



Publisher: Asosiasi Pendidikan Kebidanan Indonesia (AIPKIND)

<http://aipkind.org>



The Influence of The Paternity Class on Father's Knowledge and Support for The Essential Newborn Care

Sri Sukamti^{1*}, Wahyudin Rajab¹, Willa Follona¹, Hariyanti²

¹Midwifery Department, Jakarta 3 Health Polytechnic, Ministry of Health, Indonesia

²Midwifery Department, Jakarta 1 Health Polytechnic, Ministry of Health, Indonesia

*Corresponding author: sukamtrisri@yahoo.co.id

ABSTRACT

Background: The period after birth is the beginning of a baby's life. However, it is difficult for babies to adapt themselves to the extrauterine life that is extremely different with the intrauterine environment. This adjustment process is complicated, so babies need optimal care. Mothers are not always able to take care of their babies alone. Therefore, fathers' participation is required to provide optimal care for babies.

Purpose: This study aims to establish a forum for fathers-to-be to support the essential newborn care at home through a paternity class.

Methods: This study used the quasi-experiment design without a control group. It involved father or father-to-be respondents with at least 30 samples. Respondents were selected based on the inclusion and exclusion criteria. The data was analyzed using a different mean test to determine the influence of the paternity class on father's knowledge and support for the essential newborn care at home.

Results: The results of this study showed that the paternity class had no influence on father's knowledge, but it affected father's support for the essential newborn care with p-value of 0.036.

Conclusion: The paternity class influenced father's support for the essential newborn care. The paternity class is one of the efforts to improve insight and father's support for the care of young babies. This paternity class can be done periodically and continuously to help increase father's support for infant-toddler and pre-school children care.

Keywords: *family support, knowledge, paternity class*

BACKGROUND

Many fathers feel marginalized from mother and baby services. The negative consequences of this can be several. First, father became uninformed and unprepared because he feels that the information provided is not addressed to them. Second, it can make it difficult for fathers to engage as parents early and deeply. An important explanation why many fathers feel left out, despite the fact that they have to take part in preparatory groups for parenthood, is that childbirth or parental education classes tend to focus exclusively on women and mothers, and rarely addresses the concerns of the father and his situation (Plantin & Olukoya, 2021).

A quantitative survey among 600 Danish fathers clearly shows that 40 per cent of father did not feel that the midwife spoke directly to them during the consultation (Kajdy et al., 2020). Another study also showed that "open discussion groups" commonly used in maternal and infant care, unfair to fathers, because mothers are more accustomed to talking about pregnancy, birth, and parenting (Bremberg, 2016). The parent group sometimes highlights dad's special situation but most often they only focus on how men can support women well (Routledge, 2017).

High-quality universal newborn health care is the right of every newborn everywhere. Babies have the right to be protected from injury and infection, to breathe normally, to be warm and to be fed. All newborns should have access to essential newborn care, which is the critical care for all the babies in the first days after birth. Essential newborn care involves immediate care at the time of birth, and essential care during the entire newborn period. It is needed both in the health facility and at home (World Health Organization, 2022).

The essential newborn care includes early initiation and exclusive breastfeeding, thermal care (including prompt drying and covering at birth, maximizing skin-to-skin contact, delayed bathing, maintaining "warm chain") and also hygiene practices (including cord-care and caregiver handwashing) (Mesches et al., 2005). Father is encouraged to take part in parent groups, to participate during labor, and to take a more active role in caring for their babies. The main goal is for father to provide greater support to their pregnant partners before, during, and after delivery. So maternity care services offer dad instructions and advice focused primarily on how best to support pregnant women. This could, for example, take the form of teaching the father breathing exercises or other relaxation techniques he could use to help the mother (Asa Premberg & Lundgren, 2006).

