Impact of Training Program Upon Nurse-Midwives' Practices Concerning Third Stage of Labor

Eman A. Jaber, B.Sc. *
Rabea M. Ali, Ph.D**

*Academic Nurse Specialist. Baghdad Health Directorate, Ministry of Health
** Assistant Professor, Maternal and Child Health Nursing Department, College of Nursing, University of Baghdad

المستخلص:

الهدف :تهدف الدراسة إلى معرفة اثر برنامج تدريبي يطبق على ممارسات الممرضات القابلات فيما يتعلق بالعنايه خلال الدور الثالث من الولاده واختبار العلاقه بين معلوماتهن فيما يتعلق بالممارسات وبعض المعلومات الديموغرافيه.

المنهجية : دراسة شبه تجريبيه، تم اختيار عينة غير احتمالية (عمدية) لاثنان وخمسين قابله-ممرضهخلال الفترة من٣ابالى١٠تشرين الاول /٢٠١١.وتم إجراء الدراسة في وزارة الصحة (دائرة صحة بغداد الكرخ والرصافة) في اربع مستشفيات. تكونت الاستمارة الاستبيانية من (٣) أجزاء تشمل الخصائص الديموغرافية و معارف الممرضات القابلات فيما يتعلقبالعنايه خلال الدور الثالث من الولادهوقائمة الممارسات، و تم تحديد صدق المحتوى وثبات الاستمارة الاستبيانية من خلال دراسة استطلاعية واستخدام تحليل الإحصاء الوصفي والاستنتاجي في تحليل البيانات .

النتائج: تشير نتائج الدراسة إنأعلى نسبة (٤٤.٢%) من أفراد عينة الدراسة تتراوح أعمارهن بين (٣٠-٣٩ سنة) ومتخرجات من اعدادية القباله وان(٤٢.٣%) لديهن (١-١٠)سنه خبره في مهنة القباله ،كانت معلوماتهن وممارستهن ذات متوسطات ضعيفه ومتوسطه فيما يتعلق بالعنايه خلال الدور الثالث في الاختبار القبلي بينما هناك ارتفاع في متوسط معلوماتهن وممارساتهن بعد تطبيق البرنامج وبدلاله اجصائيه عاليه.

التوصيات: توصي الدراسة باستحداث مقياس عملي وفق معايير منظمة الصحه العالميه , تطوير برنامج التعليم المستمر ، استحداث برنامج لدرجة البكلوريوس.

Abstract:

Objective: The aim of this study is to identify the impact of training education program applied on nurse-midwife practice concerning care during third stage of labor in labor room. Examine the relationship between their knowledge regarding practices and some Demographic information's.

Methodology: A quasi-experimental design conducted on non-probability (purposive) sample of fifty two nurse-midwives selected during period from3[th] August to 10thNovember 2011. The study is conducted at the Ministry of Health (Baghdad health directorate in Al-Karhk and Al-Risafa sector) in four hospitals. The questionnaire form is consisted of three parts which included demographic data, knowledge concerning practice during third stage of labor, practice checklist. Content validity and reliability of the questionnaire determined through a pilot study, descriptive and inferential statistics are used to analyze the data.

Results: Results of the study showed that the highest percentage (44.2%) were in age group of 30-39 years, midwifery school graduate and(42.3 %)of them had 1-10 years of work experience in midwifery. There were low and moderate means in most items related to the knowledge and practices of nurse-midwives regarding third stage of labor in pre-test and assessed as (partial) while there were high mean scores in all items, and assessed Pass in posttest after the implementation of the training education program with high statistical significant .

Recommendation: The study recommended that establishment of clinical practice standards according to the WHO, development of continuing education programs; establish a baccalaureate degree program in midwifery.

Key words: Nurse- Midwives, Training, Program, Practice, Third stage of labor

Introduction:

The fifth Millennium Development Goal (MDG-5) calls for reducing the maternal mortality ratio (MMR) by three quarters between 1990 and 2015. Ensuring that all women give birth with a skilled attendant is now seen as one of the key strategies to reduce maternal mortality. [1] It is essential when discussing maternal health care services, in particular in low and middle-income countries, to establish why there is a shortage of skilled attendants, and how the shortage is distributed within the population.

