

PROCEEDING



The 4th International Nursing Conference

"Safety for all: protect patients, personnel, and environment. A multidiscipline approach."

Editor:

1. Setyowati, BA,BSN,MLApp.Sc,PhD
2. Dr. Yati Afriyanti, SKp., MN
3. Agung Waluyo, SKp., MSc., PhD

The Grand Inna Bali Beach
Bali, Indonesia
September 12-14, 2013

P E N E R B I T



UNIVERSITAS INDONESIA
DIREKTORAT RISET DAN
PENGABDIAN MASYARAKAT

Partnership:



北里大学
KEIO UNIVERSITY



Queensland University of Technology
Brisbane Australia

			3	Retno, Purwandari, Rr Tutik Sri Hariyati, Ely Afifah	Completeness of Documentation with "SIMPRO" for Patient Safety in Non Profit Hospital Bogor
			4	Yulia, Tuti Herawati, Lestari Sukmarini	Correlation of nurses' knowledge about patient safety and their perception about implementation of patient safety culture in an inpatient unit in a public hospital in Jakarta
			5	Cut Sarida Pompey, Melissa Selviany	The Mother's Knowledge of Child's Autonomy Development in Parenting and How to Discipline Toddler
Saturday /Sept 14, 2013	Sesi 3	Rama 14 & 9	1	Anggorowati, Setyowati	Technology Needs Increase Milk Production in the Mother Worker
			2	Putu Widhi, Nursalam, Ni Ketut Alit	The Relation Between Tradition of Lombok Community
			3	Deisy Sri	Effectiveness Malay Instrumental Music and Music Mozart on Oxygen Saturation and Sleep-Waking Behavior Low Birth Weight Infants in RSUD Dr. Soedarso Ponthanak
			4	Patricia Olenick	Assessment and intervention for battering during pregnancy
			5	Afriani Susiatiningsih, Denissa Faradita Aryani, Dewi Anggar Jati, Dwi Nurviandari	Anxiety's Influencing Factor Before Menopause On Perimenopausal Working Female
			6	Jantakan, Pichakarn Wichiankanyarat, Sirmanta Thitisap	Development of the Desired Healthcare System Model Enhancing Health Promotion in Adolescent Mothers and Their families
Saturday /Sept 14, 2013	Sesi 3	Sinta 11	1	Suryani Hartati	Factors that Effect The Post Caesarean Section of Mothers to Do Early Mobilization in RSUPN Dr. Cipto Mangunkusumo
			2	Nur Jannatun Na'im, Waras Budi Utomo	Relation Family Support With Level Of Anxiety Primipara Mom (Mother) Facing Childbirth In Health Society Center Of Pamulang South District Of Tangerang
			3	Zahara Farhan, Kusman Ibrahim, Aat Sriati	Stress in The Family Members Predictors With Families Treated in General Intensive Care Unit
			4	Widyatuti, Mustikasari, and Budi Santoso	A phenomenological study the spiritual child drug users using neuro linguistic programming approach
			5	Sigit Mulyono	Disaster Health Education and Training Framework in Indonesia
		Laksmiana 11	1	Susiana Nugraha, Yuko Hirano	The length of language study and preparedness for the migration A study from fourth and fifth batch of EPA nurse and care worker candidates
			2	Jum Natosba, Setyowati, Yati Afiyanti	Husbands' experience and Perception of Early-Stage cervical Cancer Patients about Sexual Needs
			3	Yuko Ohara	Migration of Indonesian nurses to Japan under the Japan-Indonesia Economic Partnership Agreement – Trends and Challenges through Sociological Perspective
			4	Ni Ketut Guru Prapti, Wongchan Petpichetchian, Wimonrat chongchareon	Massage for relieve nausea and vomiting in patients with cancer A Literature Review
			5	Tri Kurniati	Experience Of Nurses In Providing Spiritual Nursing Care To The Patients With Chronic Physical Illness That Hospitalized At Rumah Sakit Islam Jakarta 2012
			6	Fery Agusman Motuho Mendrofa, M Jamaluddin, Trio Cahyanto	The Effectiveness of Walking Therapy to Decrease Level of Depression in the Elderly in a Nursing Home Rindang Ashih II Semarang
		Wibisana 3,4,5,7,8,10	1	Ira Rahmawati, Yeni Rustina, Kunlarti	Improvement of Maternal Satisfaction With Discharge Planning Model Information-Based Technology
			2	Susilawati Hartanto, Ely Nurachmah, Dewi Gayatri	The effect of early mobilization on backpain scale in patients undergoing cardiac catheterization in RSPAD Gatot Soebroto
			3	Nani Nurhaeni	The family's empowerment experience in caring the children under five with pneumonia during hospitalization
			4	Dwi Nurviandari, Kusuma Wati, Junarti Sahar	Fall Prevention Program For Elderly in Social Institution in Jakarta
			5	Allenidekania, Rahmitha Sari	The Effectiveness of Exercise Progressive Muscle Relaxation (PMR) to reduce Cancer-Related Fatigue in Children Receiving Chemotherapy at RS Adam Malik, Medan
			6	Yati Afiyanti, Budi Ana Keliat, Ida Ruwarda, Nur Agustini	Evaluation on psychosexual health care training for Indonesian nurses as a contribution to improve the quality of life of cancer patient
			7	Rr.Tutik Sri Hariyati, Achir Yani S Hamid, Zainal A Hastibuan, Tris Eryando	Recording and reporting patient safety incidents using nursing information system "simpro"

