



Effect of Continuity of Care to Exclusive Breastfeeding Mothers Compliance in Regional Community Health Centre in Makassar City South Suolawesi

Sundari^{a*}, Muh. Syafar^b, Arsunan A. A^c, Saifuddin Sirajuddin^d, Andi Nilawati
Usman^e

^a*Doctoral Programs, Faculty of Medicine, Hasanuddin University, Makassar, Indonesia*

^a*Universitas Muslim Indonesia, South Sulawesi, Indonesia*

^b*Department of Health Promotion, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia*

^c*Department of Epidemiology, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia*

^d*Nutritional Study Program, Faculty of Public Health, Hasanuddin University, Makassar, Indonesia*

^e*Halal Center, Faculty of Public Health, Hasanuddin University, Indonesia*

^e*Public Health, Mandala Waluya College, Indonesia*

Abstract

The rate of family planning The World Health Organization (WHO) recommends exclusive breastfeeding for the first 6 months of life and continued until the age of 2 years. Breast milk is the best food for babies because it contains all the nutrients a baby needs in appropriate amounts and immunologic substances that protect the baby from infection. This study aimed to obtain the effect of the Continuity of care on adherence mothers in exclusive breastfeeding. The Regional Community Health Center Makassar. Quasi-experimental research design with a sample of 41 people were obtained by purposive sampling. The research instrument used a questionnaire and visits directly to understand compliance mothers in exclusive breastfeeding. The results showed the group was given of continuity of care had a significant effect ($p < 0.05$) to the variable compliance. It means that the mother is given continuity of care is likely to breastfeed 0,071 times than women who do not get continuity of care.

Keywords: Continuity of care; Compliance; exclusive breastfeeding.

* Corresponding author.

1. Introduction

Exclusive breastfeeding is still a problem in the world. Every year there are 1-1.5 million babies in the world who die because they do not exclusively breast-fed [1]. 1.4 million child deaths and a further 44 million are not capable of adapting to life in the country every year in low and middle income in result of suboptimal breastfeeding. In 68 developing countries are 90% of the total burden of maternal and child deaths due to early initiation of breastfeeding is 48% and the proportion of deaths due exclusively breastfed 34% [2].

Breastfeeding protects the health and development of children through the risk of infection and symptoms of infant mortality that suddenly during the growth period and reduce the risk of cancer, improve cognitive outcomes and promoting the development of the metabolic right in childhood [3]. Increasing the length and weight of the baby significantly in babies given exclusively breastfed than babies who are not breastfed exclusively [4]. Research in France found that breastfeeding for longer associated with cognitive and motor development were better in children aged 2-3 years [5]. Child labor in the United Kingdom who were breastfed associated with increased cognitive development, especially in children born preterm compared with children who are not breastfed [6]. Some nutrients including vitamins A, D, B1, B2, B6, and B12, fatty acids, and iodine required for the growth and development of the baby in breast milk [7].

The low quality of maternal and newborn care is a major factor for death. Quality can be improved through continuum of care [8]. Continuity of care can provide services for all high or low-risk mothers, mothers in this ministry will feel cared for and felt the concern of service providers [9]. Women who received *continuity of care* nearly report higher satisfaction in terms of information, advice, explanation, preparation for labor and birth, the mother has the continuity of care in obstetrics and gynecology [10,11].

An important evidence now suggests that the care provided by midwives in the continuity of care significantly to the health of mothers and infants, due to the identification of adverse effects of maternal and infant health [12]. The continuous support from health workers and others in addition to a spouse or family member is indispensable in providing care in the community to enhance the success of the process of care, especially to improve the coverage of exclusive breastfeeding. Based on this, researchers interested in conducting research that is useful to increase the coverage of exclusive breastfeeding in the health centers Makassar.

2. Materials and Methods

The study was conducted in the area of community health centre Makassar city. Ethical procedure was approved by the Ethical Commission of the University of Hasanuddin

2.1 Design and Samples

The population is all women giving birth in three areas of health centers Makassar. Kassi Kassi community health centre, Mamajang community health centre, Batua Raya community health centre with a sample of 41 people and purposive sampling technique. This study was conducted for 6 month or 180 days. This research included in this type of research Quasi-experimental design with pre and post test.

