Nurses Knowledge about Application of Skin to Skin Contact in Delivery Room

Rajaa Tareq Hasan*[1]
University of Baghdad/College of Nursing, Maternal and Neonate Nursing Department, Baghdad, Iraq,
Email: rajaat@conursing.uobaghdad.edu.iq

Abstract

Background: The oxytocin signaling pathways in both the baby and the mother are optimized by skin-to-skin contact at delivery. Oxytocin lessens the newborn's stress reaction to birth while inducing protective and sensitive caring characteristics in the mother.

Objectives: Assessment of nurses-midwife's knowledge about application of skin to skin contact.

Methodology: A descriptive study has been piloted to nurses-midwives;

the data has been composed through a questionnaire format through interview

with the study sample The questionnaire format is comprised of two parts,

Demographic characteristics of nurses-midwives and Assessment knowledge

of nurses-midwives about skin to skin. A purposive (nonprobability) sample which consisted of (65) nurses-midwives. The sample which collected from Al-Elwia Maternity Teaching Hospital, Ibn Al -Balidy for Maternity and Pediatric Hospital & Fatima Al-Zahra for Maternity and Pediatric Hospital. Data are investigated through the use Excel (Statistical package) and Descriptive statistic was used to analyze data

Results: The outcomes of the study shown that the highest percentages (30.76%) at age group (20-29) years, (76.9%) for the married, the study revealed that the most nurses-midwives you have sufficient knowledge about skin to skin contact.

Conclusions: The study founded that the most nurses-midwives have adequate knowledge about application skin to skin for newborn.
Keywords: Nurses, Knowledge, Application, Skin to Skin Contact, Delivery Room

Introduction:

Every year, 2.9 million children pass away within 28 days, and the first 24 hours following delivery are the most dangerous for both the mother and the child, according to Unicef [1] [21]. All neonates' immediate and long-term results are significantly impacted by the newborn care provided within the first hour of life [2].

The act of placing a nude newborn on a mother's bare chest or belly for at least ten minutes following delivery is known as skin-to-skin contact (SSC). The World Health Organization (WHO) suggests that a mother and child engage in SSC for at least one hour following delivery. It is also known as "Kangaroo Mother Care (KMC)", and it is a way of providing care for all infants that improves the environment for both the mum and the kid [3] [4].

Skin-to-skin contact is when a baby is placed bare chested on a mother's chest; normally, the baby's back is enclosed with a warm blanket and its head is enclosed with a dry cap [5]. Skin-to-skin contact is also called skin to skin care [6]; both expressions are commonly shortened to SSC or S2S (Skin-to-Skin Contac)]. Skin-to-skin contact is commonly categorized as immediate, initiated directly after birth, or early**,** initiated within the first day [5]. When skin-to-skin contact is persistent after the first day of birth, it is commonly called kangaroo mother care [7] or ongoing skin to skin contact. Though, skin-to-skin contact and kangaroo mother care are

not synonymous expressions; significant differences exist between the two perceptions. A major alteration between the expressions is the applicable population. Kangaroo mother care (KMC), also termed kangaroo care, is a care bundle targeted at low birth weight or premature children [8], On the other hand, skin-to-skin contact is appropriate for all children, regardless of size or gestation. Early, continuous, and prolonged skin-to skin
contact; frequent, exclusive, or almost exclusive breastfeeding; and early hospital
discharge with appropriate follow-up are all included in the KMC care bundle. [7, 8]. As this is a midwife-led research study, the choice of the research involved healthy, term babies and their mothers. Premature or unwell children drop outside the remit of midwife led care. This study explored the enabling of ongoing skin to skin contact**,** affecting to any skin to skin contact between the mother and her baby after the first hour after birth.
Numerous studies now demonstrate that, both immediately after birth and latermothers and newbor ns should be together, skin to skin (the baby should be naked, not covered in a blanket).
The infant exhibits increased happiness, more stable and normal body
temperature, more stable and normal heart and breathing rates, and more
elevated but normal blood sugar. Furthermore, skin-to-skin contact right after delivery permits the baby's colonization with the mother's microbes. It is believed
that this, along with nursing, is crucial in preventing allergy illnesses.
When a baby is placed in an incubator, germs other than those found in the skin and stomach coloni ze [9].