It is a fact that maternal and perinatal mortality and morbidity is higher among the more vulnerable population and that these often reside in rural areas where services are scarce. In order to provide recommendations that will target the most vulnerable group of women, and thus be able to reduce maternal mortality, it is crucial to explore the distribution of services within a country [2].

There are critical factors, which need to be considered when discussing how to provide skilled care for all women and newborns in a country, and the conditions will obviously vary extensively from country to country depending on factors such as the geographical diversity, the existing health.

Professionals currently providing maternal health care services, the organiz-ation and structure of the health care system, specific needs identified in the maternal population and the reporting and monitoring system. The socioeconomic and political situation moreover greatly influen-ces availability of services. Conflict affected populations, for example, are extremely vulnerable and often void of care due to internal displacement,

also of health professionals [3] For a number of reasons many countries lack the human resources needed to deliver esse-ntial health interventions, including limited production capacity, emigration of health workers, poor mix of skills and demog-raphic imbalances. It is increasingly recognized that the effective mobilization of the health workforce is the single most important obstacle to improving the perfo-rmance of health systems and achieving key health objectives, particularly in low- and middle-income countries.

In addition, most countries developed and developing face significant public financing constraints for health service provision at a time when levels of public demand and expectation are rising. [4] The Eastern Mediterranean Region Office (EMRO), World Health Organization (WHO) in 2000 at a Global Advisory Group meeting on Nursing and Midwifery identified a number of challenges being faced by governments and providers in this region for midwifery and nursing services.

An increasing demand for midwifery education and services parallels the incremental population growth, the imperative to provide evidence-based practice, quality improvement of clinical practice and more formalized systems of midwifery and nursing regulation[5].

Of all health statistics, those for maternal mortality show the greatest disparity between developing and develop-ed countries: more than 99%of maternal deaths occur in poor countries, where women run a lifetime risk of dying from a pregnancy related complication about 250-fold higher than women in developed countries.

Of the 210 million women who become pregnant each year some 30 million, or about 15%, develop complica-tions, which are fatal in 1.7% of cases, giving 529,000 maternal deaths [6].

Methodology:

Quasi-experimental design was carried out throughout the present study with the application of a pre-test and posts –test for their knowledge regarding the practices through third stage of labor and pre-test and post-test checklist for their

practices observation during third stage of labor.

Non-probability (purposive) sample consists of (52nurse-midwife).The sample exposed to pretest, Educational training program, and posttest. The criteria of this sample were nurse-midwife who work in delivery room (42 nurse- midwife) which represent (19.2%) of the target population in Al-Elwia maternity teaching hospital (23%) Ibn-Albalidy maternity and pediatric hospital 38.4%) Fatema Al-Zahra maternity and pediatric hospital in Al-Russafa sector; (10nurse-midwife) which represent (19.2%) of the target population from Akarckh maternity hospital in Al-Karkh sector.

The educational training program was designed and based on the finding that were obtained from the initial assessment of nurse midwife knowledge and practices which used to construct the educational training program, as well as throughout review of related literatures and previous studies.

The questionnaire form is consisted of three parts which included nurse-midwives demographic data, (10) item related to their knowledge regarding safe delivery practices. The response option were scored (0) wrong answer and. (1) for semi correct answer (2) correct answer with cut of point=1,and (11) item Checklist practices .Checklist used by the researcher for five times observations. An instrument was constructed through the use of (3) level type Likert scale to assess the nurse-midwives practices in their management for pregnant woman in the delivery room throughout all care during third stage for labor. Each nurse midwives observed five times, (4-5) considered as always, (1-3) considered as sometimes, and (zero) as never, the rating score for the instrument was (3) for always, (2) for sometimes, and (1) for never, with a cut of point=2.To evaluate the validity of the questionnaire form the researchers presented it to thirteen experts in various fields. Reliability of the questionnaire was determined through the use of Pretest and Posttest approach, with an interval of about three weeks, for the determination of interval consistency of nurse-midwife knowledge and practice regarding third stage for labor. R= 0.97 for knowledge and R=0.76 for practices, which are statistically acceptable.

