While the social determinant, such as mother and husband education, mother and husband occupation, husband support at ANC visit and at delivery do not directly influence to the maternal morbidity, but they promote mother to attend the ANC. The mother attendant at ANC is the important pathway in increasing maternal health in Indonesia. Thus government policy on maternal health should point out the women empowerment and men participation on maternal health.

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REFERENCES

1. United Nations Population Fund [UNFPA]. Male involvement in reproductive health, including family planning and sexual health. [N.p]: UNFPA; 1995.
2. Dudgeon MR, Inhorn MC. Men's influences on women's reproductive health: medical anthropological perspectives. Soc Sci Med. 2004 Oct; 59(7): 1379-95. doi: 10.1016/j.socscimed.2003.11.035
3. Gharoro EP, Igbafe AA. Antenatal care: some characteristics of the booking visit in a major teaching hospital in the developing world. Med Sci Monit. 2000 May-Jun; 6(3): 519-22.
4. Bureau of Statistik Indonesia [BPS], BKKBN, Kemenkes-MOH, Indonesia. ICF International. Indonesia demographic and health survey 2002-2003. Jakarta, Indonesia: BPS, BKKBN, Kemenkes, and ICF International; 2003.
5. Bureau of Statistik Indonesia [BPS], BKKBN, MOH, ICF International, Indonesia. Indonesia demographic and health survey 2007. Jakarta, Indonesia: BPS, BKKBN, Kemenkes, and ICF International; 2008.
6. Bureau of Statistik Indonesia [BPS], BKKBN, MOH, ICF International. Indonesia. Indonesia demographic and health survey 2012. Jakarta, Indonesia: BPS, BKKBN, Kemenkes, and ICF International; 2013.
7. Wolrd Health Organization [WHO], UNICEF, UNFPA, The World Bank, The United Nations Population Division. Trends in maternal mortality: 1990 to 2013. Geneva: WHO; 2014.
8. Redshaw M, Henderson J. Fathers' engagement in pregnancy and childbirth: evidence from a national survey. BMC Pregnancy Childbirth. 2013; 13: 70. doi: 10.1186/1471-2393-13-70
9. Schaffer MA, Lia-Hoagberg B. Effects of social support on prenatal care and health behaviors of low-income women. J Obstet Gynecol Neonatal Nurs. 1997 Jul-Aug; 26(4): 433-40.
10. Martin LT, McNamara MJ, Milot AS, Halle T, Hair EC. The effects of father involvement during pregnancy on receipt of prenatal care and maternal smoking. Matern Child Health J. 2007 Nov; 11(6): 595-602. doi: 10.1007/s10995-007-0209-0

11. Kiernan K, Pickett KE. Marital status disparities in maternal smoking during pregnancy, breastfeeding and maternal depression. Soc Sci Med. 2006 Jul; 63(2): 335-46. doi: 10.1016/j.socscimed.2006.01.006
12. Al Dallal FH, Grant IN. Postnatal depression among Bahraini women: prevalence of symptoms and psychosocial risk factors. East Mediterr Health J. 2012 May; 18(5): 439-45.
13. Stapleton LR, Schetter CD, Westling E, Rini C, Glynn LM, Hobel CJ, et al. Perceived partner support in pregnancy predicts lower maternal and infant distress. J Fam Psychol. 2012 Jun; 26(3): 453-63. doi: 10.1037/a0028332
14. Mekonnen W, Worku A. Determinants of low family planning use and high unmet need in Butajira District, South Central Ethiopia. Reprod Health. 2011; 8: 37. doi: 10.1186/1742-4755-8-37
15. D'Aliesio L, Vellone E, Amato E. The positive effects of father's attendance to labour and delivery: a quasi experimental study. Int Nurs Perspect. 2009; 9(1): 5-10.
16. Char A. Male involvement in family planning and reproductive health in rural central India. Finland: University of Tampere; 2011.
17. Helmer JF. Men's involvement in family planning. Reproductive Health Matters. 1996; 4(7): 146-54. doi: 10.1016/S0968-8080(96)90018-X
18. Rodríguez G. Multilevel models: contraceptive use in Bangladesh. Princeton University; 2015. [Cited 2015]; Available from: http://data.princeton.edu/pop510/bangladesh.html
19. Bureau of Statistik Indonesia [BPS], Indonesia. Human development index year 2006-2007 (Indeks pembangunan manusia, Indonesia). Jakarta: Central Bureau of Statistik Indonesia (BPS); 2008.
20. Gabrysch S, Cousens S, Cox J, Campbell OM. The influence of distance and level of care on delivery place in rural Zambia: a study of linked national data in a geographic information system. PLoS Med. 2011; 8(1): e1000394. doi: 10.1371/journal.pmed.1000394
21. Kuipers JC. Education in Indonesia: a country study. In: Frederick WH, Worden RL, editors: Library of Congress Federal Research Division. [N.p: Division]; 2011.
22. Banda I. Factors associated with late antenatal care attendance in selected rural and urban communities of the Copperbelt Province, Zambia. Luzaka, Zambia: The University of Zambia; 2012.
23. Manandhar M. Obstetric health perspectives of Magar and Tharu communities: a social research report to inform the Nepal Safer Motherhood Project's IEC strategy. Kathmandu: Family Health Division, World Health Organization; 2000.
24. Center for Research on Environment Health and Population Activities [CREHPA]. The influence of male partners in pregnancy decision-making and outcomes in Nepal. Seattle: CREHPA; 2007.
25. Gausia K, Fisher C, Ali M, Oosthuizen J. Antenatal depression and suicidal ideation among rural Bangladeshi women: a community-based study. Arch Womens Ment Health. 2009 Oct; 12(5): 351-8. doi: 10.1007/s00737-009-0080-7
26. Reid H, Power M, Cheshire K. Factors influencing antenatal depression, anxiety and stress. Br J Midwifery. 2009; 17(8): 501-8.
27. Redshaw M, Henderson J. Fathers' engagement in pregnancy and childbirth: evidence from a national survey. BMC Pregnancy Childbirth. 2013; 13(1): 70. doi: 10.1186/1471-2393-13-70

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