Aims of the Study

Assessment of nurses-midwife's knowledge about application of skin to skin contact.

Materials and Methods

Study design and setting

A descriptive design was carried out throughout the present study, on nurses-midwives. The sample which collected from Al-Elwia Maternity Teaching Hospital, Ibn Al-Balidy for Maternity and Pediatric Hospital and Fatima Al-Zahra for Maternity and Pediatric Hospital for the period from 1March 2023 to 1June 2023**.**

Study participants and sampling

A purposive (non-probability) sample which consisted of (65 Nurses/midwive's).

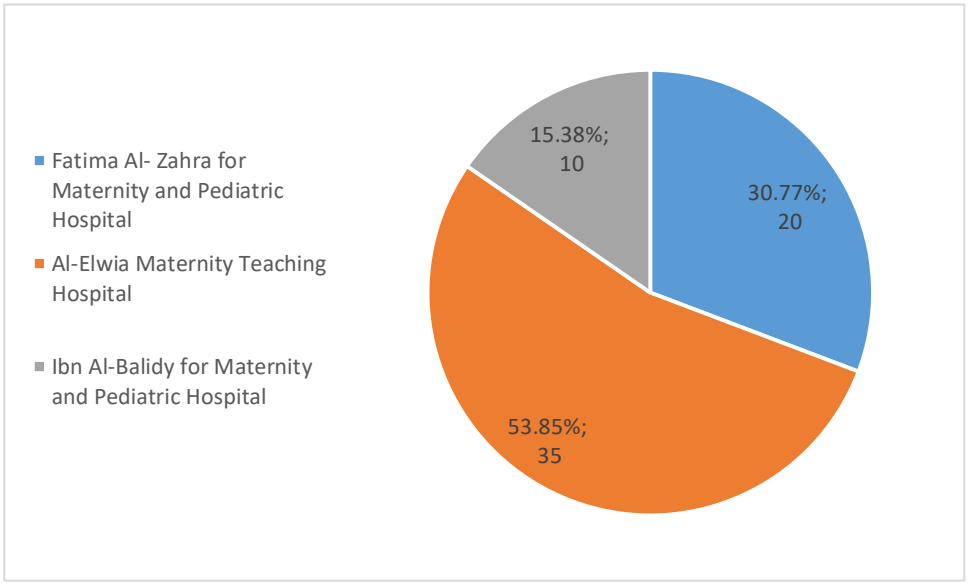

Figure (1) distribution of setting and size of the study sample

Data collection tool and technique

The data was compiled using a questionnaire style based on interviews with midwives- nurses. There are two sections to the questionnaire format: Part one: Social and Demographic Features, Part two Nurses- Midwives Knowledge about Skin to Skin Contact**.**

Statistical analysis

Statistics are analyzed through the use Excel (Statistical package) and Descriptive statistic was used to analyze statistics.

The part two nurses-midwives' knowledge about skin to skin contact questionnaire items were rates and scored to three items as one for I do not know and two for not sure and three for I know, while the numeric values for the negatives items of the scale were 1 for I do not know and 2 for not sure and 3 for I know. three point likert scales is used
for rating the items as three, two and one [10].

Results:

Table (1): Distribution of the Study Sample based on Socio-Demographic Attributes.

