

# Effectiveness Of I-Ped (Ibu Percaya Diri) Education On Maternal Confidence And Maternal Competence To Care Newborn At Bengkulu City

Asmawati

Department of Polytechnic NursingHealth  
Ministry of Health Bengkulu, Indonesia  
Bengkulu, Indonesia

[husni\\_yusran@gmail.com](mailto:husni_yusran@gmail.com)

Husni

Nursing Department of Health Polytechnic  
Ministry of Health Bengkulu, Indonesia

[asmawatinadhira@gmail.com](mailto:asmawatinadhira@gmail.com)

**ABSTRACT-** The inability of postpartum women care the babies can cause emotional distress which occurs in 30% of women. This condition can make maternal confidence to be low. The aim of the study determines the effectiveness of antenatal education on maternal confidence and competence to care for the baby — research sites at Pasar Ikan, Lempuing and Nusa Indah Kota Bengkulu. The research design used a quasi-experiment with pre and post-test only with a control group. The samples were healthy pregnant women, gestational age  $\geq 34$  weeks, single pregnancy. The technique of sampling is consecutive sampling with the amount of 60 people. Education is given during pregnancy three times. Maternal of confidence and competence is measured on the 10th-day postpartum. Maternal competence is measured by observation and maternal belief.

Measured using confident maternal Questionnaire (MCQ) consists of 14 items. Analysis statistic used T paired, independent and MANCOVA tests. The results showed there were significant mean differences of maternal confidence and maternal competence to care newborns between the intervention and control groups. The mean difference of maternal belief in the intervention group was 18.37 and control group 10.93 and the mean difference of maternal competence in the intervention group was 21.23 and in the control group 10.97 (p-value 0.000). **Keywords:** confidence, competence, postpartum, education

## I. INTRODUCTION

Being a mother is related to emotional distress that occurs in 30% of women. Postpartum mothers are at high risk experienced psychiatric disorders. Postpartum depression is one of the most common complications in the postpartum period with a prevalence of 10-20%, with an average incidence of 13%. The impact of postpartum stress continues to increase. The rate of postpartum depression is (18.6%), anxiety (13.1%) and stress (8.7%) (14).

One of the causes of psychological distress is lack of maternal knowledge, the inability of mothers to care for babies and low maternal confidence. Confidence in the postpartum period is influenced by psychosocial factors, acceptance of information and support from the others or advice from professional personnel (1).

The process of increasing self-confidence requires active, cognitive or knowledge and motor skills. To prepare a mother for its role is done by various programs such as perinatal education, parenting class or other classes (7)

Chiu Liu's, Chih Chen, Po Yeh, Sheng Hsieh (2011) reported from 372 postpartum mothers, amount the level of maternal confidence was not high, 66.7% were at low to moderate levels. Maternal self-confidence is correlated with stress, it

mean that the level of mother's confidence is low will high the stress experienced, especially in primiparous mothers (3).

Anna (2012) reported that level competition of mother at the Clinic of Mariani Medan North Sumatera to care for the babies at period postpartum is still low (40.9 %) and moderate 22.7%. This condition can trigger postpartum stress. In Indonesia, the incidence of postpartum stress 50-70% among delivery women. Ratna (2011) reported an incident of postpartum blues at Bengkulu are 26 %. Although the rate of postpartum depression not more in Bengkulu but any incidence psychosis of postpartum at mental psychiatric of hospital Bengkulu since 2012-2013 and tendentious to increase annually.

## II. METHODS

The research design using a quasi-experimental design with *pre and posttest only with a control group*. Samples are pregnant mothers who healthy have single pregnant and gestation age > 34 weeks. An intervention of education is given for three times at pregnancy with duration as 30-45 minute and discussion group. Each group education amount of 10 mothers. Materials of instruction are provided such as knowledge about the neonatal, skill and care for the baby, but the control group has received the booklet and routine standard antenatal care from professionals. Before giving education, intervention group is measured data maternal confident, knowledge and competence like is the control group. And then after giving the third education doing evaluated of expertise. The next, after women were delivery is measured maternal confidence and maternal competence. Data collection is carried out by filling a questionnaire using an instrument *Maternal Confident Quissioner* consisting of 15 questions with answers using a Likert scale range from "never