2.2 Intervention

Intervention for 6 months or 180 days by dividing the sample into two groups randomly namely group A and group B. EGroup A were given the intervention will be provided Continuity of care. Group A (intervention group) will receive treatment that is counseling at each visit, visits over 8 times (1 week, 2 weeks, 4 weeks post partum, then every 2 weeks until the baby is 6 months old). Compliance breastfeeding monitored by a team of researchers at each visit to check compliance list. At the end of the intervention is given post-test with a questionnaire about breastfeeding. Group B at the start of meeting given pre-test knowledge of exclusive breastfeeding subsequent patients received counseling on exclusive breastfeeding before discharge from the health center. Post exclusive about breast milk knowledge test performed after 6 months postpartum. Compliance breastfeeding monitored by the research team at the end of a visit to the compliance checklist.

2.3 Statistical analysis

Data presented as frequency in a table form and data analysis using chi-square test.

3. Results

Results showed that the continuity of care had a significant effect to the variable of compliance. The frequency of mothers who gave exclusive breastfeeding (categorized obediently) in the group given CoC was higher than that given CoC (Table 1).

Table 1: Effect of continuity of care to compliance of exclusive breastfeeding

Group	Exclusive Breast Feeding				P-value*
	Yes		Not		
	n	%	n	%	
Intervention (CoC)	18	85.7	3	14.3	0.0001
Control (Non CoC)	6	30	14	70.0	

*Chi Square test

4. Discussion

This study conducting continuous visits as scheduled by 8 visits each respondent. Whenever a visit there providing counseling on exclusive breastfeeding in that the material already planned in each visit coupled with the needs of each of the respondents associated with exclusive breastfeeding.

The results of the continuity of care to compliance breast-feeding from the results of logistic regression, table

4.8 shows that the continuity of care had a significant effect ($p < 0.05$) to the variable compliance. This study memberikan sense that the mother is given continuity of care is likely to provide ation 0,071 times than in women who do not get continuity of care. The results are consistent with the results of research conducted by Hector and his colleagues stated that factors that influence the implementation of exclusive breastfeeding, especially factor attitudes, motivation, and knowledge, good attitude, motivation, and knowledge of the mother, as well as health workers. Conducting continuity of care will increase the knowledge in changing attitudes and motivations [13], Ambarwati, R in the title of his research the effect of counseling lactation intensive breastfeeding (breastfeeding) exclusive to 3 months and the results are breastfeeding practices after receiving counseling lactation intensive during the prenatal and postnatal care in the treatment group showed no increase in the number of mothers who exclusively breastfed from 2 to 10 mothers, whereas the control group showed no change in the number of mothers who exclusively breastfed before and after treatment [14]. Also according to the study in Ghana which states that the practice of exclusive breastfeeding is higher in women who receive counseling lactation (39.5%) compared with women who did not receive counseling (19.6%) [15]. The effectiveness of continuity of care (CoC) conducted as research conducted in the US by providing continuous support showed a positive effect. Mother expressed his satisfaction in this ministry [16,17], Continuity of care in Yates research get the result that the difficulties people may have access to health care, the higher the level of community satisfaction with this CoC so that people get health personnel who are experts in caring for him [18], midwives in doing this Coc care have a high enough responsibility to finish the job in caring for mothers and their babies, so that its success in delivering high enough care [19]. Continuous support during labor may ultimately strengthen the self-esteem of mothers and their ability to interact with and care for their babies and also can improve the involvement of fathers in general. In the present study investigated whether the mother, which was attended by midwives and nurses in the process-oriented breastfeeding counseling, feels more strongly to the maternal feelings towards their babies than women who received only routine care [20]. Midwives who perform continuity of care contributes to improving the quality and safety and treatment in this model is more likely to have an effective treatment, better experience, clinical outcomes are better, and some evidence of improving access to care by mothers who are difficult to reach and coordination better. Model continuitas led by midwives provide services to all women in all settings, whether mothers classified as high risk or low. Recent evidence shows that improved results without side effects on the population at risk [21]. The intensity counseling is also one that affects an increase in maternal knowledge, thus becoming more frequent contact between mother and counselor, the more often the mother to get information that does not directly increase the mother's knowledge. Another benefit of the intensity of counseling often is the repeating of information that a contributing factor in understanding the mother to the information. Information or knowledge that is frequently and repeatedly can increase one's knowledge retention [22]. Four main themes required by mothers after childbirth to overcome breastfeeding obstacles: 1) The timing, 2) time to care for themselves and their babies, 3) continuity of care and 4) Applying professional knowledge. Given the migration patterns of mother and baby at the hospital on the first day or two after birth, that time of immediate breastfeeding is very important to allow mothers initiate and continue breastfeeding. Badly in need continuity of care mothers, including during the transition from hospital to community services [23]. Lactation education and support is the health care field are not usually included in the discussion and general approach. Though it is a means of change to improve quality. But the negative results associated with the lack of clarity of continuity of care. When

