

Gap Between Current and Ideal Immediate Normal Postpartum Nursing Care at Woman's Health University Hospital, Assiut.

Mervat M. Hassan, Ali M. El-Seman, Nabila Taha & Nadia A. Mohammed.

Assistant lecturer obstetrics & Gynecological nursing, faculty of Nursing South Valley University Egypt .

Professor of Obstetrics & Gynecology, Faculty of Medicine Assiut University Egypt .

Assistant Professor Obstetrics & Gynecological Nursing, Faculty of Nursing Assiut University Egypt .

Assistant Professor Obstetrics & Gynecological Nursing, Faculty of Nursing South University Egypt.

Abstract

Improving the quality of obstetric care is an urgent priority in developing countries where maternal mortality remains high. Optimal obstetric care is the key requirement in reducing maternal mortality. The **Aim** of this study is to identifying the gap between the current and ideal Immediate normal postpartum nursing care at Woman's Health University Hospital, Assiut. Descriptive observational **Design** was used. Convenient **Sample** of 500 women were included. **Data collected** from June 2013 to January 2014, an interview questionnaire and clinical audit chart were used. The **Results** revealed that mean age of subjects was 27.83 ± 4.85 years, multiparae constitutes more than half of subjects . Hygienic & nutritional advices were not done by nurses. Breast feeding advices were provided to around one quarter of subjects. Check for uterine contractions was provided by the nurse for nearly half of subjects. Immediate newborn care was provided by nurses in different high percentages, while monitor baby breathing not done by nurses. It is **Concluded** that, a gaps were identified between current and ideal immediate normal postpartum nursing care. Hygienic & nutritional advices not provided by nurses. All items of immediate post-partum care except check for uterine contractions not provided by the nurses. Immediate newborn care was the most item of care provided by the nurse. Reaudit is **Recommended** to improve quality care.

Key Words:- Immediate Post Partum Period, Audit & Ideal Care.

Introduction

Primary responsibilities of nurses in postpartum settings are to assess postpartum patients, provide care and teaching, and if necessary, report any significant findings. Postpartum nurses are essentially detectives searching for findings that might lead to negative outcomes for patients if left unattended (Moldenhauer, 2013). Postpartum period is a very special phase in the life of women and newborn and forms a part of the normal continuum of reproductive cycle. Immediate post-partum period referred to the first 24 hours after birth. (Ricci & Kyle, 2009). Nurses need to be aware of the normal physiological and psychological changes that take place in clients' bodies and minds in order to provide comprehensive care during this period. In addition to client and family teaching, one of the most significant responsibilities of the postpartum nurse is to recognize potential medical complications after delivery (Bethany et al., 2010). The provision of midwifery care to women following the birth of their baby aims to encompass aspects of observing and monitoring the health of the new mother and her baby as well as offering support and guidance in breast feeding and parenting skills. (Swell, 2007). As a result there have been increasing numbers of research studies that challenge the traditional pattern of

postpartum care and its overall provision and value (Wary et al., 2008).

The period soon after childbirth process substantial health risks for both mother and newborn infant. Yet the postpartum period receives less attention from health care providers than pregnancy and childbirth. Models of postpartum care have changed little since first developed acentury ago. The World Health Organization (WHO) is in the process of revising and updating its guidance on immediate postpartum care delivered by skilled providers. The purposes of revision are to encourage and support broader provision of care that promotes health as well as maintains vigilance against dangerous complications. (WHO, 2010). To ensure that a good quality of care is provided, one technique that has been developed for this purpose is clinical audit. (Graham et al., 2012). Clinical audit is a continuous process about improving practice and providing a better service. Practitioners are expected to measure and demonstrate the effectiveness of the care they provide and one way of assessing practice by clinical audit (Kitson et al., 2012).

