



## Husband's knowledge related to their role in caring wives with preeclampsia risk<sup>☆</sup>



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### KEYWORDS

Husband;  
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### Abstract

**Objective:** Around the world, preeclampsia still become a problem. It is affected nearly eight percent of total pregnancies and resulted in women's morbidity and mortality. Pregnant women who are at risk for preeclampsia certainly need support from the family, especially their husband. Some studies suggest that the expecting fathers was less involved in pregnancy. Other studies also suggested that men have less knowledge about pregnancy complication. The purpose of this study was to analyze the correlation between husband's knowledge and their role in caring wives with preeclampsia risk.

**Method:** The design in this study was *cross-sectional* with *purposive sampling*. There were 93 husbands involved in the study. Data collection used *questionnaires* and analyzed by Spearman's rho test ( $\alpha \leq 0.01$ ). The independent variable was husband's knowledge and the dependent variable was their role in caring wives with preeclampsia risk.

**Result:** More than 60% participant had less knowledge about preeclampsia especially the signs and the risk factors. The majority of husband performed moderate role in caring their wives. Their role included attends antenatal visit, motivates their wives to reduce salt intake and limit tiring activity. Only less than 20% always avoid smoking while at home, helps with house chores, and seeking information related preeclampsia. The results showed that there was a correlation between husband's knowledge and their role in caring wife with preeclampsia risk ( $p = 0.000$ ;  $r = 0.440$ ).

**Conclusion:** Husbands with more knowledge about preeclampsia performed better role in caring wives with preeclampsia risk.

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## Introduction

The prevalence of hypertension in pregnancy in Indonesia according to a study using the 2007 Basic Health Research (Riskesdas) data reached more than 12% and in the province of East Java accounted for more than 20% of maternal mortality rates.<sup>1,2</sup> Mothers in pregnancy need social support from family, especially from their partners. Good social support improves the health of pregnant women. Some studies show that male involvement in pregnancy preparation is low, especially in developing countries.<sup>3,4</sup> The main purpose of this study was to analyze the correlation between husband's knowledge and their role in caring wives with preeclampsia risk.

## Method

### Design

This study used correlational design with cross sectional approach.

### Population and study setting

The population were Husbands whose pregnant wives were at risk of experiencing preeclampsia (122 husbands). Purposive sampling applied and 93 husbands were participated in the study. The time to collect the data was July 2018.

### Variables

The independent variable was husband's knowledge about preeclampsia and the dependent variable was husband's role in caring wives who is at risk for preeclampsia.

### Data collection

Data collected by visiting the participant's house. Participants who agreed to participate in the study were given an informed consent sheet. Researchers explained how to fill out questionnaires.

## Data analysis

The research data were analyzed using Spearman rho correlation analysis with a significance level  $\alpha = 0.01$ .

## Ethical aspects

This study approved by the Health Research Ethics Commission, Faculty of Nursing with Approval Certificate No. 1055-KEPK.

## Results

More than 60% participant had less knowledge about preeclampsia especially the signs and the risk factors. The majority of husband performed moderate role in caring their wives attends antenatal visit, motivates wives to reduce salt intake and limit tiring activity. Only less than 20% always avoid smoking while at home, helps with house chores, and seeking information related preeclampsia. Table 1 shows that husbands having lack knowledge about preeclampsia play a less role in caring. Husbands who have good knowledge about preeclampsia, have good role. The results showed there was a correlation between husband's knowledge and their role in caring wife with preeclampsia risk ( $p = .000$ ;  $r = .440$ ).

## Discussion

This study revealed that the husband's knowledge of preeclampsia was still low. The husband in this study not aware that excessive nausea, vomiting, excessive salt consumption, parity above two and weight gain of more than 20 kg can cause complications in the mother. The role shown by the husband in this study was at moderate level. This means that there were some behaviors that already good, but some need to be improved. This is consistent with the results of several studies that men try to be involved in maternal and newborn health services on their own terms. The involvement such as waiting for the wife to have antenatal visits but remain waiting outside, choosing the health centers or by giving wives incentives to pay fees and transportation for health services.<sup>4,5</sup> Though husband's role is at a moderate level, there were behaviors that still need to be improved. The husband in this study rarely avoided smoking when at home, helped his wife do housework and