No.	Variables	Study sample (n=65)	
1	**Age**	**F**	**%**
	20-29	20	30.76
	30-39	17	26.15
	40-49	14	21.53
	≥ 50	14	21.53
	X± SD	37.05 ± 11.24	
2	**Social Status**	**F**	**%**
	Married	50	76.9
	Divorced	6	9.2
	Widow	1	1.5
	Single	8	12.3
3	**Educational level**	**F**	**%**
	School of nursing	1	1.5
	Preparatory nursing	13	20
	Preparatory midwifery	32	49.2
	Nursing institute (diploma nursing)	17	26.2
	Nursing college and above	1	1.5
	others (graduate from another filed but work in nursing field)	1	1.5
4	**Job information**		
4-1	**Job description**	**F**	**%**
	Nurse-midwife	23	35.4
	Midwife	42	64.6
4-2	**Experience years**	**F**	**%**
	< 1 year	5	7.69
	1-3 years	3	4.61
	4-6 years	6	9.23
	> 6 years	51	78.46
4-3	**Experience years in midwifery**	**F**	**%**
	< 1 year	10	15.38
	1-3 years	10	15.38

	4-6 years	2	3.07
	> 6 years	43	66.15
4-4	**Training courses in skin to skin contact**	**F**	**%**
	Nothing	13	20
	1-2	26	40
	3-4	12	18.5
	and more 5 years	14	21.5
4-5	**Practicing**	**F**	**%**
	The hospital only	44	67.6
	Government private hospital	9	13.8
	Hospital and home	12	18.5
4-6	**Working shifts**	**F**	**%**
	Morning only	24	36.9
	Morning & evening	4	6.2
	Evening only	37	56.9
4-7	**Desire to work in midwifery**	**F**	**%**
	Yes	56	86.2
	No	9	13.8

Table (1) show that the main percentage (30.76%) of study sample at age group (20-29) years with mean age and SD is 37.05 ± 11.24, The highest percentage (76.9%) were married, the highest percentage (49.2%) were preparatory midwifery, the majority (64.6%) were midwives. And the highest percentage (78.46%) for experience year for midwives more than 6 years, the highest percentage (66.15%) for study sample was more than six years' experience in midwifery, the highest percentage (40%) were have 1-2 courses in skin to skin contact and (67.6%) existed practicing in the evening shifts and the highest percentage (86.2%) were have positive desire to work in midwifery.

Table (2): Study Sample Distribution based on Nurses'-Midwives' Knowledge of Skin-to-Skin Contact.

No.	Questions		F	%	MS	RS	Ass.
1	**Benefits of the skin to skin contact**						
1.1.	**Helps improve the physical health of newborn**	I know	56	86.15	2.74	0.91	H
		Not sure	1	1.53			
		I do not know	8	12.30			
1.2.	**Makes the mother gave better care to her newborn**	I know	61	93.84	2.88	0.96	H
		Not sure	0	0			
		I do not know	4	6.15			
1.3.	**Helps improve and successful**	I know	58	89.23	2.86	0.95	H

	breastfeed from the first trial	Not sure	5	7.69			
		I do not know	2	3.07			
1.4.	**Makes the mother feel comfortable and satisfied**	I know	63	96.92	2.95	0.98	H
		Not sure	1	1.53			
		I do not know	1	1.53			
1.5	**Creates a sense of security In newborn**	I know	60	92.30	2.88	0.96	H
		Not sure	2	3.07			
		I do not know	3	4.61			
1.6	**Boots mother's love for her newborn**	I know	64	98.46	2.98	0.99	H
		Not sure	1	1.53			
		I do not know	0	0			
1.7	**Reduces maternal stress about the health of her newborn**	I know	62	95.38	2.94	0.98	H
		Not sure	2	3.07			
		I do not know	1	1.53			
2	**Impact of the skin to skin position on the mother's health**						
2.1	**Accelerates the time of placental separation**	I know	52	80	2.74	0.91	H
		Not sure	9	13.84			
		I do not know	4	6.153			
2.2	**Accelerates the return and contraction of the uterus**	I know	53	81.53	2.80	0.93	H
		Not sure	11	16.92			
		I do not know	1	1.53			
2.3	**Helps in secretion hormone oxytocin from the mother**	I know	49	75.38	2.62	0.87	H
		Not sure	7	10.76			
		I do not know	9	13.84			
2.4	**Reduces maternal exposure to hemorrhage after childbirth**	I know	46	70.76	2.58	0.86	H
		Not sure	11	16.92			
		I do not know	8	12.30			
2.5	**Maintains body temperature regulation and prevent chills**	I know	47	72.30	2.65	0.88	H
		Not sure	13	20			