TECHNOLOGY NEEDS INCREASE MILK PRODUCTION IN THE MOTHER WORKERS

Anggorowati^{1*}, Setyowati²

1. Maternity and Child Nursing Department Diponegoro University, Semarang, Indonesia
2. Maternity Nursing Department, Faculty of Nursing, Universitas Indonesia, Depok, Indonesia

*Email: aangham@gmail.com

Abstract

Babies deserve Breast Milk as the best food for at least 6 months. The fulfillment of these rights depends on the ability of mothers to breastfeed is influenced by the mechanisms of production and flow of milk. Factors affecting the sustainability of working mother breastfeeding for mothers working conditions have limited nursing time and higher stress levels. Qualitative research was conducted to obtain an overview of breastfeeding on the mother's experience of working with design phenomenology. Data collection with in-depth interviews with 6 participants working mothers with infants aged over 6 months in Semarang. The results showed that the period of breastfeeding in mothers work between 3-4 months with a variety of patterns. The production of milk during work a little that is reason to stop breast feed the baby. Mother's motivation to breastfeed during work influenced practicality milking and milk production technologies. Working mothers need a tool to increase breast milk production

Keywords: breast milk, milk production, mother workers, technology needs

Introduction

The infant mortality rate is one of the nation's health indicators are included in the target of the Millennium Developmental Goals fourth. Based on data from the World Bank in 2010 the infant mortality rate in Indonesia is 35.3 per 1,000 live births. This figure is higher than other ASEAN countries such as Malaysia (6.3), Thailand (13), Singapore (2.6) (WHO, 2011). While the MDG target to reduce infant mortality to 23/1000 live births [1].

One of the causes of infant deaths are due to infection, infection often occurs in infants who are not breastfed as babies lack of immune substances. Babies who are not breast feed 4.9 times more at risk of developing diarrhea than breastfed Likewise breastfed infants at higher risk of death due time 10:52 diarrhea [2]. Early breastfeeding can reduce infant mortality 22% [3]. Therefore indirectly breastfeeding can reduce infant mortality.