The 2017 Indonesian Demographic and Health Survey (IDHS) results showed that the under-five mortality rate in Indonesia (32 per 1000 live births) was still relatively high compared to other countries in Southeast Asia. According to 2018 Basic Health Research data, the leading causes of death among children under five were diarrhea (25%) and pneumonia (15%), while the leading causes of infant mortality were diarrhea (42%) and pneumonia (24%) (Boot Camp for New Dads, 2021). The 2014 Sample Registration System (SRS) study showed slightly different results where the leading causes of death among children under five were diarrhea (17%) and pneumonia (13%). On the other hand, the main cause of infant mortality was asphyxia (18%), followed by pneumonia (8%).

The 2017 IDHS showed that 7% of women became mothers at the age of 15-19 years, 5% had given birth, and 2% were pregnant with their first child. Education had an essential role in decreasing perinatal mortality. The highest perinatal mortality rate (66 deaths per 1000 pregnancies) was found among uneducated women. The perinatal mortality rate fell by more than half (28 deaths per 1,000 pregnancies) among women

who attended school even though they did not complete primary school (Almalik et al., 2018).

Types of the newborn (neonatal) care reported in the 2017 IDHS included measure the birth weight, examine the umbilical cord, measure the body temperature, provide information about danger signs in newborns, and provide counselling on breast milk (ASI). Nearly eight out of ten (79%) newborns had received at least two types of neonatal care, 95% of newborns were weighed at birth, 75% had their umbilical cord checked, and 61% had their body temperature measured. However, only 48-59% of mothers were given information about newborn danger signs and breastfeeding counselling (Almalik et al., 2018).

Many factors influence father's role in providing primary care for young babies of less than two months old. Results of a study stated that knowledge and attitudes had a significant correlation with father's role in the newborn care (Mlotshwa et al., 2017). Another study also stated that there was a significant association between knowledge and attitudes of fathers and their role in the neonatal care and recommended giving education about newborn care (Rahman et al., 2018). In other studies, there was also a significant correlation between knowledge, family support, environment and support from health workers for taking care of the umbilical cord of newborns (Odom et al., 2013). Efforts to improve knowledge, attitudes and roles of fathers and family support can be made by providing health education for fathers and families, especially when the father accompany their spouse to health facilities. For this reason, it is necessary to give an exceptional opportunity for prospective fathers to learn the importance of father's role in the essential newborn care and skills in the basic infant care at home.

Boot camp for new fathers (Daddy Boot Camp) is a unique, father-to-father based workshop, which inspires and equips men from all levels of economy, age, and culture to confidently engage with their newborn, support their spouse and personally navigate their transformation into fathers and has been carried out in the United States and Canada since 1990. In Indonesia, there have been antenatal classes that teach about preparation for motherhood and classes for mothers of infants and toddlers, which involve fathers (Redshaw & Henderson, 2013). However, in Indonesia there is no particular class for fathers that facilitates their active role in providing the essential newborn care at home.

For this reason and in this opportunity, the researchers want to initiate a paternity class to improve father's knowledge, care, role and support in the primary care for babies aged less than two months so that a mother is not alone in taking care of her newborn at home.

This study aims to determine the effectiveness of a paternity class in improving father's knowledge and support in the essential newborn care.

METHODS

This is a quantitative descriptive study that uses a pre-post-test without a control design. The hypothesis test used was the Wilcoxon non-parametric statistical test. In this study, health education about the primary care for newborns is given to a group of fathers through a paternity class. Health education was provided for 1 day by the researcher using lecture, discussion and demonstration methods about the role of fathers in caring for newborns, exclusive breastfeeding, child care, keeping the baby warm, umbilical cord care, nutrition for babies, danger signs in babies, and how to change a baby's diaper. Then, the knowledge and support of fathers in the primary care for young infants aged less than two months are measured.

The variables that will be measured in this study are knowledge and support of fathers and health education about the newborn care as an intervention. This study was conducted Karawang, West Java from August to September 2021. The population of this study was families who have a newborn. The minimum number of samples required based on the calculation is 30 respondents. Respondents are fathers of babies aged less than two months or prospective fathers. This study uses a purposive sampling technique.