Significance of the study

More than 70% of maternal deaths occur in the

postpartum period, especially in developing countries, 77% of these deaths occur during or shortly after childbirth (within 24 hours). (John & Sons, 2007). Studies have found that at least 88-98% of maternal deaths can be prevented if good quality emergency obstetric care is available (NHS Executive, 2010). Postpartum care remains a vital part of the childbearing process that the midwife has to provide for the mother and baby immediately following birth (WHO, 2006).

Research Question

Is there a gap between the current & ideal immediate normal post-partum nursing care at Woman's Health University Hospital, Assiut.

Aim of the work

Identifying the gap between the current and ideal immediate normal postpartum nursing care at Woman's Health University Hospital, Assiut.

Subject & method

Research design

Descriptive observational design was used for this study.

Setting

This study was conducted at the Women's Health University Hospital, Assiut, which provides free services for rural and urban areas. Annual delivery rate reach to 25000 approximately.

Subjects

Convenient sample of normal vaginal delivered women. According to sample equation 500 women included in this study.

Inclusion criteria

Normal vaginal delivery.

Tools of data collection

The following tools were used.

1-Interviewing questionnaire

Developed by the investigator and included: socio demographic data, menstrual history, past obstetrical history, medical history, family planning history, & present history.

2-Clinical Audit chart (observational check list)

This tool designed by WHO (2003) according to guidelines standard of essential obstetric care for postpartum women and baby. It consists of different tasks that are to be performed immediately after delivery, checked by done or not done. Modified by adding four columns, done by high qualified nurse, staff nurse, student's nurse, others.

Include:- the ideal care & advices should provide to mothers, the ideal care should provide to newborn, advices and counseling should provide to mothers

regards postpartum care and hygiene, breastfeeding, nutrition, and prevention of micronutrient deficiencies.

Administrative approval

The necessary official permission was obtained from the Dean of Faculty of Nursing, Assiut University to proceed with the study and from the chairman of Woman's Health University Hospital, Assiut to proceed with the study.

Ethical Considerations

Research proposal approved from ethical committee in the faculty of nursing. There is no risk for study subjects during application of the study. An oral consent were obtained from women and nurses after explaining the nature and purpose of the study. Confidentiality and anonymity were assured.

Pilot study

A pilot study carried on 10% of the total subjects (50 woman) to test the validity and consistency of the tool and to detect any modifications needed, those subjects were included in the study. Omit high qualified nurse from care providers in clinical audit chart were recommended after application of pilot study.

Filed work

The investigator interviewed the women to fulfill the questionnaire, observe the nursing staff who provide the immediate postpartum nursing care for the women & newborn and recording in the clinical audit chart. All nurses working in labor room were diploma nurse. They were nine nurses, only two nurses in every shift, two nurses off and one nurse responsible for administrative work. Data collection started on June 2013 and ended by January 2014. Data were collected three days a week during morning shift. Four to six women were delivered during this period and included in the study.

Statistical analysis

The collected data were tabulated and entry in excel sheets. Data analysed by using SPSS program version 19. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables.

Results

Table (1): Distribution of the study subjects by their socio-emographic characteristics.

Demographic characteristics	No. (n= 500)	%
Age		
< 25 years	127	25.4
25 - < 30 years	194	38.8
30 - < 35	123	24.6
≥ 35 years	56	11.2
Mean ± SD (Range)	27.83 ± 4.85 (19 – 45)	
Level of education:		
Illiterate	9	1.8
Read & write	12	2.4
Primary	77	15.4
Preparatory	105	21.0
Secondary	226	45.2
University	71	14.2
Occupation		
Housewife	481	96.2
Employed	19	3.8
Residence		
Rural	381	76.2
Urban	119	23.8

Table (2): Distribution of the study subjects by their Obstetrical history.

