

Health Promotion Model to Increase Maternal Visit and Exclusive Breastfeeding in the Puerperium Period in Sleman, Yogyakarta

Eny Retna Ambarwati¹⁾, Endang Khoirunnisa²⁾, Waryana³⁾

^{1,2)} Academy of Midwifery Yogyakarta, Yogyakarta, Indonesia

³⁾ Health Polytechnics, Poltekkes, Yogyakarta, Indonesia

ABSTRACT

Background: Exclusive breastfeeding in the puerperium period is beneficial for mother and infant. Breastfeeding stimulate oxytocin release that will increase uterine contraction. It in turn fastens uterine involution process and eventually prevents prolonged post partum bleeding. Breastfed infants are healthier, have better nutritional status, and less probability of dying. Therefore, there is a need to develop a health promotion model that empowers post partum mothers to visit maternity clinic for post partum examination. This study aimed to determine factors that affect maternal visits to maternity clinic for post partum examination.

Subjects and Method: This was an analytical observational study with cross-sectional design. This study was conducted in Sleman, Yogyakarta. A total sample of 125 post partum mothers was selected for this study. The dependent variable was number of visits to maternity clinic for post partum examination. The independent variables were maternal knowledge, access to information, husband support, stakeholder role, and participation in maternal health promotion class. The data were collected by a set of questionnaire, and then were analyzed by Structural Equation Model (SEM).

Results: The SEM showed Goodness of Fit, with indicators as follows: Chi Square 263.01, $p=0.055$, RMSEA=0.025, GFI=0.98, NFI=0.92, and CFI 1.00. Maternal knowledge ($b=0.15$), access to information ($b=0.42$), husband support ($b=0.52$), stakeholder role ($b=0.57$), participation in maternal health promotion class ($b=0.04$).

Conclusion: Maternal knowledge, access to information, husband support, stakeholder role, participation in maternal health promotion class, are important determinant of maternal visit to maternal clinic for post partum examination.

Keywords: maternal visit, maternal clinic, health promotion class, puerperium.

Correspondence:

Eny Retna Ambarwati. Academy of Midwifery Yogyakarta, Yogyakarta, Indonesia. Email: enyretnaambarwati@gmail.com.

BACKGROUND

The development of health in the periods of 2015-2019 is Program Indonesia Sehat (Healthy Indonesia Program) which aims to improve health status and health promotion. Health promotion is a health development policy that is focused on strengthening basic health efforts.

The Maternal Mortality Rate is far from the MDGs target in 2015. This program is called the Sustainable Development

Goals (SDGs), including 17 goals in the health sector. The improvement of public health status, especially for mothers, was carried out with indicators of decreasing maternal mortality from 359 per 100.00 live births to 346 and 306 per 100,000 live births and increasing efforts to improve health promotion and community empowerment, financing promotive and preventive activities. The quality of women's human resources must be improved. Women also affect the quality of future

generations because women's reproductive functions play a role in developing human resources in the future. Reproductive health becomes quite serious throughout life, especially for women (Manuaba, 2002).

More than 50% of Indonesia's population are women. They live in the countryside. Most of them are in low economic status and low education levels. This is one of the factors which causes maternal mortality. Puerperium is at risk of causing maternal mortality. Therefore, mothers need to get health services during the puerperium by getting postpartum visits by health professionals at least 3 times. One of the goals of postpartum visits is to have breastfeeding counselling.

The goal of health development set by the Indonesian Ministry of Health is increasing awareness, willingness and ability for everyone in realizing optimal public health degrees. Health promotion has been established as a mandatory service for community health center.

Table 1. The Result of SEM Analysis

No.	Latent Variable	Path Coefficient (b)		Total
		Direct (Postpartum visit)	Indirect (maternal health promotion class)	
1	Maternal knowledge	0.06	0.09	0.15
2	Access to information source	0.10	0.32	0.42
3	Husband support	0.42	0.10	0.52
4	Stakeholder role	0.15	0.42	0.57
5	Maternal health promotion class	0.04	-	0.04

DISCUSSION

a. The direct effect of maternal knowledge, access to information source, husband support, and stakeholder role on postpartum visit.

The results showed that there were two determinants that directly had a significant and positive effect on postpartum visit, such as husband support and stakeholder role. Meanwhile, the other three deter-

SUBJECTS AND METHOD

This study used a survey method with cross-sectional design. It was descriptive correlational study which aimed to determine the extent to which variations in a factor are related to variations in one or more another factors based on correlation coefficients.