The instrument used in this study was a questionnaire compiled by the researchers based on the literature on the primary care in newborns and the role of fathers in the health of newborn. The questionnaire about knowledge contains semi-closed questions with 17 true-false statements, while the father's support questionnaire contains statements with a Likert scale that has 1–4 response options (never, rarely, often and always). This instrument has been tested for validity and reliability on 15 respondents who have similar characteristics to respondents of the study. The validity test results showed that all statements were valid with the calculated R value above the r table (0.514) and reliable with the Cronbach alpha value of the knowledge variable 0.84 and the support variable 0.76.

RESULTS

The research was conducted online in September 2021 using the WhatsApp application and through a virtual zoom meeting due to the COVID-19 pandemic situation. The sampling technique used was purposive sampling by involving families who have babies aged less than 12 months at Karawang Regency and willing to take part in paternity class activities virtually. There were forty-two registered respondents. Respondents who meet the requirements are included in WhatsApp groups to make coordination easier. The research team consisted of the main researcher, research members, assistants to community volunteer for health services and two students majoring in midwifery.

The results of the study were obtained by processing and analyzing data as follows:

Table 1 Distribution of Frequency Characteristics Respondents in 2021

Variable	Frequency	%
Education		
1. Junior Secondary Education	6	20
2. Senior Secondary Education	19	63,3
3. Higher Education	5	16,7
Source of Information		
1. Family and neighbors	17	56,7
2. Electronic media	8	26,7
3. Printed Media	1	3,3
4. Health Workers	4	13,3
Parity		
1. Don't have children yet	4	13,3
2. 1	13	43,3
3. 2	10	33,3
4. ≥ 3	3	10

Respondents with senior secondary education were 63.3%, junior secondary education were 20%, and higher education were 16.7%. The most common sources of information used by respondents were families and neighbors (56.7%), electronic media (26.7%), health workers (13.3%) and print media (3.3%). Respondents who did not have children were 13.3%, had one child 43.3%, had two children 33.3% and had >3 children 10%.

Table 2. Distribution of Knowledge and Father's Support

Variable	Mean	SD	Minimum Maximum	95% CI
Knowledge:				
Pre-Test	93.13	8.09	75 - 100	90 - 96
Post-Test	94.79	7.71	75 - 100	91 - 97
Father's Support				
Pre-Test	80.83	15.76	56 - 100	74 - 86
Post-Test	84.51	12.72	58 - 100	79 - 89

Before joining the paternity class, respondent's knowledge was measured and the mean score obtained was 93.13 with standard deviation (SD) of 8.09, while the mean score for respondent's knowledge after joining the paternity class was 94.79 with SD of 7.71. Before joining the paternity class, score of father's support was 80.83 with SD of 15.76 and after joining the paternity class it was 84.51 with SD 12.72.

Table 3 Average Distribution of Knowledge and Father's Support Paternity Class

Variable	N	Mean Rank	Sum Rank	P Value
Knowledge 1 Knowledge 2	30	3,8	19	0,071
Support 1 Support 2	30	9,33	48	0,036

Based on table 3, there was no significant difference in knowledge before and after respondents joining the paternity with p value of 0.071 and there was significant difference for father's support before and after respondents joining the paternity class with p value 0,036.

DISCUSSION

This study has some constraints: the paternity class, which was carried out virtually, made the respondents unable to socialize and exchange experiences freely because they were constrained by network stability. Respondents also had constraint in using the Zoom application and were unable to try to simulate the baby care directly. In addition, the researchers were unable to evaluate conditions at the beginning and at the end of the paternity class activities because the researchers were not assured that respondents' answers were not influenced by their partner.

The results of the study found that the community, especially fathers, already had good knowledge about the primary care for young babies, especially how to keep the baby warm, take care of the umbilical cord, and fulfill infant nutritional needs (breast milk) to prevent infection. Fathers obtained this information from family and neighbors. Member of the family was the closest person in the respondent's daily life, so their experience and knowledge about a subject will be the first source of information received by the respondent. Other closest person in the respondent's daily life is their neighbor or the community living around the respondent's residence (Lewis et al., 2015).