Women who breast feed get more benefits. Among other benefits of breastfeeding can increase uterine contractions and reduce postpartum bleeding in women. Weight breastfeeding mother quickly returned to pre-pregnancy. Besides, the birth mother can set the distance to the next child. Other benefits that breastfeeding can reduce the risk of ovarian cancer, the risk of premenopausal breast cancer, and osteoporosis [4]. Similarly, mothers who have a history of breastfeeding for more than 24 months are not at risk for breast cancer [5].

Women who do not breastfeed have a 22% higher risk of hypertension compared with those who breastfeed their children. Women who are breastfeeding to avoid hypertension over the next 14 years compared with those who do not want to breastfeed and just give formula to their infants. Similarly, women who breastfeed their children only three months or less, still had a greater risk of hypertension compared with those who breastfeed their

babies at least six months (exclusive breastfeeding) to a year [6].

Mother after giving birth has a role to breastfeed her baby. Mother's ability to breastfeed is influenced by mechanisms of production and flow of milk. Hormonal factors play an important role in the production and flow of milk. Hormone prolactin affects milk production and the hormones oxytocin affects the flow of breast milk [7].

Older nursing mother is different, at least up to 6 months in which the needs of the baby the best food in the period comes only from milk [8]. Breastfeeding mothers can continue until the age of 2 years old boy who also get other foods. In the long working mothers breastfeeding can be shorter when milk production decreases. According to Amin (2011), 51% of working mothers to stop breastfeeding, the majority of women stop breastfeeding when the baby aged less than three months [9].

Women are in a position that can cause problems when it is in a position to breastfeed and work. Working mothers are in the choice to breastfeed or not after the expiry of maternity leave. Maternal employment sectors related to flexibility for working mothers to breastfeed. Mothers who work at home can be flexible to breastfeed directly. However, mothers who work in the formal sector, which should leave the house possible effort in order to keep baby are breastfed to accommodate/ milking breast milk during the workday.

SDKI data (2007) showed that 57% of workers in Indonesia are women. In 2009 the number of female workers 40.7 million people (BPS, 2009). In 2011 the Central Java province has a population of 9.17 million women of childbearing age, among the population of them work outside the home. Average working hours of women in Central Java around 37 hours, but for the city of Semarang 42 hours per week (BPS Central Java, 2012). Thus the working mothers would leave their families an average of 8 hours a day plus travel time. The condition will affect the sustainability of breastfeeding.

Breastfeeding mothers can continue to keep giving her milk even though the mother had to work. Efforts are underway among other working mothers expressing milk and then save it for granted at work left her baby at the time. However, working mothers to breastfeed their children up to 6 months half of working mothers. Therefore we need a full picture of breastfeeding working mothers. The research question is how the image of breastfeeding working mothers?

The research aims to gain an overview of breastfeeding on the mother works in the city of Semarang with a specific purpose:

1. Describe the characteristics of mother breastfeeding at workers in Semarang city
2. Describe the meaning of breastfeeding in mothers working in Semarang city
3. Describe the constraint breastfeeding in mothers working in Semarang city
4. Describe the support for working mothers who breastfeed in Semarang city
5. Describe efforts to increase breastfeeding in mothers working in Semarang city

Methodology

Study design with a phenomenological study on working mothers with children under five criteria, history of breastfeeding. Number of sample 6 people with purposive sampling. Research is in the Semarang city Central Java.

Data collection methods used in-depth interviews because this method enables the acquisition of knowledge is needed to explore the informants who adapted to the purpose of research. Data collection tool is the foremost researcher himself, other than that used structured interview guide researchers who have adapted to the purpose of research, writing books or notes and stationery, as well as other supporting devices such as camcorders [10].

Qualitative research uses data analysis and descriptive content analysis. Content analysis data analysis involves the process of organizing and sorting data into patterns, categories, and a description of the basic unit that found the theme. While the descriptive data analysis is to

describe (explain) events are conducted in a systematic [10].