The population in this study was all breastfeeding mothers in Sleman Regency. This study used random sampling. The subjects of the study were breastfeeding mothers with normal labor history. The data were analyzed by Structural Equation Model (SEM) with the LISREL program.

RESULTS

The result of Goodness of fit model showed that chi square was 263, P-value was 0.055, RMSEA was 0.025, GFI was 0.92, NFI was 0.98, CFI was 1.00.

minants directly did not have a significant effect on postpartum visit, such as maternal knowledge and access to information sources. The non-significant effect does not mean that it is not acceptable, but it has small or less effect.

The high direct effect of maternal knowledge, access to information sources, husband support, and stakeholder role

were (6%; 10%; 4%; 42%, 15%) on post-

partum visits.

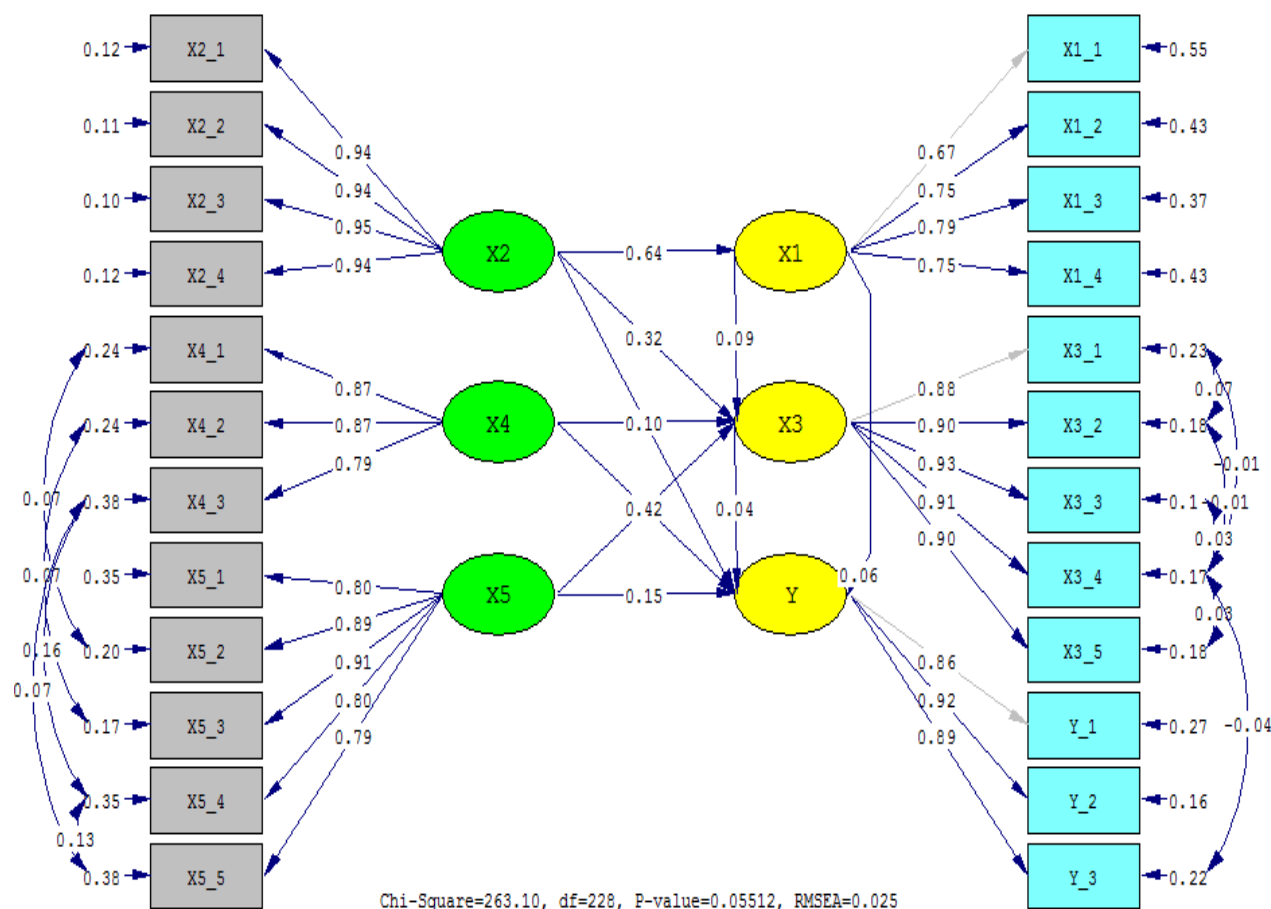


Figure. The result of SEM analysis

- 1) The direct effect of maternal knowledge on postpartum visit

The direct effect of maternal knowledge on postpartum visits is low. The contribution of maternal knowledge on postpartum visit is only 6%. This is also supported by the result of t value by 0.77. The effect is good and significant if the t value is bigger than 1.96.