**Table 1** Correlation between husband's knowledge and their role in caring wives with preeclampsia at risk.

	Husband's role					
	Less		Moderate		Good	
	Frequency	%	Frequency	%	Frequency	%
<i>Knowledge about preeclampsia</i>						
Less	31	33.3%	27	29.0%	6	6.5%
Moderate	2	2.15%	16	17.2%	6	6.5%
Good	0	0%	2	2.15%	3	3.2%
<i>Total</i>	33	35.45%	45	48.35%	15	16.2%

actively sought out information about preeclampsia care. These results support previous research which revealed that most men do not stop smoking even though their partners are pregnant and believe smoking inside the house is permissible.<sup>6-8</sup> Several studies have revealed that many men think pregnant women should reduce doing heavy housework, but they also reveal that it is very difficult not to depend on women regarding domestic work.<sup>9,10</sup> The participation of men in maternal and newborn health services is indeed very important. This study provides results that good husband's knowledge will improve the performance of their role in caring for wives who are at risk of preeclampsia. Despite the positive results of the correlation of knowledge with the performance of the husband's role, further research needs to be done related to women's independence in decision-making about pregnancy and childbirth after the husband's involvement.

Husbands with better knowledge related to preeclampsia performed a better role in caring for wives who were at risk of preeclampsia. The husband is expected to increase knowledge about risk factors, signs and symptoms of preeclampsia. Husband is also expected to improve care for the mother during pregnancy by avoiding home smoking, took over the household chores, and improve health information-seeking behavior.

## Conflict of interest

The authors declare no conflict of interest.

## References

1. Sirait AM. Prevalensi Hipertensi Pada Kehamilan di Indonesia dan Berbagai Faktor yang Berhubungan (Riset Kesehatan Dasar 2007). *Bul Penelit Sist Kesehat* [Internet]. 2012;15:7. Available from: <http://www.bkbn.go.id> [cited 24.11.18].
2. Dachlan EG, Joewono HT, Sulistyono A, Wardhana MP, Gumilar KE. *Rekomendasi Satgas Penakib Jawa Timur: Preeklampsia-Eklampsia & Perdarahan Pasca Salin*. Surabaya: Satgas Penakib Jatim; 2016. p. 29.
3. Mersha AG. Male involvement in the maternal health care system: implication towards decreasing the high burden of maternal mortality. *BMC Pregnancy Childbirth* [Internet]. 2018;18:493. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/30547771> [cited 30.09.19].
4. Davis J, Vaughan C, Nankinga J, Davidson L, Kigodi H, Alalo E, et al. Expectant fathers' participation in antenatal care services in Papua New Guinea: a qualitative inquiry. *BMC Pregnancy Childbirth* [Internet]. 2018;18:138 [cited 30.09.19].
5. Aborigo RA, Reidpath DD, Oduro AR, Allotey P. Male involvement in maternal health: perspectives of opinion leaders. *BMC Pregnancy Childbirth* [Internet]. 2018;18:3. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/29291711> [cited 30.09.19].
6. Kandel N, Lamichhane J. Female health volunteers of Nepal: the backbone of health care. *Lancet* (London, England) [Internet]. 2019;393, e19–20. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/30739703> [cited 21.09.19].
7. Pandey S, Murugan V, Karki YB, Mathur A. In-home smoking in households with women of reproductive age in nepal: does women's empowerment matter? *Health Soc Work* [Internet]. 2017;42:32–40. Available from: <https://academic.oup.com/hsw/article-lookup/doi/10.1093/hsw/hlw057> [cited 01.10.19].
8. Tanner ME. Application of the transtheoretical model of change to the smoking behavior of men during their partner's pregnancy; 2019. Available from: <https://sigma.nursingrepository.org/handle/10755/17318> [cited 01.10.19].
9. Tokhi M, Comrie-Thomson L, Davis J, Portela A, Chersich M, Luchters S. Involving men to improve maternal and newborn health: a systematic review of the effectiveness of interventions. *PLoS One*. 2018;13.
10. Mkandawire E, Hendriks SL. "The role of the man is to look for food": lessons from men's involvement in maternal and child health programmes in rural Central Malawi. *PLoS One* [Internet]. 2019;14:e0221623. Available from: <http://dx.plos.org/10.1371/journal.pone.0221623> [cited 01.10.19].