Obstetrical history	No. (n= 500)	%
Number of gravidity		
1	65	13.0
2 - 4	358	71.6
≥ 5	77	15.4
Number of parity		
1	91	18.2
2 - 4	344	68.8
≥ 5	65	13
Number of abortions		
0	377	75.4
1	87	17.4
2 or more	36	7.2
Number of stillbirths		
0	493	98.6
1	7	1.4
Number of neonatal deaths		
0	495	99.0
1	3	0.6
2 or more	2	0.4
Number of living children		
One	95	19.0
2 - 3	292	58.4
> 3	113	22.6

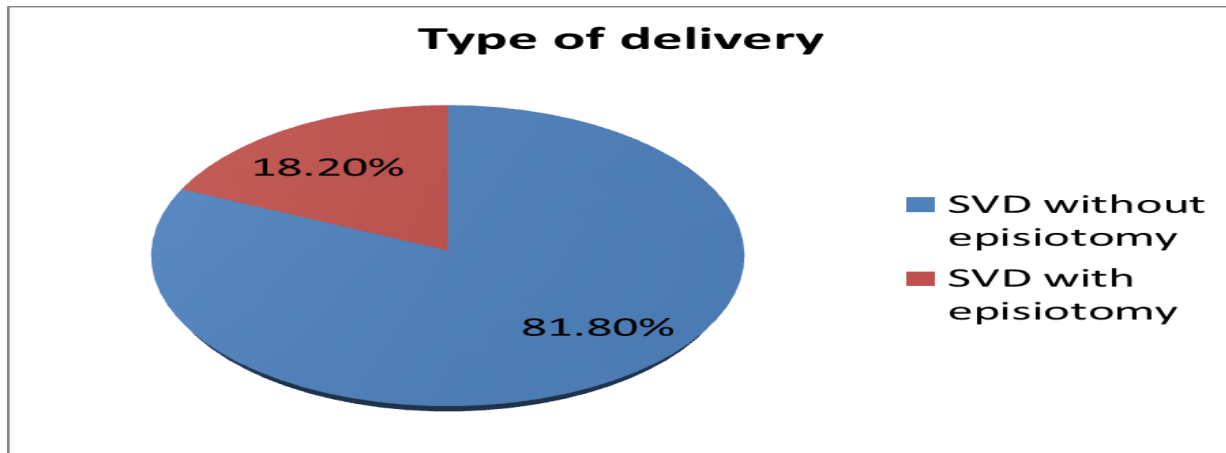


Figure (1): Distribution of the study subjects by their type of delivery

Table (3): Distribution of the study subjects by immediate postpartum nursing care & care providers.

Items of care	Done by staff nurse		Done by student nurse		Done by others		Not done	
	No.	%	No.	%	No.	%	No.	%
Check for completeness of placenta and membranes	14	2.8	14	2.8	347	69.4	125	25.0
Assess general maternal well-being (blood pressure, body temperature, puls	0	0.0	86	17.2	3	0.6	411	82.2
Identify and respond to/refer immediate postpartum problems such as excessive bleeding (i.e., a pad soaked in less than one hour), fever, elevated blood pressure	0	0.0	4	0.8	3	0.6	493	98.6
Check for pallor (conjunctiva and palms)	0	0.0	19	3.8	6	1.2	475	95.0
Check perineum for tears, inflammation, discharge	52	10.4	31	6.2	309	61.8	108	21.6
Check for uterine contraction and fundal height. Feel if uterus is hard and round	215	43	44	8.8	210	42.0	31	6.2
Encourage mother to empty bladder	0	0.0	0	0.0	0	0.0	500	100.0
Encourage mother to eat and drink	0	0.0	40	8.0	383	76.6	77	15.4
Initiate early (within one hour) and frequent, exclusive breastfeeding and assist the mother to adopt correct breastfeeding practices	14	2.8	83	16.6	292	58.4	111	22.2
Advise on maternal/ newborn danger signs and where to go for help	0	0.0	30	6.0	0	0.0	470	94.0
Advise on when to return for next postpartum check-up	0	0.0	0	0.0	0	0.0	500	100.0