A pilot study included ten nurse-midwives obtained from Al-Elwia maternity teaching hospital in al-Russia during the period from 10th July 2011 to the 28th July 2011 to determine the reliability of the study and testing about nurse-midwives knowledge regarding third stage for labor .The statistical procedures include descriptive statistic (frequency, mean, percentage, relative sufficiency and inferential statistic approach have been used.

Results:

Table 1. Distribution of demographic characteristics of the study sample

	Groups	F.	Percent	C.S. P_{-value}
Age Groups	< 20	3	5.8	χ^2= 34.2 P=0.00
	20 — 29	5	9.6	
	30 — 39	23	44.2	
	40 — 49	18	34.6	
	50 >	3	5.8	
Education Levels	Nursing school	3	5.8	χ^2= 100.3 P=0.00
	Secondary	7	13.5	
	Midwifery	39	75.5	
	Nursing institution	1	1.9	
	College	2	3.8	

Table 1. Continued

Job titles	Nurse	6	11.5	χ^2= 27.7 P=0.00
	Nurse midwives	11	21.2	
	Midwives	35	67.3	
Years of work	< 5	23	44.2	χ^2= 3.0 P=0.21
	5 – 14	13	25.0	
	15 – 24	16	30.8	
Years of experience	1 – 10	22	42.3	χ^2= 2.0 P=0.36
	11 – 20	14	26.9	
	21 – 30	16	30.8	
No. of training course	1 – 5	27	51.9	χ^2= 8.8 P=0.01
	6 – 10	15	28.8	
	11 >	10	19.2	
Place of work	Hospital	43	82.7	χ^2= 57.7 P=0.00
	Hospital and House	2	3.8	
	Government and Private	7	13.5	
No. of delivery in Month	1 – 10	7	13.5	χ^2= 10.3 P=0.
	11 – 20	8	15.4	
	21 – 30	21	40.4	
	31 >	16	30.8	
Time of work	Morning	29	55.8	χ^2= 22.2 P=0.00
	Evening	2	3.8	
	Both	21	40.4	

P= level of probability; χ^2= Chi-square Test; F=Frequency; C.S=Comparisons Significant

This table demonstrates that the highest percentage of the study sample (44.2%) were in age group of 30-39 years, according to the educational level the highest percentage of the study sample (75%)were midwifery school graduate, while (67.3%) of them there job title were midwives (44.2%) of them had less than 5 Years of work experience, while (42.3%)of them had 1-10 years of work experience in midwifery, and (51.9%) of them had 1-5 training courses and(82.7%) work in hospital, and 40.4%of them had attended between 21-30 deliveries in month.

Table 2. Distribution of Nurse –Midwives Practices during Third Stage of Labor

Items	Questions Related to Practice checklist	No.	Pre Period				Post Period				Z Statistic	P-value
			$\bar{x}$	S.D.	R.S.%	Ass.	$\bar{x}$.	S.D.	R.S.%	Ass.		
Practices during he third Stage	Give oxytocin	52	1.90	0.72	63.3	Failure	2.90	0.30	96.7	Pass	-5.49	0.00
	Change gloves when cutting the cord	52	1.19	0.40	39.7	Failure	2.71	0.46	90.3	Pass	-6.37	0.00
	Milking the umbilical cord	52	2.56	0.50	85.3	Failure *	1.00	0.00	33.3	Pass*	-6.48	0.00
	Using aseptic technique when cutting umbilical cord	52	1.94	0.80	64.7	Failure	2.50	0.50	83.3	Pass	-3.55	0.00
	Observe signs of placenta separation	52	1.48	0.67	49.3	Failure	2.83	0.38	94.3	Pass	-5.93	0.00
	Active management of third stage	52	1.12	0.32	37.3	Failure	2.77	0.43	92.3	Pass	-6.47	0.00
	Check the perineum area	52	1.54	0.61	51.3	Failure	2.83	0.38	94.3	Pass	-6.17	0.00
	Check the bladder	52	1.21	0.41	40.3	Failure	2.98	0.14	99.3	Pass	-6.66	0.00
	Check the placenta and membrane	52	1.33	0.65	44.3	Failure	2.88	0.32	96.0	Pass	-6.28	0.00
	Clean the perineum and put pad	52	1.79	0.61	59.7	Failure	2.50	0.50	83.3	Pass	-4.39	0.00
	Stay with the mother	52	1.23	0.43	41.0	Failure	2.50	0.50	83.3	Pass	-6.34	0.00