(1) To" always (5) "with range score 1-5. Measurement of the competency and confidence aspects of the mother was done on day ten postpartum and one month after the birth of the baby. MCQ instrument reliability test obtained with *alpha Cronbach* above 0.82-0.92. For competency data, the researcher used questionnaires containing 15 observation items. The experiments using *t-paired and t-Independent* test. multivariate analysis to identify confounding factors that affect maternal competence and confidence with MANCOVA test

## III. RESULTS

**Table I**  
Descriptions of respondents' characteristics and homogeneity of variance (n = 60)

Variable	Kelompok		P value
	Intervention (n= 30)	Control (n=30)	
Age, mean (SD)	28 (4.96)	25.6 (3.43)	
Median	28	26	
Min-maks	18 – 38	21 – 35	0,777
CI 95 %	26,1; 9,9	25,3 – 27,8	
Parity $\sum$ (%)			
Parity $\leq$ 3	4 (13.3)	1 (3.3)	
Paritas 1-2	20 (66,7)	20 (66,7)	0,301
Nuliparous	6 (20)	9 (30)	
Income, mean (SD)	1,7 (0,6)	1,74 (1,5)	
Median	1,5	1,7	0,748
Min –Max	0,5 – 3	1 – 3	
CI 95 %	1,4 ;1,9	1,6 ;1,9	
Education $\sum$ (%)			
Based (SD, SMP)	3 (60)	2 (40)	
Middle (SMA)	22 (46,6)	25 (53,2)	0,640
High/D3/S1/S2	5 ( 62,5)	3 (37,5)	
Pekerjaan $\sum$ (%)			
Work	3 (33,3)	2(66,7)	0,335
No	28 (51,9)	26 (48.1)	
Antenatal care			
visir Mean (SD)	6.6 (0.8)	6.7 (1.0)	
Median	7.0	7.0	0.296
Min –Max	5-8	5-8	
CI 95 %	6.3;6.9	6.3-7.0	

SD, standard deviasi, p-value  $\alpha \leq 0.05$

Table 1 showed that the mean of age among groups are 26 and 28 years old, parity 1-2 is 66.7 %, a half of samples have level education is middle or senior high school , 50 % mothers no have job, mean of family approximately 0.5-3 million each month and mothers are done antenatal care visit to professional for seven-time along pregnancy.

**Table II**  
Description of equality of maternal confidence and maternal competence and knowledge before is given intervention (n = 60)

variables	Group		P value
	Intervention (n = 30)	Control (n = 30)	
Confidence, mean (SD)	39 (5.4)	38.1 (6.6)	0.121
Competence, mean (SD)	38 (4.4)	37 (4.6)	0.759
Knowledge, mean (SD)	63.5 (12.36)	63 (14.53)	0.954

SD, standard deviation, significant T ind,  $\alpha \leq 0.05$

Table 2 shows that the mean score of maternal confidence in the intervention group was 39, standard deviation of 5.4 and the mean of maternal competence to care for infants was 38, A standard deviation of 4.4. The mean score of maternal confidence in the control group was 38.1, standard deviation 6.6 and mean maternal competence to care for a baby 37, standard deviation 4.6. Homogeneity test of mean knowledge, maternal confidence and maternal competence to care for babies among groups before given education was equal (homogen) (p value >  $\alpha$  0.05)

**Table III**  
Mean differences in maternal confidence and competence before and after intervention on the tenth day of the postpartum in the city of Bengkulu (n = 60)

Variables	Pre-intervention (A) mean (SD)	Post Intervention (B) mean (SD)	Difference (BA) Mean (SD)	Changes in groups (p value)	(p value)
Confidence intervention	30.6 (4.4)	55.5 (7.84)	18.37 (5.06)	0,000 *	0,000 **
control	29.7 (4.2)	50 (6.66)	10.93 (4.23)	0,000 *	
Competence intervensi	39.07 (5.4)	57.2 (5.39)	21.23 (6.03)	0.000 *	0.000 **
Control	36.33 (4.57)	48.9 (3.86)	10.97 (2.85)	0.000 *	

\* Paired T-test \*\*, independent T-test

The results of statistical analysis shows that there was increasing mean maternal competence and maternal confidence to care newborn in intervention group and control group after 10 days postpartum is 18.37 in aspect of

mean of maternal competence and maternal confidence which starting on the 10th day postpartum in the intervention group or control group. Increasing maternal competence and maternal confidence were higher in the intervention group

The results of the multivariate test are showed that the most influential variables on maternal confidence and maternal competence were the knowledge who have a mother, sense of confidence that mothers had, and the competition for babies. Educational intervention and sense of confidence before is given education is 0.001 and mother's competence in caring for a baby is 0.001. Educational interventions can explain the difference of variations incompetencies is 76.4%.