Others mean obstetrician or nurse's aids

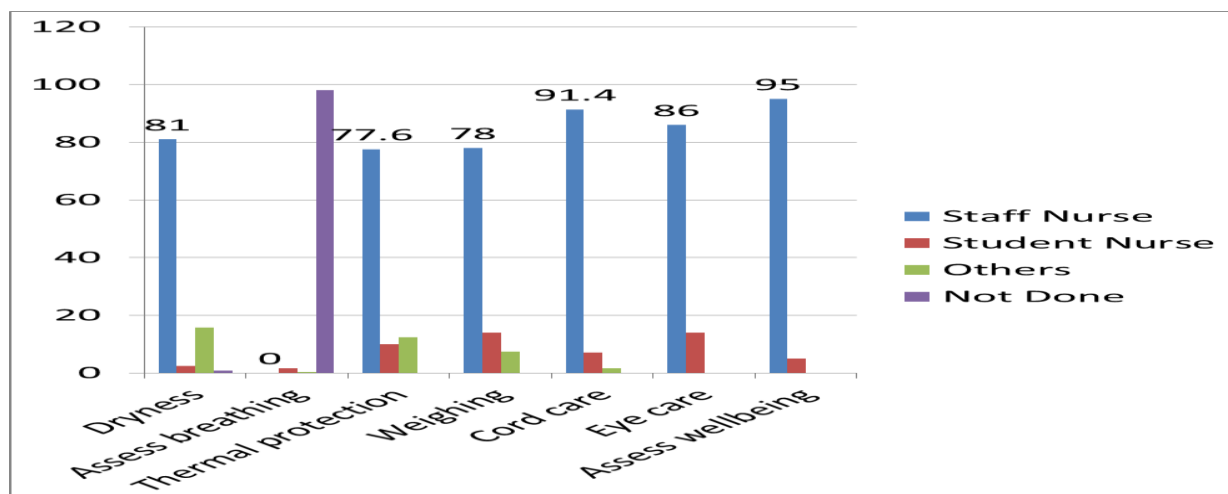


Figure (2): Distribution of the study subjects by immediate postpartum nursing care for the newborn & care providers.

Table (4) : Distribution of the study subjects by hygienic advices & care providers

Items of care	Done by staff nurse		Done by student nurse		Done by others		Not done	
	No.	%	No.	%	No.	%	No.	%
Wash hands before handling baby	0	0.0	4	0.8	0	0.0	496	99.2
Wash hands before feeding baby	0	0.0	7	1.4	0	0.0	493	98.6
Wash perineum daily	0	0.0	50	10.0	0	0.0	450	90.0
Wash hands after fecal excretion	0	0.0	10	2.0	0	0.0	490	98.0
Wash hands before preparing food	0	0.0	8	1.6	0	0.0	492	98.4
Change pads every 4-6 hours	0	0.0	38	7.6	0	0.0	462	92.4
Wash the body daily	0	0.0	49	9.8	0	0.0	451	90.2

Others mean obstetrician or nurse's aids

Table (5): Distribution of the study subjects by breastfeeding advices & care providers.

Items of care	Done by staff nurse		Done by student nurse		Done by others		Not done	
	No.	%	No.	%	No.	%	No.	%
Keep newborn in skin-to-skin contact with mother soon after delivery.	138	27.6	93	18.6	11	2.2	258	51.6
Initiate breastfeeding within ½ to 1 hour after birth.	109	21.8	90	18.0	13	2.6	288	57.6
Give baby the first milk (colostrums), which is nutritious.	11	2.2	95	19.0	93	18.6	301	60.2
Counsel on exclusive breastfeeding. WHO recommends that infants should be breastfed exclusively from birth to at least 4 and if possible 6 months of age	0	0.0	88	17.6	3	0.6	409	81.8
Emphasize that breastfeeding should be given as often as the child desires, day and night, at least 8 times in 24 hours.	1	0.2	79	15.8	1	0.2	419	83.8
Teach correct positioning and attachment for breastfeeding.	0	0.0	36	7.2	36	7.2	428	85.6
Advise the mother to drink plenty of fluids, eat more,	0	0.0	95	19.0	76	15.2	329	65.8