Fail (33.33 – 66.66) Pass (66.67 – 100);*negative answer. Pass (33.33 – 66.66) Fail (66.67 – 100); No=Number of nurses,$\bar{x}$= Mean, S.D.= Standard Deviations ; R.S.=Relative Sufficiency
P-value= Level of Probability;Ass= Assessment; Z= z score

This table reveals that there was low Means in most of nurse-midwives practices in pre-test with low relative sufficiency and all of them assessed as (Failure).While there were high mean scores in all practices, and assessed (Pass) in posttest after the implementation of the educational raining program with high statistical significance.

Table 3. Improvement percent for the study group of Main Domains Related to Knowledge in Pre-Post Period

Main Domains	Period	N.	$\bar{x}$	Std. Dev.	R.S.%	Ass.	Imp. %
During Labor - Third Stage	Pre	52	1.20	0.35	60.19	Under	25.29
	Post	52	1.71	0.15	85.48	Upper	

Cutoff Point: (R.S. % = 50.00%); Imp. Improvement = $((M_{post} - M_{pre})/(2))*100\%$;　N=Number of nurses,= Mean; S.D.= Standard Deviations ; R.S.=Relative Sufficiency;Ass= Assessment

　　　The findings of this table indicate that the assessment of nurse-midwives knowledge improve by different periods for third stage after the implementation of educational training program. The highest percentage (25.29%) of nurse-midwives improved their knowledge concerning third stage of labor from under to upper.

Table 4. Improvement percent for the study group of Main Domains Related to Practice checklist in Pre-Post Period

Main Domains	Period	No.	$\bar{x}$	Std. Dev.	R.S.	Ass.	Imp. %
Third Stage	Pre	52	1.6	0.35	53.91	Under	47.31
	Post	52	2.5	0.12	85.45	Upper	

　Cutoff Point =2: R.S. (33.33 – 66.66) ;(66.67 – 100), Imp. : Improvement = $((M_{post} - M_{pre})/(2))*100$; N=Number of nurses:$\bar{x}$=Mean; S.D. = Standard Deviation; R.S. =Relative Sufficiency; Ass= Assessment

　　　This table shows scoring of the assessment of nurse-midwives practices improvement by different periods for Third Stage after the implementation of training program (47.31%) improvement concerning practice of third stage of labor.

Table 5. Relationship between Socio.-demographic Characteristics and Knowledge and Practices changes (Pre-Post periods

Variables	Overall Assessment Related (O.A.R.) to:			
	Knowledge		Practice checklist	
	Contingency Coefficient	P-value	Contingency Coefficient	P-value
Age Groups	0.25	0.47	0.17	0.80
Educational Level	0.34	0.13	0.27	0.38
Job Title	0.37	0.01**	0.18	0.47
Years of Work	0.29	0.01**	0.19	0.34
Experience in midwifery	0.29	0.07	0.19	0.34
Training course	0.31	0.05*	0.31	0.05*
Area of work	0.09	0.79	0.11	0.71
Number of Deliveries	0.35	0.06	0.33	0.08
Time of work	0.13	0.62	0.12	0.56

　P-value= Level of Probability,** Highly significant,* significant

This table shows that there were no relationship between the improvement of the Nurse-midwives Knowledge and their socio-demographic characteristics in the overall assessments in multiple periods, except in (Job title and years of work) were significant in relation with their knowledge. Regarding Practices the result shows that there were no relationship between the improvement of the Nurse-midwives practices and their socio-demographic characteristics in the overall assessments in multiple periods, except in training course was significant in relation with their practices.