### III. DISCUSSION

The role of being a mother is a process of cognitive development and self-identity through achievement of the role as a mother. Being a mother is a process of discovery, a learning process that will produce a positive experience. New Mothers

who do not have the skills and lack of preparation of knowledge about baby care will feel lost in control and frustrated in carrying out the role as a mother (8).

The results of this study showed that in 10 days postpartum there was an increase in mean

maternal self-confidence score of 18.37 points and maternal confidence was 21 points in the Intervention group from the first day of birth. This is associated with a difference in knowledge of 10.75 after education in both groups means that after being educated there is an increase in knowledge about the competence of caring for babies.

According to Mercer, in the two-week period postpartum is a stage of physical recovery, the stage of learning and knowing the baby (8). At this stage, mothers learn about caring for babies from other people or professionals about their role in being mothers, learning to know babies closer to the process *bonding and attachment* to increase

their sense of comfort, responsibility, acceptance and enjoy the role of being mothers (9). After two weeks of childbirth for up to four months, the baby is characterized by the mother learning about baby cues, developing her style for the process of becoming a mother. This stage is an increase in the achievement of competence the development of

maternal self-confidence and 21.23 in the aspect of competence to care for the baby. The results of the a study concluded that overall there was increasing

confidence, integrating oneself and the baby in his life, feeling safe and comfortable with the tasks he

has and has a way of solving problems in baby care (9).

In addition to the education provided, mothers also get postpartum home visit services that can facilitate mothers to learn about baby care, recognize baby signals and prevent health problems that can occur in infants. The effect of interventions on postpartum home visits significantly reduced health problems or complications in the mother and baby at six weeks postpartum (5). The existence of a home care model can influence the mother through the stages towards the integration of identity as a mother in fostering a new mother's confidence to develop self-identity (8)

Confidence can be increased through the intervention of home visits after childbirth which is sufficient support to facilitate parents in care at home, a significant opportunity for mothers to improve healthy behavior, increase maternal and infant affection, help to cope with new situations and help boost confidence in caring for babies. According to Mercer (2004). Postpartum home visits can help mothers find experienced people and the role models needed in caring for babies and can increase a *sense of control* and family participation in meeting needs (Stanhope & Lancaster, 2004).

The results showed there were differences in aspects of competence and confidence on the 10th day of postpartum in the intervention group and control group. The element of competency showed significant differences between groups of 21.23 in the group given education compared to the control group.

Mothers on the first day up to 3 days postpartum focus more on competency to become mothers and care for babies. Mothers learn to meet the needs of the baby and learn to overcome the physical discomfort problems of the mother and baby (2).

Asserted that in the initial postpartum period, parents are required to adjust their ability to care for babies to meet the changing needs of the baby quickly. Achieving this competence will go straight with confidence to be a mother (10). Period of 2 weeks to 4 months after birth, the mother experiences changes in her body and the ability to breastfeed will make the mother aware of the role of being a mother. From two weeks to four months postpartum, competency is achieved, developing confidence, accepting and integrating babies in their lives. Mother feels safe with the baby, and gradually there is an increase in competence and ways to solve problems and be comfortable with the task of being a mother (8).

The results of Wan Ngai, WC Chan & Holroyd (2010) research in a qualitative study found that the characteristics of competent mothers were a commitment in caring for the baby, focusing on the baby and having an endless sacrifice in improving the welfare of the baby. The competency aspect consists of 1) maintaining the physical health of the baby or protecting it from injury, being responsible for the protection of the baby, providing a comfortable and safe environment, keeping the baby healthy and avoiding various diseases. 2) maintaining the emotional well-being of the baby that is shown often interacting with the baby and giving love, *caring*, patience, responsiveness and understanding the baby's emotional needs, trying to provide the best for the baby 3) instilling good values for the baby provides a good foundation for child socialization and offers a good model for the child's future development.