Some studies have found that knowledge is one of the factors that affect women to use postpartum services. A study conducted by Ugboaja et al (2013) stated that the main reason women do not take postpartum visit after labor is the lack of knowledge about the care needed after labor. This is in line with a study conducted by

Pistella and Synkewecz in Sara (2008) that surveyed 78 professional health workers and coordinators who regulate health care providers for women showed that many postpartum mothers do not have knowledge about the purpose and the importance of postpartum visit. It causes the low number of postpartum visit. It shows that the level of knowledge affects postpartum visit.

A woman who has knowledge of pregnancy complications has a significantly bigger possibility of taking puerperium services 24 hours after delivery (Kim et al, 2013). Meanwhile, an experimental study conducted by Syed et al. (2006) found that there is a significant increase in the use of

postpartum services after being given an intervention about knowledge. Maternal knowledge of two danger signs in the postpartum period increases. It shows that the increase of knowledge is very influential in increasing postpartum visit.

2) The direct effect of access to information source on postpartum visit

The effect of access to information source on postpartum visits is low. The contribution of information source on postpartum visit is only 10%. This is also supported by the result of *t* value by 1.17. The effect is good or significant if the *t* value is bigger than 1.96.

Based on a study conducted by Prashant, Rai, Alagarajan, Singh (2012), women who have a source of health information has a possibility of taking antenatal care, safe delivery services and postpartum services than women who do not have a source of health information. This is in line with the result of the study conducted by Islamic studies and Oldland (2011) which showed that postpartum mothers who can access the information sources from media have higher possibility of taking postpartum visit than postpartum mothers who cannot access information from the media. Information about the program of postpartum visit that is not obtained entirely by postpartum mothers from health workers or the media causes a lack of knowledge about the importance of postpartum visits. Therefore, postpartum mothers feel that they do not need and get the benefit of postpartum visits.

Based on a study conducted by Lamoro et al. (2002), most of postpartum mothers consider that quality postpartum care is portpartum care which can provide satisfactory information and check up services. The level of maternal satisfaction during postpartum visit is in the information needs of postpartum care and infant

care which has been fulfilled. The level of satisfaction of postpartum mothers decreases if health workers do not provide information needed in postpartum care and infant care completely.

3) The direct effect of husband support on postpartum visit

The direct effect of husband support on postpartum visits is high. The contribution of husband support on postpartum visit is 42%. This is also supported by the result of *t* value by 4.90. The effect is good and significant if the *t* value is bigger than 1.96.

Husband support is a factor which support postpartum mothers in taking postpartum visits, because husband is the decision maker in a family. According to the result of a study conducted by Bhata (2011), husband support in the form of informative supports are husband support in giving suggestions and advices about the puerperium period to the wife based on the husband knowledge. Based on the result of a study in Pakistan, most of the respondents did not know about the complications of the puerperium due to the low husband knowledge about the danger signs occur during puerperium. It is one of the inhibiting factors in accessing health services. The low husband knowledge about the danger signs and complications of the puerperium causes the slow response of husband to have a check up to health workers in making a postpartum visit.

The low knowledge is not related to the education status of husband which causes low husband support for postpartum mothers, but the cultural barriers that underestimate the status of women compared to men. In fact, the husband support and enthusiasm is high for pregnancy, labor and puerperium, but it is practically low. It is because of the differences in gender point of views on cultural norms that have been inherent in the region. Meanwhile, the

husband income is not related to husband support during puerperium period.

One of the husband supports on postpartum mothers in postpartum visits is by accompanying the postpartum mother when making a visit to a health care facility. This emotional support is an empathy and concern for the mother during puerperium. Based on the result of a study conducted by Islamic and Oldland (2011), postpartum mothers who get emotional support by being accompanied by their husbands during postpartum visits are more often taking postpartum visits than postpartum mothers without being accompanied by husbands.