Items of care	Done by staff nurse		Done by student nurse		Done by others		Not done	
	No.	%	No.	%	No.	%	No.	%
eat healthy foods and rest while breastfeeding.								
Discuss benefits for the mother	0	0.0	96	19.2	0	0.0	404	80.8
Postpartum bleeding can be reduced due to uterine contractions caused by the baby's suckling.	0	0.0	93	18.6	0	0.0	407	81.4
Breastfeeding can help delay a new pregnancy.	0	0.0	95	19.0	0	0.0	405	81.0
Talk about benefits for the baby	0	0.0	93	18.6	0	0.0	407	81.4
Breast milk contains the water and the nutrients that a baby's body needs and is easily digested by the baby.	0	0.0	93	18.6	0	0.0	407	81.4
Breast milk has unique antibodies that help protect the baby against infections.	0	0.0	97	19.4	0	0.0	403	80.6

Others mean obstetrician or nurse's aids

Table (6):Distribution of the study subjects by nutritional advices and care providers.

Items of care	Done by staff nurse		Done by student nurse		Done by others		Not done	
	No.	%	No.	%	No.	%	No.	%
Women's food intake should be increased by 10% to 20% during lactation. Advise the woman to eat a greater amount and variety of healthy foods. Give examples of types of food and the amount to eat	0	0.0	85	17.0	0	0.0	415	83.0
Determine if there are taboos about foods which are nutritionally healthy. Advise the woman against all dietary restrictions	0	0.0	2	0.4	0	0.0	498	99.6
Advise and counsel on the effects of iodine deficiency to the fetus (e.g., brain damage) and in childhood (e.g., mental retardation, neurological disorders, cretinism)	0	0.0	4	0.8	0	0.0	496	99.2
Advise and counsel on prevention of vitamin A deficiency-effects of deficiency (e.g., childhood blindness) and types of food to take to prevent deficiency	0	0.0	5	1.0	0	0.0	495	99.0
Explain that Vitamin A will help her to recover better and that the baby will receive the vitamin through her breast milk	0	0.0	5	1.0	0	0.0	495	99.0
Anemia aggravates the effects of maternal blood loss and is thereby a major contributor to maternal mortality in the postpartum period	0	0.0	55	11.0	0	0.0	445	89.0
Encourage the consumption of foods rich in iron (dark green leafy vegetables) and foods which enhance iron absorption (fruits and vegetables rich in vitamin C)	0	0.0	84	16.8	0	0.0	416	83.2
Birth spacing and family planning	0	0.0	96	19.2	0	0.0	404	80.8
Immunization of mother and newborn	0	0.0	87	17.4	0	0.0	413	82.6

The age of the study subjects **Table (1)** : ranged between 19-45 yaers with the mean of 27.83±4.85 years. Nearly half of them (45.2%) with secondary education. Vast majority of the subjects (96.2%) were house wives, and more than three quarters of them (76.2%) were from rural areas.

As regards obstertical history **Table (2)** : more than two-thirds of the subjects (68.8%) were multiparae.

The episiotomy were done to all primiparae (18.2%) included in this study, **Figure (1)**: Concerning immediate post-partum care provided to parturients, **Table(3)** : nearly half of the study subjects (43%) assessed by the nurse for uterine contractions & fundal height, while encouraged empty bladder not done for all parturients. Check for completelness of the the placenta done by others (obstetrician or

nurse's aids) in about 69.4% of the study subjects, also encourage parturients to eat & drink done for about 76.6% of the study subjects by them.

Assessed general well-being of the newborn

Figure (2) : done by nurses for 95% of subjects, while monitoring baby for breathing not done for 98% of subjects.

Hygienic advices **Table (4)** : not done by nurses for all subjects.

Breast feeding advices **Table (5)** : keep skin to skin contacts and initiation of breast feeding early were discussed by the nurse in 27.6% & 21.8% of subjects respectively.

Nutritional advices **Table (6)** : the nurse not provide any nutritional advices with the study subjects during the period of the study.