To obtain the necessary data validity checking techniques based on credibility, transferability, dependability and conformability. In this study the researchers used the technique of triangulation, which is a technique that utilizes data validity checking something outside the data for checking purposes or as a comparison of the data obtained. Triangulation technique used is triangulation. Triangulation in this study is achieved by comparing the interview data obtained during the research interview data in place and a different time from the previous data collection [11].

Result and Discussion

The study results obtained by some of the themes as follows:

1. Period of breastfeeding on the mother works

Upon completion of the leave long reach one month of breastfeeding and exclusive breastfeeding averages 3-4 months old. Participant statements, among others:

"...During my first fitting work so still fully breastfed" (P2)

"...Stop totals after 4 months because my milk did not come out..." (P3)

"Stop feeding when the child is 3 months old" (P2)

The results showed that the duration of breastfeeding ranged from 3-4 months. It is not meet for that exclusive breast feeding without additional food for 6 months after birth [1]. In depth interview result is not much different from the old research on breastfeeding working mothers in Jakarta showed that the mothers working in government institutions 60.2 % breastfed for more than 6 months, the mother worked in the private 51.1 % breastfed for more than 6 months. In the study in Semarang showed that the rate of exclusive breastfeeding on the mother works at 5.6 % [12].

2. Patterns of mothers breastfeeding after work

Varies

On working mothers breastfeeding patterns vary primarily partial breastfeeding patterns as well as statements of participants:
"...When children from 3 months already accompanied formula" (P3)
"...When children go to bed about to suckle" (P4)
"...If I work at home drinking formula but it ya netek" (P5)

Although the pattern of breastfeeding in mothers work varies but generally partial breastfeeding. Breastfeeding pattern consists of exclusive breastfeeding, predominant breastfeeding and partial breastfeeding. Breastfeeding is baby gets partial breast-milk substitutes or complementary foods. Based on Riskesdas in 2010 showed that in five months age, exclusive breastfeed pattern covering 15.3%, 1.5%, and predominant breast feeding partial breast feeding 83.2%.

3. Conditions that affect the sustainability of Breastfeeding

Working mothers to continue breastfeeding need comfort and frequency of breastfeeding or expressing milk frequently. Participants of this statement is

"...Breastfeeding also need the peace ..." (P2)

"...To provide breast milk that took very comfortable for the baby..." (P3)

"...Not exclusively breastfed intense..." (P2)

Working mothers to continue breastfeeding need comfort and frequency of breastfeeding or expressing milk frequently. Leisure provide a pleasant atmosphere in nursing mother, relaxed state will have an impact on hormone oxytocin that will help the flow of breast milk. The more often breastfeeding issued the stimulus increases milk flow which will provide feedback mechanism to the hormone prolactin, which increases milk production.

4. Reasons can't breast feed while working

Mother's decision to work for not breastfeeding anymore because of distance between home and work place is not far back enough to go home during breaks, reduced frequency of breast-feeding. Participant statements, among others:

"Besides the distance between homes with school right away (place of work)..." (P2)
"Frequency of breastfeeding my son on it to be reduced..." (P3)

The long distance course will spend time working mothers have to go home when breastfeeding. The limited time off work to make mothers who breastfeed every 2-3 hours not flexible to express the milk. Milking frequency stimulation reduced impact on milk production.

5. Milking milk during work performed at rest with a little volume

Time expressing milk is at rest and cow milk obtained a little. Participant on this statement as follows.

"...When I break her milk dairy" (P3)
"...Squeezed, but the release also is not much..." (P4)
"...If I milch volume is not much..." (P2)

Spending milk every 2-3 hours will increase milk productions, more rarely milked the less milk production. Therefore, if the mother's condition to work for 8 hours only once flushed stimulation to produce milk well within their given stimulus.

6. Maternal motivation works influenced practical milking and milk production technology

Working mothers are less motivated to express the milk because it felt cumbersome and impractical. In addition it also milked milk production did not fit mother expectations. Statements related to the following participants.