4) The direct effect of stakeholder role on postpartum visit

The direct effect of stakeholder role on postpartum visits is high. The contribution of stakeholder role on postpartum visit is 15%. This is also supported by the result of t value by 2.21.

A study by Kululangan in Malawi (2011), how to involve stakeholder in maternal visit during labor is by approaching community leaders. Health care providers such as hospitals or other health centers approach community leaders or people who have power in the area and highly respected by the community. In addition, community leaders are informed about maternal health issues. Furthermore, the health service providers and community leaders need to involve men to care about maternal health problems, such as presenting it at public meetings, giving incentives, and launching male involvement. It has a good impact on the increase of postpartum visits.

b. The indirect effect of maternal knowledge, access to information source, husband support, and stakeholder role on postpartum visit through maternal class

The results showed that there were two determinants that indirectly had a signi-

ficant and positive effect on postpartum visit through maternal health promotion class, such as access to information source and stakeholder role. Meanwhile, the other two determinants directly did not have a significant effect on postpartum visit through maternal health promotion class, such as maternal knowledge and husband support. The non-significant effect does not mean that it is not acceptable, but it has small or less effect.

The high effect of maternal knowledge, access to information sources, husband support, and stakeholder role were (9%; 32%; 10%; 42%) on postpartum visits through maternal health promotion class

1) The indirect effect of maternal knowledge on postpartum visit

The indirect effect of maternal knowledge on postpartum visits is low. The contribution of maternal knowledge indirectly on postpartum visit is 10%. This is also supported by the result of t value by 1.25. The effect is good and significant if the t value is bigger than 1.96.

The big problem of maternal health and prosperity of postpartum mothers is focused on education during pregnancy to get better knowledge. Media is a medium to play an important role in developing individual perceptions and influenced cultures and expectations. Based on the result of this study, it indicates that education during pregnancy affects the health and prosperity of postpartum mothers. The result of this study showed that the knowledge during the puerperium period had a positive effect on the success of the puerperium. Therefore, the education of postpartum which provided on postpartum visit is very important. In addition, the improvements in postpartum care are part of the effectiveness of postpartum visits.

2) The indirect effect of access to information sources on postpartum visit

The indirect effect of access to information sources on postpartum visits is high. The contribution of information source indirectly on postpartum visit is 32%. This is also supported by the result of t value by 4.30. The effect is good and significant if the t value is bigger than 1.96.

Midwives as health workers have an important role in providing maternal health promotion class. Based on the result of a study conducted by Akmes (2013) in Turkey, access to information about postpartum care can be obtained through mother and newborn home care education programs. It aims to provide health education to postpartum mothers about postpartum care and newborns. The midwife's home care not only aims to provide counseling and health education to the mother but also to people who provide care for the mother or newborn at home such as grandmothers, sisters or others. It aims to improve the quality of home health care services. This program aims to be a medium for accessing information for mothers and families about postpartum care and infant care. Therefore, the families involved in the puerperium know their role in supporting the postpartum mother.

Based on the result of this study, postpartum mothers and families who received health education from midwives argued that midwives knowledge, skills and attitude who conducted home care were sufficient and had good information from midwives. Mostly, respondents were satisfied with this program. In addition, their trust increased on midwives and the education they had received.

3) The indirect effect of husband support on postpartum visit

The indirect effect of husband support on postpartum visits is high. This study showed that the contribution of husband support on postpartum visit is 10%. This is also supported by the result of t value by 1.17. The effect is good and significant if the t value is bigger than 1.96.

Based on the result of a study conducted by Mullany, Becker and Hindin (2007), interventions in the form of maternal health promotion class which involves husbands increase postpartum visit compared to mothers who participate in maternal health promotion class on their own and mothers who do not participate in maternal health promotion class. Mothers who participate in this class with their husbands have more preparation in preparing labor than mothers who do not participate in this class. It shows that husband support plays an important role in postpartum visits.

4) The indirect effect of stakeholder role on postpartum visit

The indirect effect of stakeholder role on postpartum visits is low. The contribution of stakeholder role directly on postpartum visit is 10%. This is also supported by the result of t value by 0.42. The effect is good and significant if the t value is bigger than 1.96.