Discussion

An audit is an objective, systematic & critical analysis of medical care. (Wagaarachchi, Graham, 2001). Routine clinical audits can easily be implemented in obstetric settings, (Dupont, 2009). Nursing audit measures the quality of nursing care actually given to patients, (Jairus, & Walia, 2011). This study aimed at identify the gap between the current & the ideal immediate normal postpartum nursing care at Woman's Health University Hospital, Assiut.

As regards assessed general well-being of the newborn, the results of the present study revealed that the percentage of 95 of the study subjects received their care by the staff nurse. Keep the newborn in skin to skin contact with mother soon after delivery done by staff nurse for 27.6% of the study subjects. These findings were in agreement with the (study done in 2012) to investigate the clinical practice guiselines on intrapartum & immediate post-partum care. The study recomended skin to skin contact between mother & baby at birth & early initiation of breast feeding which considered to be part & parcel of good practice in all birthing facilities (A collaboration of the department of health and **Philippine obstetrical & gynecological society, 2012**).

Findings of the present study showed that the mean age of women was 27.83 ± 4.85 years. Also showed a gab between the current and ideal care (recommended by WHO), provided immediately to post-partum women at woman's health university hospital, Assiut. These results were in agreement with the study done by (Kongnyuy, et al., 2008), a hospital-based study in Malawi, who stated that the mean age of women was 25years, also when the first audit was performed in their study, wide gaps were identified between current practices & standards.

Other study conducted in Dar assalam, Tanzania (Kidanto, 2009), to improve quality of perinatal care, identified inadequate maternal & fetal monitoring during labor. Also identified suboptimal care in about 80% of audited cases. Other study done by Navkiran, et al., (2014) who work on skill development of nurses in managing the fourth stage of labour they found that, in spite of the fact that the fourth stage is such an important stage to be managed, the staff nurses were not following the steps for managing the fourth stage of labour properly.

As regards immediate postpartum care provided to parturient, findings of the present study showed that the only item of care provided by nurses (among those items recommended by WHO & included in the audit chart), was the assessment of uterine contractions (among 43% of subjects). Other items of care for example check for completelness of the placenta done by others than nurse (obstetrician or nurse's aids) in about 69.4% of subject. Encourage parturient to eat and drink done by obstetrician or nurse's aids among 76.6% of the study subjects. On the other hand there were items of care not done by any person for example, encourage mother to empty her bladder, advice on time of next postpartum visit and nutritional advices. . These finding are in agreement with the study done at University hospital in ShebinEl-Kom Menoufiya by Abdel Fattah & Zein ElDein (2012), they stated that much still needs to be done to improve the quality of maternal & newborn care.

These findings could be explained by many reasons including:- Shortage in number of nurses, there were only two working nurses during each shift (morning, afternoon, neight). Poor of documentation system. Working nurses were disadvantaged in continuing educational programs which increase their knowledge & improve their skills. Lack of continuous supervision and annual evaluation for their performance. Absence of job specification plus shortage in staffing lead to overlapping in providing items of care and negligance other items of care. Early discharge after delivery may be a cause make inadequate time to provide the instructions and advices necessary for parturients. Lastly and not least involving the working nurses in administrative duties other than their duties as a health care providers which make them overloaded.

Conclusion

A gaps were identified between current and ideal immediate normal postpartum nursing care. It is concluded that all items of immediate post-partum care recommended dy WHO except check for

uterine contractions not provided by the staff nurses . Hygienic & nutritional advices not provided to all of the study subjects by staff nurses. Immediate newborn care was the most items of care provided by the staff nurse.

Recommendations

On the light of findings of the present study the following recommendations was developed

- 1-Re-audit to improve immediate post-partum care provided.
- 2-Policies & regulations recommended nurse/patients ratio to improve the quality of health care.
- 3-Importance of participation of the nurses in continuous educational programs.