"Yes bothered if the canal should continue expressing milk at work..." (P4)
"It's not so practical anymore" (P5)

"...If my volume is not much dairy is not as expected ..." (P4)
Working mothers are less motivated to express the milk because it felt cumbersome and impractical. Expressing milk is done in various ways, namely milking by hand, using both manual and electronic Breast pump. Milking is a single activity that requires space and time. In addition it also milked milk production did not fit mother expectations. Results are slightly shrinking to milking mothers to continue milking for work. Mothers choose not to blush at the work period.

7. Facilitation for workplace breastfeeding

Workplace facilities do not meet the expectation to continue to express the milk during the work, as the following participant statement.

"Yes, there's no ice cupboard specifically for milk, my buddy in alamari drugs" (P1)
"...Sometimes banging on the bathroom due again to blush" (P4)

Workplace facilities do not meet the expectation to continue to express the milk during the work. Facilities that should be available include nursing room, refrigerator, ice pack, cooler bag, bottle sterilizer, table chair with ottoman, nursing apron, washcloths, hand washing (Rule of Ministry of Health No 15 / 2013) [13].

8. Psychological working mothers who did not breastfeed

Psychological working mothers who did not breastfeed longer have feelings of guilt.
"...Yes disappointed" (P2)
"...Felt guilty once, regret and certainly regret it..." (P3)

Guilt is not only because it can't breastfeed but also for leaving the child in the UK as survey shows more than half of mothers feel guilty leaving son (mother and child magazine).

9. Needs tools increase breast milk production

Working mothers hope to still be able to establish breastfeeding due to declining production among other tools to increase production, as the following participant statement.

"...Yes happy if there tools let me not bother..." (P5)
"...It's been milked so milk can also be a lot of ... (P4)

Milk production by a mechanism is depend on hormone prolactin. While the prolactin hormone is has a feedback mechanism to oxytocin. Efforts to increase the hormone oxytocin can through massage. During the massage is done conventionally by manual. We have already developed the technology to create a massage tool, among others, in the form of digital and manual. Particularly for oxytocin massage is a necessity for the development of massage tools.

Conclusions

- Working mothers who breastfeed exclusively and continue breastfeeding continues up to two years and requires preparation before starting to work in order to meet the cow milk
- During working breastfeeding mothers, maintaining milking frequency as the frequency of breastfeeding between 2-3 hours so that milk production is maintained
- Working mothers who breastfeed need technology in order to increase milk production, among others, oxytocin massage with massage tool that can be operated alone
- Guilt working mothers who did not breastfeed appropriate child rights
- Working mothers who breastfeed need support in order to facilitate workplace breastfeeding

Suggestions

- For a place where workers are still earning lactating women workers should provide appropriate means Permenkes 15 in 2013,

- allowed time to work, giving the opportunity to express the milk
- For the study, developed oxytocin massage tool that can be operationalized by the mother's milk flow and work to increase breast milk production
- For working moms, optimize breastfeeding for working effort includes the preparation and on the job.

References

- Ministry of Health, 2012. Indonesian Health Profile 2011. Jakarta: Ministry of health.
- Lamberti, LM, Walker CLT, Noiman, A, Victora, C., Black, RE., 2011. Breastfeeding and the risk for diarrhea morbidity and mortality. *BMC Public Health*, vol.11 (suppl 3): 515
- Edmond, Karen M., Zandoh, Charles., Quigley, Maria A., Amega-Etego, Seeba. Owusu-Agyei, Seth. Kirkwood, Betty R., 2006. Delayed breastfeeding initiation increases risk of neonatal mortality. *Pediatrics*. 117: e380-e386
- Angeletti, M A. Fall, 2008. Workplace Lactation Program : A nursing friendly initiative. *Journal of Health and Human Service Administration*.
- Awatef, M. Kacem, M., Rim, C., Olfa, G., Imed, H., Imen, C., Mohamed, B., Slim. B.A., 2010. Breastfeeding reduces breast cancer risk: a case-control study in Tunisia. *Cancer Causes Control*, 21:393-397
- Ika G., 2011. Breastfeeding may lower risk of multiple diseases. <http://sidomi.com/32161/menyusui-dapat-menurunkan-resiko-beberapa-penyakit/>. March 22, 2012
- Soetjiningsih. , 2005. Breastfeed guidance for health professionals. *ASI petunjuk bagi tenaga kesehatan*. Jakarta: EGC.
- WHO.2009. Infant and young child feeding: Model Chapter for textbooks for medical students and allied health professionals. Geneva: WHO Press.
- Amin, RM. Said, ZM. Sutan, R. Shah, SA. Darus, A. Shamsuddin, K. 2011. Work related determinants of breastfeeding discontinuation among employed mothers in Malaysia. *International Breastfeeding Journal*, 6: 4.