The majority of the respondents had a senior secondary education, and with this level of education they were ready to receive information from various sources and analyze it appropriately according to their needs. In addition, a good level of education is a favorable condition that facilitates health workers ability to provide education and motivation to improve father's knowledge, attitude and support for newborn's health. Most of the respondents were in the middle adulthood and had a level of critical thinking and mature emotions to find, review and receive any information required according to their condition. The majority of the respondents were freelancers/non-permanent workers who had the opportunity to gain knowledge about the newborn care from their family or other sources.

The study illustrated that paternity class did not influence respondent's knowledge. In some respondents, there was an increase in their knowledge, but not significant. It might happen because they already had good initial knowledge. Minor improvements might take place because the paternity class was conducted through the Zoom application with limited time for discussion and exchange of experience. This condition could affect the effectiveness of the paternity class.

A person's knowledge affects their attitude and behaviors towards something. Respondent's knowledge about the essential newborn care, which was mostly good, was a factor that could determine their attitude and behaviors as well as support for their spouse in carrying out the primary care for young babies. The ability to do this must be accompanied by courage and habituation because respondents may not yet be aware that their spouse needs support in carrying out essential newborn care (Astuti et al., 2021).

Paternity class activities found a significant difference in father's support for the essential newborn care before and after attending paternity class. This is a positive improvement that can help fathers find out and provide forms of support for the essential newborn care required by their spouse (Ayaz et al., 2020). Fathers may already have knowledge about the primary care for young babies but they are not aware that their spouse need their support and participation in it.

A postpartum mother needs physical, mental, social health, and support from all families, especially from her spouse as the closest person to take care of herself and her baby. Support from her spouse will significantly affect a mother's success in raising her baby so they can grow healthy and develop according to their age (Ball et al., 2016).

Father's knowledge and attitude are crucial in increasing father's role in caring for newborns, but most fathers think that it is not their duty. After the fathers were given education about the newborn care, it was found that their knowledge and attitude towards the newborn care were improved and increase their role in looking after their newborn. Similarly, the success of early initiation of breastfeeding and exclusive breastfeeding require the support of fathers, and the knowledge given to fathers about these increases their role in supporting the implementation of early initiation and exclusive breastfeeding (Rai & Unisa, 2013).

Currently there are classes for pregnant women and for mothers of toddlers or parenting classes. However, there is no particular class for fathers to increase their role in the process of reproduction and in infant-toddler care. In a study on the role of paternity class in improving the quality of antenatal care, it was found that there was a correlation between paternity class and readiness to face childbirth. There was a correlation between paternity class and father's attitude.

Putri and Lestari's research (2015) showed that couples shared roles in three areas: decision making, family financial management and child care with a flexible role in their implementation, where husbands had a more significant role in decision-making and wives in financial management and childcare. This fact shows that husbands are aware and included in the primary care for newborns, but do not always participate in this activity. Through this class, husbands can obtain information about the importance of father's support and role in the essential newborn care, which are essential for the baby and their spouse (Astuti & Putri, 2022).

In addition, husband's participation in domestic activities, such as housework and child care, is very limited because most husbands think that those are women's duties. Husband's social support for their spouse in child care affects their happiness and comfort as well as reduces their burden of life.

CONCLUSION

From the results of this study, it was concluded that the father's class had an influence on increasing the knowledge and support of fathers in essential newborn care at home. This paternity class may serve as a forum to improve insight, knowledge, attitudes and supports of fathers for the primary care of young babies at home. Education given in the paternity class may not only be limited to the introduction of the essential newborn care, but may be developed to include toddler care and father's role in developmental aspects.

ACKNOWLEDGMENTS

The authors would like to thank Posyandu Kenanga 12 cadres where this research was carried out. This research was supported by Ministry of Health of Indonesia