Health promotion needs to be conducted together in the community by creating networks and partnerships as an effort to improve access to health services including postpartum visits. Based on the result of a study conducted by Kearn, Caglia, Hoope Bender and Langer (2015), LHW (Lady Health Workers) and HEW (Health Extension Workers) have a role in strengthening the national health system, especially in rural areas, because the skilled health workers are mostly concentrated in

urban areas. LHW and HEW have educational and cultural backgrounds which ensure that they are respected, supported by the community and motivated to provide services to the community and become important links with the primary health care system.

Based on the result of a study conducted by Medhanyie et al. (2003) in Ethiopia, HEW has an important contribution in increasing the use of health services, such as postpartum visits. HEW is a part of the Health Extension Program which aims to expand the coverage of health services and achieve justice in accessing health services. HEW is a health cadre who has received special training and training for one year. The lowest community health center is Community Health Center. There is a health center and a health post unit under the Community Health Center. One health center consists of experts such as doctors, midwives, nurses, laboratory staffs, sanitarians and so on. Meanwhile, HEW in the health post. HEW provides information about pregnancy, safe delivery and postpartum care. HEW is able to increase the use of postpartum care services, thus increasing postpartum visits.

c. The effect of maternal health promotion class on postpartum visit.

Counseling as a process of empowerment, will produce a dynamic and progressive society in a sustainable manner, because there are intrinsic and extrinsic motivations in themselves (Mardikanto, 2010). Counseling not only aims to change the behavior of lower society class, but also to increase interaction inter-stakeholders. As a result, they are able to optimize their accessibility with information and improve their economic conditions and social welfare.

Maternal health promotion class is one of the health programs which are expected to play a role in decreasing morbi-

dity and mortality due to pregnancy, labor and puerperium. Maternal health promotion class is a medium for learning together which needs to be taken by pregnant mothers in order to obtain sufficient knowledge; thus, it can prevent complications and increase the coverage of K1, K4 and deliveries to health workers (Ministry of Health, 2012).

The authority of midwives in carrying out government programs is by carrying out health services, such as doing integrated antenatal care, conducting community participation, implementing community midwifery services, and conducting other health service in the government programs. This is stated in the Peraturan menteri kesehatan (Regulation of the Minister of Health) number 1464 in 2010, article 13 and article 18. In carrying out the practice, midwife is obliged to establish a government program in improving the level of public health status. In principle, when referring to the 2010 Permenkes, the duties and authority of midwives in carrying all types of government programs including maternal health promotion class are regulated in the regulation of the Minister of Health.

The effect of maternal health promotion class on postpartum visits is low. The contribution of maternal health promotion class on postpartum visit is only 4%. This is also supported by the result of t value by 0.47. The effect is good and significant if the t value is bigger than 1.96.

Based on the result of a study conducted by Sarah (2008), maternal health promotion class increases parenting knowledge about neonatal diseases such as respiratory disorders, sepsis, and prematurity complications in order to decrease neonatal mortality rate. It aims to assess the effectiveness of neonatal education in increasing maternal knowledge about newborns care

with limited resources and to determine whether this knowledge can survive during the puerperium. Educational interventions which were given in a structured manner and face-to-face interactive modules which were taught showed an increase in knowledge about neonatal care. Furthermore, the results were tested again after labor. The results were comparable to the post test: the mothers were able to remember information about neonatal care during the first puerperium. This study shows that health promotion through short antenatal education given to mothers is very effective.

Based on study conducted by Bahrami, Simbar, and Bahrami (2013), maternal health promotion class provides information about pregnancy, labor, infant care, self-confidence, and responsibility as parents. This is a positive approach for mothers who will labor. Antenatal education has a positive effect on the quality of life for postpartum mothers. Several studies found that there is a significant correlation between education of pregnancy/support programs on the quality of labor, puerperium experience and parental satisfaction.

The result of this study showed that pregnancy education produces long-term knowledge to improve the quality of life for postpartum mothers at 6-8 weeks to 1 year. The study was conducted in two groups: one group which was intervened and the other as a control. The group which was intervened has a high level of satisfaction than the control group. The group which was intervened has better quality of life. This can be seen in the high scores on physical health, psycho-social, social relations and environmental health. It shows that health promotion through antenatal education or maternal class increases postpartum visits. It is observed from the effectiveness and satisfaction of postpartum

visits. The conclusions of this study are as follows:

1. Maternal knowledge, access to information sources, husband support, and stakeholder role have direct effect on postpartum visit. The highest effect is husband support.
2. The effect of maternal knowledge, access to information sources, husband support, and stakeholder role have indirect effect on postpartum visit through maternal health promotion class. The highest effects are access to information source and stakeholder role.
3. Maternal knowledge significantly has positive indirect effect on postpartum visit through maternal health promotion class.
4. Maternal health promotion class significantly has effect on postpartum visit through maternal health promotion class. The better the maternal health promotion class, the better the postpartum visit.
5. The contribution of each variable is important, so that the model of health promotion in increasing postpartum visits is conducted.