Discussion:

The study result shows that the highest percentage (44.2%) were in age group of (30-39) years and there are high significant differences in between groups (χ^2= 34.2 P=0.000). This result consisted with study conducted by Collins et al who reported that the majority of midwives were aged between 25 and 39 years [7], and WHO reported that the age of mid- wives will take a minimum of 25 years in some places, to have skilled care at all birth [3]. Chunyi et al in china reported that all participants were aged between 24 and 32 years.[8] Regarding education level the study found that the highest percentage (75%) (39)(χ^2=100.3P=0.000) graduated from mid-wifery school and there are high significant differences between groups, the sample who working in delivery room were mostly midwifery school graduates. WHO assisted the educational level of midwives through the definition of midwives as a "person who, having been regularly admitted midwifery educational programmed, duly recognized in the country in which it is located, has successfully completed the prescribed course of studies in midwifery and as acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery [1].

Styles et al., stated that the education of a skilled birth attendant should be of good quality at both pre-service and in-service levels with a system for supportive supervision. [9]The result in current study shows that the highest percentage (75%) their job title were midwives and there are high significant differences between groups. Most of the samples were graduated from midwifery secondary school, and they are permanent registered midwives according to the policies of Ministry of Health (MOH) in Iraq. Regarding years of work (44.2%) of them were working for less than (5) years

and (42.3%) of them having (1-10) years of experiences in midwifery. Al-Ammari reported that (28% of them were employed for (1-10) years while (32%) of them spent between (1-5)years of experience in midwifery, and Collins et al reported in their study that the sample were midwives who having (10)or more year of experience as a midwives. [7][10] Regarding training course in midwifery the highest percentage (51.9 %) participated in training course ranging between (1-5)courses this result are in agreement with study of Al-Ammari who reported that (60.4%) of nurse-midwives sample having 1-5 courses This result is consistent with study conducted by Bij De Vaate et al. which concluded that the initial training of the midwives involved a six-week course from a national curriculum on the management uncomplicated labor and the prevention ,detection and response to obstetric complications **[10][11].**

Hussain from the instruction of Ministry of Health in Iraq (1988) reported that licenses of Midwives must be renewed annually after passing training course for one month (two weeks in the hospital and two weeks in primary health care centers).[12]

The study results shows that (82.7)of nurse mid wives work governmental hospital only. While only ((13.5%) practicing in private hospital. This result agrees with result found in Al-Ammari in her study that the highest percentage (90%) of the nurse-midwives practicing their profession at public hospital [10].

Fako et al found in study done in Botswana that the most common type of health facility in which nurse-midwives were based was a maternity ward (46.8 %).[13]The result of the study also revealed that the highest percentage (40.4%) of the nurse midwives attending (2130)delivery in month (30.8%attending(>31) deliveries.

This percentage differs from hospital to another according to the hospital center and the population covered by the hospital and bed number of these hospital and the competencies of obstetricians and nurse-midwives in these hospital. The highest percentage (55.8%) of study sample work in the morning shift while (40.4%) of them working in morning and evening shift and only (3.8%) working in the evening shift. Chunyi et al., in china reported in their study that the midwives providing continuity of care did not have fixed working hours and all participants had experience of working continuously for 16 hours or so and they described their feeling of fatigue and lack of sleep when being with women[8]

Regarding practices during third stage the study analysis presented low mean of scores in most items of nurse-midwives practice in pre-test with low relative sufficiency and most of them assessed as (Failure). Whiled there were high mean scores in all items, and assessed (Pass) in posttest after the implementation of the educational training program with high statistical significant. POPPHI found that active management of the third stage of labor, another form of care proven to be beneficial, is very rarely frequently in the West Bank applied in Syria (12.5%) but more (71%).However, observation in Egypt showed that while active management was frequently applied, this was appropriately applied in only 15% of cases.[14]National Program Officer WHO, Swaziland found over 85 percent used appropriate and sterilized instruments to cut the cord while over 75 percent used a new thread to tie the cord as is Active management of the third stage of labor has been systematically tested and shown to be effective as a strategy to reduce the incidence of postpartum hemorrhage.[15] Hassan (2011) stated that cord traction is an unsafe delivery practice that can lead to hemorrhage.