REFERENCES

- Almalik, M., Mosleh, S., & Almasarweh, I. (2018). Are users of modern and traditional contraceptive methods in Jordan different? *Eastern Mediterranean Health Journal*, 24(4), 377–384. <https://doi.org/10.26719/2018.24.4.377>
- Asa Premberg, & Lundgren, I. (2006). Fathers' Experiences of Childbirth Education. *The Journal of Perinatal Education*, 15(2), 21–28. <https://doi.org/10.1624/105812406X107780>
- Astuti, A. W., Hirst, J., & Bharj, kuldip kaur. (2021). Adolescent fathers' experiences in indonesia : a qualitative study. *International Journal of Adolescence and Youth*, 26(1), 201–210.
- Astuti, A. W., & Putri, C. (2022). Outcomes of teenage pregnancy in developing countries : A scoping review. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 7(1). <https://doi.org/10.30604/jika.v7i.1066>
- Ayaz, R., Hocaoglu, M., Günay, T., Yardımcı, O. D., Turgut, A., & Karateke, A. (2020). Anxiety and depression symptoms in the same pregnant women before and during the COVID-19 pandemic. *Journal of Perinatal Medicine*, 48(9), 965–970. <https://doi.org/10.1515/jpm-2020-0380>

- Ball, M., Weaver, C., & ... (2016). Healthcare Information Management Systems. In *Journal of Information Systems Education* (Vol. 14, Issue 4). <https://doi.org/10.1007/978-3-319-20765-0>
- Boot Camp for New Dads. (2021). *A Unique Workshop For Boot Camp for New Dads Dads-to-Be to Learn from New Dads & Babies about Dad Life*.
- Bremberg. (2016). *New tools for parents. Proposal for new forms of parent support. In Swedish national Institute of Public Health R*.
- Kajdy, Feduniw, Ajdacka, Modzelewsk, Baranowska, Pokropek, Pawlicka, Kazmierczak, Rabijewski, Asiak, Lewandowski, Borowski, & Kwiatkowski. (2020). Risk factors for anxiety and depression among pregnant women during the COVID-19 pandemic: a web-based cross-sectional survey. *Medicine*, 99(10), 21–27.
- Lewis, S., Lee, A., & Simkhada, P. (2015). The role of husbands in maternal health and safe childbirth in rural Nepal: A qualitative study. *BMC Pregnancy and Childbirth*, 15(1). <https://doi.org/10.1186/s12884-015-0599-8>
- Mesches, G. A., Wisner, K. L., & Betcher, H. K. (2005). Depression in Pregnant Women. *Jama*, 293(24), 2992. <https://doi.org/10.1001/jama.293.24.2992-c>
- Mlotshwa, L., Manderson, L., & Merten, S. (2017). Personal support and expressions of care for pregnant women in Soweto, South Africa. *Global Health Action*, 10(1). <https://doi.org/10.1080/16549716.2017.1363454>
- Odom, E. C., Li, R., Scanlon, K. S., Perrine, C. G., & Grummer-Strawn, L. (2013). Reasons for earlier than desired cessation of breastfeeding. *Pediatrics*, 131(3). <https://doi.org/10.1542/peds.2012-1295>
- Plantin, & Olukoya. (2021). Fathering. *Fathering*, 9 (1), 87–102. *Fathering*, 9(1), 87–102. <https://doi.org/10.3149/fth.0901.87>
- Rahman, A. E., Perkins, J., Islam, S., Siddique, A. B., Moinuddin, M., Anwar, M. R., Mazumder, T., Ansar, A., Rahman, M. M., Raihana, S., Capello, C., Santarelli, C., El Arifeen, S., & Hoque, D. M. E. (2018). Knowledge and involvement of husbands in maternal and newborn health in rural Bangladesh. *BMC Pregnancy and Childbirth*, 18(1), 1–12. <https://doi.org/10.1186/s12884-018-1882-2>
- Rai, R. K., & Unisa, S. (2013). Dynamics of contraceptive use in India: Apprehension versus future intention among non-users and traditional method users. *Sexual & Reproductive Healthcare*, 4(2), 65–72. <https://doi.org/https://doi.org/10.1016/j.srhc.2013.03.001>
- Redshaw, J., & Henderson, M. (2013). Fathers' engagement in pregnancy and childbirth. *BMC Pregnancy and Childbirth*, 13(70), 1–15.
- Routledge. (2017). *Rosemary Mander, Men and Maternity*. <https://doi.org/https://doi.org/10.4324/9780203642443>
- World Health Organization, (WHO). (2022). *Essential newborn care. World Health Organization*.