REFERENCE

- Akmese(2013). Mother and newborn home care education program the effects of “mother and newborn home care education program (mnhcep)” on mother and persons providing care of mother/newborn. *Balikesir Sağlık Bilimleri Dergisi/Balıkesir Health SciencEs Journal*
- Bhata B (2011). An exploratory study of prevailing knowledge, attitude and practice of husband in regards to factors affecting in supporting activities during pregnancy, delivery and

- post-partum periods. *Journal of Nobel Medical College* (2011), 1 (45)
- Bourne L, Walker DHT (2006). Visualizing stake holder influence-two australian examples. *Project Management Journal*. 37: 5-21.
- Butterfield KD, Reed R, Lemak DJ (2004). An inductive model of collaboration from the stakeholder's perspective. *Business and Society*, 43 (2): 162-195 Washington State University: SAGE Publications.
- Green, Keuter (2000). *Health promotion planning*. 2nd ed. Mountain View: Mayfield Publishing Company.
- House, Williams (2000). *Promoting health: intervention strategies from social and behavioral research*. Promoting health: intervention strategies from social and behavioral research.
- Herijulianti E (2002). *Pendidikan kesehatan*. Jakarta: ECG.
- Islam MR, Odland JO. (2011). Determinant of antenatal and postnatal care visits among indigenous people in Bangladesh: a study of the mru community. *Rural dan Remote Health* 11: 1672
- Kearn AD, Caglia JM, Hooper B, Langer A (2015). Antenatal and postnatal care: a review of innovative models for improving availability, accessibility, acceptability and quality of service in low resource setting. *B JOG journal of Obstetric and Gynaecology*.
- Khadijah M, Somayyeh OG, Mohammad TS (2013). Matrenal knowledge on postpartum care in healthcare centers of mashhad iran 2013. *Jurnal Of Midwifery & Reproductive Health*.
- Kim N (2013). Early postnatal care and its determinant in cambodia. *Directorat General for Health Ministry of Health-Kingdom of Cambodia*.
- Labonte R, Laverack G (2008). *Health promotion in action: from local to gloBal empowerment*. UK: Palgrave Macmillan.
- Lamoro (2002). Mothers' perspectives on the quality of postpartum care in Central Shanghai, China. *Int J Qual Health Care*. 2002 Oct;14(5): 393-402.
- Medhanyie A. (2003). The role of health extension workers in improving utilization of maternal health services in rural areas in Ethiopia: a cross sectional study. *wanita*. Jakarta: EGC.
- Prashant R, Alagarajan S (2012). Determinants of maternity care services utilization among married adolescents in rural india. *PLoS ONE*, 7(2)
- PRHP (Prairie Region Health Promotion) Research Centre. (2004). *Health promotion capacity checklists: a work book for individual, organizational, and environmental assessment*. Saskatoon, saskatchewan, Canada: University of Saskatchewan.
- Singarimbun, Masri, Effendi (2005). *Metode penelitian survei*. LP3ES. Jakarta.
- Syed U, Asiruddin, Helalm I. (2006). Immediate and early postnatal care for mothers and newborns in rural bangladesh. *J Health Popul Nutr*; 24 (4): 508-518
- Smalwood. (2014). Maternal knowledge on postpartum care in healthcare centers of mashhad, iran in 2013. *Journal of Midwifery & Reproductive Health*
- Sarah BV. (2008). *The postpartum visit: an overlooked opportunity for prevention*. Dissertation Submitted To The Faculty Of The University Of North Carolina At Chapel Hill In
- Ugboaja, Joseph O. (2013). *Barriers to postnatal and exclusive breastfeeding among urban women in southeastern*

Journal of Health Promotion and Behavior (2016), 1(3): 139-149
<https://doi.org/10.26911/thejhp.2016.01.03.01>

nigeria. Nigerian Medical Journal 54
(1).

Wiryanto. (2004). Pengantar ilmu komunikasi. PT. Grasindo, Jakarta