WHO recommends every placenta must be examined for make sure that both the placenta and the membranes are complete after the delivery of the placenta, examine the membranes carefully to determine whether they are complete the placenta is now held in both hands and the maternal surface is inspected after the membranes are folded away. A missing part of the placenta, or cotyledon, is thus easily noticed abnormalities [16].

Elbourne conducted a study to assess the effects of active versus expectant management on blood loss, they found regarding the practices, the results reveal that there are high mean of score, with positive trend in Nurse-Midwives practices regarding the third stage of labor.[17]

The correlation reported that the improvement of the Nurse-midwives knowledge and practices) had no relationship with their socio-demographical characteristics in the overall assessments of knowledge and practices program in multiple periods, except in (Job title, years of work) was significant. Farrell found: A total of(31nurse and (36) midwives were included in the study and control towns respectively There were no differences regarding the age, level of training and experience between the 2 groups. The mean percentages obtained in the pre-tests did not differ between the study and control towns. The post tests showed a significant (p=0, 0000) improvement of 35, 8% in the study town and no change in the control towns. A stratified analysis was done on the midwives involved with antenatal care only and those working in labor wards of the hospitals. The skills of the antenatal care midwives in the study town improved significantly (p=0, 0000) with 44,3% with no change in the control town.[18]Walker et al, found that there was a statistical relationship between the nurse who work in the hospital for a long period & their experience in hospital and improvement in the skill and knowledge.[19].

Regarding Nurse- Midwives age, the study was not in agreement with the result of the study conducted by AL- Sharkrawe which stated that, the younger Nurse- Midwives have more practices than the older ones.[20] And was consistent with Durham who stated that older nurses had better performance than younger probably due to their orientation and the benefits that may gaiout of their employment for long period of experience.[21]found to gain improvement in the knowledge more than the

older ones.[22]Also Mamb stated that the youngest ages were found with most knowledge because they are recently qualified and the knowledge of high risk factors is relatively Sanadin and others who indicated that the youngest ages of nurse- Midwives where fresh to apply practices and to give care in proper way to the woman during stages of labor. [23]

AL- Shakrawe in her study stated that the Nurse-midwives practices are satisfactory due to poor knowledge and skill, techniques or unavailability of resources and facilities requir-ed, lack of services and train in courses to improve their knowledge and skill to acquire more experience and to develop present study which, shows that the nurse-midwives have good knowledge, but they have inadequate practice performance also due to lack of continuing education and training courses, lack of supervision on their performance, lack of resources availability.[20] Regarding Nurses-midwives experiences in maternity hospital or delivery room were in agreement with Cunningham they discovered a significant correlation between the practices and the years of experience and their year of attending deliveries. [24]

Recommendations:

The study recommends that advanced certification for midwifery need to be developed, and administration of continuing education programs, establish a baccalaureate degree program in midwifery. Advanced practitioner roles which are regulated and supported by master's level programs need to be developed and establishment of clinical practice standards according to the WHO, Develop Clinical Ladder Program to provide the midwives with the opportunity to move toward advanced levels of professional practice in the dual realms of knowledge and skills, and leadership Employers introduce formal support through preceptor ship arrangements for newly appointed midwives.

References:

1. World Health Organization (**WHO**: **Prevention of Postpartum Haemorrhage study, west jawa, Indonesia.** Geneva (2004).Retrieved 5-11-2010.Availablat ttp://www.jhpiego.org/ resources /pubs /mnh/ pphjavastudy

2. De Bernis L, Sherratt D, AbouZahr C, and Lerberghe W: **Skilled ttendants for pregnancy, childbirth and postnatal care. World Health Organization**, Geneva, Switzerland: 2011

3. World Health Organization WHO: **Integrated Management of Pregnancy and Childbirth, Postpartum and Newborn Care: A guide for essential practice. Geneva** (2006)**.**retrieved 18 /3 /2011 from http://www.who.int/.