Improvement of maternal competence in this study after the intervention. The development of *a sense of competence* maternal is a critical component that needs to be considered in achieving the role of being a mother and significantly impacting parenting behavior and psychosocial development of children in the future (12). According to Teti & Candelaria states that the *level of competency* of high maternal roles will facilitate skills *parenting* such as being sensitive and naturally responsive, the better behavior *attachment* between mother and baby. In contrast, low levels of competency in maternal roles correlate positively with postpartum depression and vice versa (13)

Achievement of the level of maternal competence is influenced by age, parity, socioeconomic, marital status, self-concept, attitudes towards infant care, family functions, stress, system support and influenced by cultural and social backgrounds of women (8). The results of this study indicate that the mean age of mothers is adult age, that is 27 years who are more mature in attitude and problem-solving. More than a half respondents in the study who have had childbirth experience and the education level of respondents, most of whom are high school secondary education and the existing system support almost all respondents have the support of parents and extended families in helping care for and meet the needs of mothers and babies.

The results of the study of confidence become a mother increased by 18.35. Confidence will grow in the postpartum period which is influenced by the experience of being a parent and expanding the ability to care for the baby adequately. In this maternal study competence

increased on the 10th day of postpartum which was also directly proportional to the increase in maternal confidence.

Besides, self-confidence increases in a postpartum woman due to the support of family especially husbands and parents. It has a positive correlation with maternal self-esteem, meaning that the greater the support received, the higher the mother's confidence. Parity factor also contributes to increasing confidence. In this study, it was proved that 70% of mothers had a baby. According to Pyng Kuo, et al., the experience of caring for a baby and the age of the mother has a relationship with increased self-confidence. Mothers who have had a baby have experience in providing care to babies which makes mothers know what the baby's behavior means and can use his experience as a criterion for assessing baby's care needs. A multiparous woman also consider themselves to be more competent in caring for babies than a primiparous woman. The level of confidence of multiparous is higher than that of primiparous (10). Conversely, mothers who lack confidence in caring for babies at the early postpartum have negative experiences to be a mother and cannot adequately care for babies feeling unhappy, and less time to relax with babies than confident mothers, lack of attachment to babies (8)

## V. CONCLUSION

Education antenatal is using the discussion group method can improve maternal confident and maternal competence in caring for the newborn. Education antenatal can has done programmed antenatal at community health center each month

## REFERENCES

1. Aya Gato et al. (2007) Prevalence and risk factors of postpartum depression in Yaounde. *Journal of obstetrics and gynecology*. Vol.5 pg;608-617
2. Chii Liu, Chich Chen, Po Yeh & Sheng Hsieh (2011). Effect of maternal confident and competence of maternal parenting stress in a newborn. *Journal of Advanced Nursing*, 1, 908-920
3. Bahadoran, Mohseni & Abedi (2008). Mother's experience of the postpartum period: phenomenology study. *IJNMR* Vol.14 pg; 117-122
4. Chii Liu, Chich Chen, Po Yeh & Sheng Hsieh (2011). Effect maternal confident and competence on maternal parenting stress in a newborn. *Journal of Advanced Nursing*, 1, 908-920
5. Duman, N & Karatas, N (2012). The effect of home care service on maternal health after cesarean delivery in Turkey. *Journal of Nursing education and practice*, 2 (4), 124-134
6. Hockenberry, Perry, Lowdermilk & Wilson (2010). *Maternal-child care*. Mosby Elsevier. Missouri
7. Mercer, R.(2004). Becoming a mother versus maternal role attainment. *Journal of Nursing Scholarship*, 226-232
8. Murray & Kinney (2007). *Foundations of maternal, newborn nursing*. First edition. Philipina: Saunders Elsevier
9. Pilittery (2010). *Maternal and child health nursing*. Six editions. China: Lippincott Williams
10. Pyng Kuo, C, Lin Chuang, H, Hsin Lee, S, Chun Liao, W & Chih Lee, M (2012). Parenting confidence and needs for a parent of the newborn in Taiwan. *Iran Journal of Pediatrics*, Vol. 22, 77-184
11. Silaban AR (2011). Hubungan pengetahuan ibu tentang perawatan bayi terhadap kemampuan ibu merawat bayi baru lahir selama post partum dini di Klinik Bersalin Mariani Medan. Repository.usu.ac.id
12. Sander & Wolley (2005). The relationship between protective self-efficacy and parenting practice: implication for parent training. *Journal of Childcare health development*. Vol.1, 65-73
13. Wan Ngai F, Chan S, Holroyd. 2010. Chinese primiparous women's experience of early motherhood: factors affecting maternal role competence. *Journal clinical nursing*.vol.20. 1481-1489
14. Haque, Namavar & Breene. 2015. Prevalence risk factors of postpartum depression in middle eastern /Arab women. *Journal of Muslim mental health*. .vol. 9