		I do not know	5	7.69			
3	**Benefits of the skin to skin contact for newborn**						
3.1	**Improves the immune system of newborn**	I know	49	75.38	2.63	0.87	H
		Not sure	8	12.30			
		I do not know	8	12.30			
3.2	**Improves the development and growth of newborn**	I know	45	69.23	2.54	0.84	H
		Not sure	10	15.38			
		I do not know	10	15.38			
3.3	**Establishes an emotional bond between the mother and her newborn**	I know	60	92.30	2.86	0.95	H
		Not sure	1	1.53			
		I do not know	4	6.15			
3.4	**Regulates the level of oxygen in newborn bold**	I know	43	66.15	2.54	0.84	H
		Not sure	14	21.53			
		I do not know	8	12.30			
3.5	**Regulates the heartbeat of the newborn**	I know	49	75.38	2.66	0.88	H
		Not sure	10	15.38			
		I do not know	6	9.23			
3.6	**Helps and improves breathing for newborn**	I know	51	75.38	2.66	0.88	H
		Not sure	6	12.			
		I do not know	8	12.30			
3.7	**Regulates the temperature of the newborn**	I know	50	69.23	2.68	0.89	H
		Not sure	9	15.38			
		I do not know	6	15.38			

F: Frequency, %: Percentage, MS: Mean Scores (weighted mean), RS: Relative Sufficiency, Ass.: Assessment, L: Low (0.33-0.55), M: Moderate (0.56-0.78), H: High (0.79-1.00)

This table indicates that there are high mean score and relative sufficiency in all items is shown in table (2).

Discussion:

The present study reveals that (30.76%) the study sample at age group (20-29) years with mean age and SD is 37.05 ± 11.24 as presented in table (1). These results are consistent with to their age, According to Omar (2021), the average age of nurses-midwives were 39 years old, with an 8.7 standard deviation [11]. World Health Organization [11] had stated that, in some areas, midwives must be at least 25 years' old

to provide competent care for all births.
Also, in contrast, In the another research, demonstrated that the majority of nurses-midwives (25%) are between the ages of 20 and 24 [12].
The current study indicates that the highest percentage (49.2%) existed preparatory midwifery as presented in table (1).
These findings are consistent with to their educational level, study in Erbil had stated that the nurses-midwives had the following educational qualifications: 46 of them graduated from preparatory school of nursing and midwifery 27.9%, It is clear that hospitals need more professional nurses that their qualifications could be higher [11].
Concerning the occupation title, Mejbel and Ali in their study, have stated that the main percentage (75%) of their job titles existed midwives. According to Iraq's Ministry of Health (MOH) regulations, the majority of the samples were permanent registered midwives who had completed secondary school in midwifery [13].
The current study exposes that the highest percentage (78.46%) for experience years for midwives more than 6 years as shown in table (1). The study carried out in Baghdad, Iraq by Mejbel and Ali revealed years of employment and experience, with 44.2% of them having worked as midwives for less than five years and 42.3% having done so for one to ten years [13]. Another research article that (28%) of study sample were employed for (1-10) years, while (32%) of them spent between (1-5) years of experience in midwifery. The researchers have reported in their study that the sample were midwives having (10) or more years of experience as midwives [22].
These findings are consistent with to their experience year, the researcher had stated that the obtainable of the 165 participants, 23 percent had worked for six to ten years, and 46 had more than fifteen years' experience [11].
Though, Just 8.5% of nurses had worked for one to five years, 27.9% for eleven to fifteen years, and 40.8% for five years. The members' average experience working in maternity hospitals was fourteen years. Nurse to patient range is another important consideration. One to five patients, or even more, is the range of nurses to patients, according to 130 nurses. The current study exposes that the highest percentage (40%) have 1-2 courses in skin to skin contact and (67.6%) existed practicing of evening shifts as shown in table (1). With respect to training courses in midwifery, the researchers have depicted that the majority (51.9%) of training course shares were in the range of 1–5 courses [13].
This result is consistent with a research that found 60.4% of the sample of nurse-midwives had completed one to five courses. According to the study's findings, 82.7 percent of nurse-midwives only work at government hospitals. However, just 13.5% of doctors work in private hospitals. This outcome is consistent with their study's findings, which showed that public hospitals employed 90% of the nurse-midwives in practice. Regarding the work shift, it has been shown that the majority of the study sample (55.8%) works the morning shift, followed by the morning and evening shifts (40.4%), and t he evening shift (3.8%). [13].