parents are not educated in the prenatal period, they will receive information conflicts, they tend to start breastfeeding or stop menyusui at a time that is not appropriate. stop breastfeeding earlier than they had planned. These are all indicators of continuity of care is low and causes concern often heard from families who can not afford to maintain breastfeeding up to the recommended level. With the whole continuity of care, the community will see an increase in breastfeeding rates and overall health outcomes for their communities, both in the present and in the future [24]. In Canada, other central principle of the model of midwifery in providing this care includes: a) *Continuity of care*: Midwifery care given to a continuous during pregnancy, labor, birth and postpartum. This period allows clients to build relationships of mutual understanding and trust with their midwife or midwives do care that is always there when mothers in need. b) *informed choice*: Mothers are encouraged to make choices based on the information provided relates to her health care on their own. Midwives support the mother as the main decision makers and contribute knowledge of evidence-based recommendations in Indonesia in a way that is not authoritarian. Visits obstetrics allow sufficient time for discussion, interactive discussions and open education [25], American Dietetic Association states that ongoing support is essential to ensure successful breastfeeding. Counselors are able to identify and discuss the barriers to breast-feeding and able to improve the confidence of a mother to breastfeed [26]. *Continuity Of Care* performed by midwives generally oriented to improve the continuity of services in the period. Continuity Of Care has three types of services, namely management, information and relationships. Continuity management involves communication between the mother and midwife. Continuity of information regarding the availability of the relevant time. Secondly it is important to organize and provide maternity care. Provision of information to the mother allows and empowers them to perform maintenance on their own and appear as a dimension Continually as information and partnerships. Treatment plan not only sustain the midwife to coordinate their comprehensive service but also creates a sense of security and make decisions together. Provide information and knowledge on a consolidated maternal part of the continuity of information, and that support and recognize the role of patients in care is a relational dimension which are essential continuity.

5. Conclusion

These findings indicate that the average given continuity of care much who exclusively breastfed compared to the group not given the continuity of care. It can be concluded that the continuity of care giving effect to the compliance of the mothers exclusively breastfed.

Acknowledgement

The authors would like to thanks to friends for supporting during this study.

Competing Interest

The authors declare that they have no competing interests.