4. World Health Organization. (WHO): **Models and tools for health work for ceplanning and projections.** (2010) (Human Resources for Health Observer, 3)

5. Federal Department of Nursing, MOH, UAE (2008) **Scope of Practice for the Midwife Scope of Practice for the Midwife**. Abu Dhabi: Jan 23 2008.

6. WHO, UNICEF, UNFPA and The World Bank **(2008): Trends in maternal mortality: 1990 to2008. WHO Library Cataloguing-in-Publication Data.**

7. Collins T, Fereday J, Fereday J and Oster C: An evaluation of the satisfaction of midwives' working in midwifery group practice **Midwifery J** August 2010; 26 (4): p 435-441.

8. Chunyi Gu, Zheng Z, Yan DingRN**:** Chinese midwives' experience of providing continuity of care to laboring women. **Midwifery** 2011; 27(2): p 243-249 Available online 22 August 2009.

9. Styles M, Cheyne H, Cheyne R: **Midwives' Intrapartum Decision Making** MPhil Thesis, University of Stirling (2008).

10. Al-Ammari, A: **Assessment of Nurse-Midwives Knowledge and Practice Concerning Perinatal Care through- out stages of labor**, MSC. Thesis, College of Nursing/ Univer-sity of Baghdad, 2008, pp: 64, 70, 74, 95, and 102.

11. Bij de vaate A, Coleman R, Manneh H and Walraven G. **Knowledge Attitude and Practices of Trained Traditional birth attendant in the**

Gambia in the prevention, recognition, and Management of postpartum Hmorrhage. Midwifery Journal. 2002; 18: 3-11.

12. Husain AK. **Situation of midwifery in Iraq**. Ministry of Health, Iraq. 2004:2-10.

13. Fako , Forcheh N, Ncube E: **Prospects of safe motherhood in Botswana: midwifery training and nurses' ability to complete the Botswana obstetric record** Social Science & Medicine. March 2004; 58 (6): p 1109-1120.

14. POPPHI. Prevention of Postpartum Hemorrhage (2009): implementing **Active Management of the Third Stage of Labor (AMTSL)**. Facilitator's Guide: Training of AMTSL mentors. Seattle: PATH; 2009.

15. Khumalo P, National Program Officer WHO, **Swaziland Reproductive Health Program Manager**, Ministry of Health and Social Welf are, Swazil and August 2001

16. Hassan H, Jokhio AH, Winter H, Macarthur C., **Safe delivery and newborn care practices in Sindh**, Pakistan: Midwifery. 2011 Sep7; Accepted 26 June 2011.

17. Elbourne- DR; Prendiville- WJ; Carroli- G; Wood- J; McDonald- S; **prophylactic use of oxytocin in the third stage of labor**, the Cochrane library (oxford) 2002 .

18. Farrell, M. Pattinson B: **Intrapartum Care review and Guidelines.**28 December2005.

19. Walker, D,; Mcdermot;Ryshby,F,and Tanjung,M,: **An economic Analysis of midwifery training programmers in south Kalimantan, Indonesia** .Bulletin of the World Health Organization2002,80(1)pp.47-50.

20. Al-Shkrawe, S: **Assessment of Nurse –Midwives practices regarding prolonged labor in Babylon governorate,** MSC. Thesis, College of Nursing/ University of Baghdad, 2004, p: 60.

21. Durham, J.: **Personal experience and training as a Doula**: 2002.pp1-3.

22. Sandin, F; HallordL; Axelsson, O; Uden, G, and Larsson, W: **midwifery care Development to Measure Quality Based on the World Health Organizations Classification of Care in normal Birth**. Journal of Clinical Nursing, 2004; 13(1):p75.

23. Mamb, p: *Nurse-Midwives knowledge and Basic decision making on* maternal reproductive high risk factors in pregnancy: Africa Journal of nursing and wifery, 2000; 2 (2):p60.

24. Cunningha, Mcdonald P,;Gant N,; LevenaD,; Gilstrap L,: **Williams obstetrics** ,20th ed , Appieton &Lang 1997,PP.329-331-431.