References

1. **A Collaboration of the Department of Health & the Philippine Obstetrical and Gynecological Society, (2012):** Clinical Practical Guidelines on Intrapartum & Immediate Post-partum care.
2. **Abd El Fattah N., and Zein El Dein N., (2012):** Assessment of Quality of Nursing Care Provided Immediately After Birth At University Hospital. *Life Sci J*;9(4):2115-2126] (ISSN: 1097-8135). <http://www.lifesciencesite.com>. 316
3. **Bethany Derricott, B., M., R., (2010):** Wild Iris Medical Education, Inc. Is an Approved Provider of Continuing Nursing Education by the American Nurses Credente.
4. **Dupont C., Touzet S., Colin C., Deneux-Tharoux C., Rabilloud M., & Clement H., (2009):** Incidence and management of postpartum haemorrhage following the dissemination of guidelines in a network of 16 maternity units in France . *Int J Obstet Anesth* . 18 : (4) Pp. 320 - 7
5. **Graham W., Wagaarachchi P., & Penney G., (2012):** Criteria for Clinical Audit of the Quality of Hospital-Based Obstetric Care in Developing Countries. *Bull World Health Organization*, 78: Pp 614-20.
6. **Jairus R., & Walia I., (2011):** Nursing Audit. *The Nursing Journal of India*, June, vol c11 No.6.
7. **John W., & Sons, I., (2007):** The Cochran Collaboration, Prophylaxis for Cesarean Section, Review(2).
8. **Kidanto H., (2009):** Improving quality of perinatal care through clinical audit: *Epidemiology & Global Health*. Department of Public Health & Clinical Medicine. Umea University ,SE- 90187.
9. **Kittson H., Mogren I., & Massawe S., (2012):** Criteria-based audit on management of eclampsia patients at a tertiary hospital in Dar el Salaam, Tanzania. *BMC Pregnancy Childbirth* ;9:13.
10. **Kongyuy E., Malava G., Broek N., & Van den,(2008):** Using criteria-Based Audit to Improve the Management of Post-partum Hemorrhage in Resources Limited countries: Acase Study of Malawy. *Maternal & Child Health Journal*, DOI 10. 1007/ s10995-008-0408-3
11. **Moldenhauer J., (2013):** *Postpartum depression*. Merck manual for health care professionals. Retrieved from <http://www.merckmanuals.com>
12. **Navkiran Kaur, Sukhjit Kaur, P., Saha, (2014):** Skill development of Nurses in Managing the 4th stage of labor. *Nursing & midwifery reseach journal*, vol-10, no.1, January, Pp 16-29.
13. **NHS Executive, (2010):** Promoting clinical effectiveness. A Framework for Action in and Through the NHS. London: NHS Executive.
14. **Ricci & Kyle, (2009):** Postpartum Adaption, *Maternity and Pediatric Nursing Care* , chapter 15, pp.430-439.
15. **Swell B., (2007):** The Right kind of Help. *RCM Midwives* 10(2):85.the fourth stage of Labour. *Nursing and Midwifery Research Journal*, Vol-10, No.1, January , pp 16-29
16. **Wagaarachchi P., Graham W., Penney G., McCaw-Binns A., Yeboah Antwi K., & Hall M., (2001):** "Holding up a mirror: changing obstetric practice through criterion based clinical audit in developing countries." *Int J Gynec Obstet*.74: Pp 119-130.
17. **WHO (World Health Organization), (2003):** *Pregnancy, Childbirth, Postpartum and Newborn Care: A guide for essential practice*. www.who.int/reproductivehealth/publications/pcpnc/
18. **World Health Organization, (2006):** *Integrated Management of Pregnancy and Childbirth Services (IMPAC)*. Geneva: WHO (retrieved 20 April 2007) http://www.euro.who.int/pregnancy/esscare/20051103_3?language=german.
19. **World Health Organization, (2010):** WHO Technical Consultation on Postpartum and Postnatal Care, Department of Making Pregnancy Safer.
20. **Wray S., Jones K., Kupittayanant S., et al., (2008):** Calcium Signaling and Uterine Contractility. *J Soc Gynecologic Investing*. 10(5):252– 64.