Morse Janice M and Field Peggy Anne. 2004. *Nursing research : the application of qualitative approaches*. Second edition. USA : Chapman and Hall.

Cresswell, John W. 2003. *Research Design*. Diperoleh pada tanggal 7 April 2010 dari <http://www.scribd.com/doc/13487304/Research-Design-John-Wcresswell-Chapter-8>

Sadyoga, PA. 2010. Images of Exclusive Breastfeeding Among Mothers on Workers in the Village District Klepu Pringapus Semarang regency in 2010.

Rule of Ministry of Health No. 15/2013 on Procedures for the provision of special facilities and nursing or milking breast milk



ISBN 978-602-96679-6-7



9 786029 667967 >



Certificate of Appreciation



This certificate is awarded to

Anggorowati, M.Kep., Sp.Mat

as a

Presenter

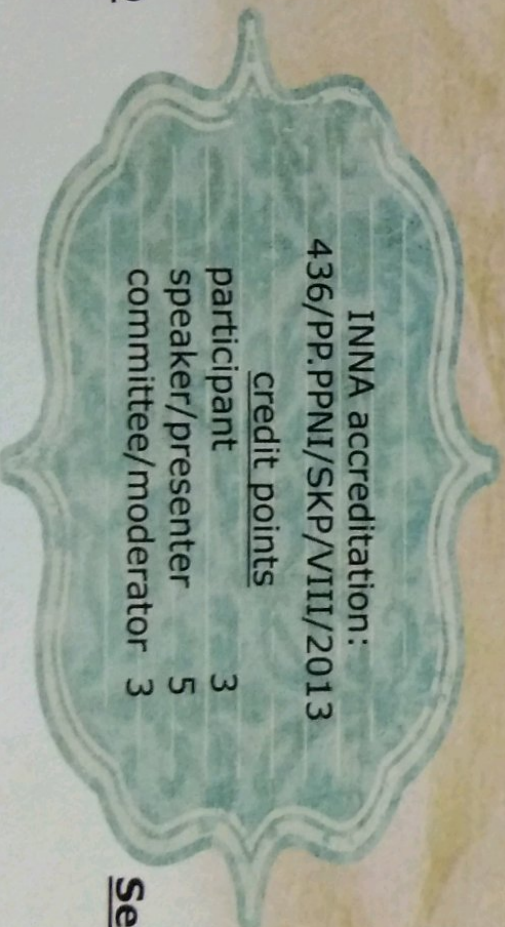


In The 4th International Nursing Conference

"Safety for all: protect patients, personnel, and environment. A multidiscipline approach."
The Grand Inna Bali Beach, Bali, Indonesia
September 12-14, 2013

Dewi Irawaty, M.A., PhD

Dean of Faculty of Nursing
Universitas Indonesia



INNA accreditation:
436/PP.PPNI/SKP/VIII/2013

credit points	
participant	3
speaker/presenter	5
committee/moderator	3

Setyowati, BA, BSN, MAppSc, PhD

Organizing Committee