References

- [1] WHO. (2009). Global strategy for infant and young child feeding: the optimal duration of exclusive breastfeeding. World Health Organization. Geneva, Switzerland.
- [2] Bhutta, ZA & Lobbok, M. (2011) Scaling up breastfeeding in developing countries. *Lancet*, Vol 378 : 65–71.
- [3] Dieterich, C.M., Felice, J.P., Sullivan, E & Rasmussen, K.M. (2013) Breastfeeding and Health Outcomes for the Mother-Infant Dyad. *pediatric.theclinics*. 60; 31–48
- [4] Nurmiaty., Arsunan A. A., Sirajuddin S & Syafar M. (2016). The Influence of Lactation Education toward Growth of Infants 0-6 Months in Kendari. *International Journal of Sciences: Basic and Applied Research (IJSBAR) (2016) Volume 27, No 3, pp 150-158.*
- [5] Bernard, J.Y., Agostini, M.D., Forhan, A., Alfaiate, T., Bonet, M., Champion, V.A., Kaminski, M., Guillaing, B.D.L., Charles, M.A & Heude, B. (2013) Breastfeeding Duration and Cognitive Development at 2 and 3 Years of Age in the EDEN Mother–Child Cohort. *J Pediatr*; 163:36-42
- [6] Quigley, M.A., Hockley, C., Carson, C., Kelly, Y., Renfrew, M.J & Sacker, A (2012) Breastfeeding is Associated with Improved Child Cognitive Development: A Population-Based Cohort Study. *Pediatrics*; 160:25-32.
- [7] Valentine, C.J & Wagner, C.L. (2013) Nutritional Management of the Breastfeeding Dyad. *Pediatrictheclinics* 60/ 261–274
- [8] Cousens S., Blencowe H & Stanton C. (2011). National, regional, and worldwide estimates of stillbirth rates in 2009 with trends since 1995: a systematic analysis. *Lancet*; 377: 1319–30.
- [9] Sandall, J. (2013) The contribution of continuity of midwifery care to high quality maternity care Available From; <http://www.rcm.org.uk/ebm>. Akses tanggal 21/02/2015.
- [10] Mc Court C & Pearce, A. (2000) Does continuity of carer matter to women from minority ethnic groups? *J. Midwifery*; 16:145-54.
- [11] Finlay, S & Sandall, J. (2009) “Someone’s rooting for you”: continuity, advocacy and street-level bureaucracy in UK maternal healthcare. *J Soc Sci Med*; 69(8):1228-35.
- [12] Sandall J., Gates S., Shennan A & Devane D. (2013). Midwife-led continuity models versus other models of care for childbearing women. *Cochrane Database of Systematic Reviews (8)*:CD004667.
- [13] Hector D., King L and Webb K. (2005). Factors affecting breastfeeding practices: Applying a conceptual framework. *N S W Public Health Bulletin*. 16(3-4): 52-55.

- [14] Ambarwati,R., Muis, S.T., Susantini, P. (2013). Pengaruh konseling laktasi intensif terhadap pemberian air susu ibu (ASI) eksklusif sampai 3 bulan. *Jurnal Gizi Indonesia*. Vol. 2, No. 1, Desember 2013: 15-23.
- [15] Aidam, B.A., Escamilla, R.P., Lartey, A. 2005. Lactation Counseling Increases Exclusive Breast-Feeding Rates in Ghana, *Journal of Nutrition*. 135: 1691-1695.
- [16] Tinajero AR & Loizillon A. (2010). The review of care, education and child development indicators in early childhood. Paris: United Nations Educational, Scientific and Cultural Organization. Available from: <http://unesdoc.unesco.org/images/0021/002157/215729E.pdf> [accessed 30 maret, 2015].
- [17] Moore ER., Anderson GC., Bergman N & Dowswell T. (2012). Early skin-to-skin contact for mothers and their healthy newborn infants. *Cochrane Database Syst Rev*; 5: CD003519.
- [18] Yates, K., Usher, K & Kelly, J. (2011). The dual roles of rural midwives: The potential for role conflict and impact on retention. *Collegian*. (Royal College of Nursing, Australia). 18(3), 107-113.
- [19] Scherman, S., Smith, J & Davidson, M. (2008). The first year of a midwifery-led model of care in Far North Queensland. *Medical Journal of Australia*. 188(2), 85-85-88.
- [20] Ekstrom, A & Nissen E. (2006) A mother's feelings for her infant are strengthened by excellent breastfeeding counseling and continuity of care. *J Pediatrics*; 118 (2); e309-14
- [21] Sandal, J. (2014). The contribution of continuity of midwifery care to high quality maternity care. A report by Professor Jane Sandall for the Royal College of Midwives
- [22] Notoatmodjo, S. (2003). Pendidikan dan Perilaku Kesehatan, Rineka Cipta, Jakarta.
- [23] McLelland, G., Hall, H., Gilmour, C & Cant, R. (2015). Support needs of breast-feeding women: Views of Australian midwives and health nurses. *Journal Midwifery*. Volume 31, Issue 1, Pages e1–e6.
- [24] NACCHO. (2017). Breastfeeding and Continuity of Care: Closing the Care Gap. Issue Brief community Health. November 2017.
- [25] CAM & ACSF.(2010). Midwifery Models And Outcomes In Canada. Canadian Association of Midwives Fact Sheet updated July 2010.
- [26] American Dietetic Association. (2009). *Journal of the American Dietetic Association*. 109: 1926-1942.