The current study exposes that show that the highest mean score and relative sufficiency in all items as shown in table (2). There is prosperity of confirmation highlighting the advantages of mothers' and their newborns' first skin-to-skin contact. But it's standard procedure in hospitals for moms to go back to work after giving birth, and for the babies to be kept in cribs or on warmers. Very few studies stated that SSC training started as soon as a healthy baby was born, and even fewer stated how long it lasted [14] [21].
Advantages of Skin to Skin Contact (SSC) between mother and her baby, specifically when it is directed immediately after birth, Skin to skin contact in newborns is a condition in which the infant's skin comes into contact with the mother's [5] Following delivery, moms typically initiate skin-to skin contact with their newborns during the

early stages of breastfeeding [15]. Both normal postpartum and Cesarean section women receive their first skin-to-skin touch. When moms give birth, they reach SSC, which has benefits for both the infant and the mother herself, including a lower risk of bleeding after delivery and a stronger bond between the mother and the child. The newborn's body temperature can be stabilized by the mother and child making skin-to-skin contact, preventing hypothermia.The psychological effects of skin-to skin contact between a mother and her newborn are profound [16]. The early hours after delivery, when the fetus is exposed to outside life and goes through quick and significant physiological changes, are considered a critical phase when the baby must quickly adapt in order to survive, according to the ethological point of view. According to researchers, the first hour after delivery is the best time to start nourishing behaviors in infants, including sucking and seeking, and it's also a delicate and important moment for breastfeeding because most newborns react to touch, temperature, and fragrance during this time [17]. According to a related study done in Istanbul, Turkey, giving neonates kangaroo care made them breastfeed more frequently, quicker, and longer. Additionally, the data demonstrated an improvement in their ability to nurse [18].
According to a study done in Egypt, skin-to-skin contact between a woman and her newborn at birth increased breastfeeding initiation and enhanced the quality of the first feeding [16]. The risk of hospital admission in the first few hours of the newborn's life is strongly affected by direct SSC of the newborn at birth. [19].
The sample consisted of (292 midwives) who were in charge of deliveries or newly born babies in Tehran's 18 hospitals. Firstly, a stratified method was used for the selection, followed by a straightforward random approach. They were divided into three categories: private hospitals, social security, and education. A self-created questionnaire used for data collection included questions about social support, demographics, and midwives' motivation to do the SSC at birth. The source of it was a qualitative investigation. The questionnaire's internal consistency was evaluated through the application of Cronbach's alpha correlation coefficient. Results indicated that 93.8% of midwives thought well of the social support provided by other midwives, with Cronbach's alpha of 0.744, and 96.6% thought well of the midwives' motivation in relation to the impacts of skin contact [20].

Conclusions:

According to the research results, the majority of nurses-midwives are adequately knowledgeable in applying skin-to-skin care for newborns.

Recommendation:

Maintain your support for midwives to become more knowledgeable and skilled in caring for newborns (skin to skin contact) by offering recurrent in-service training, follow-up, and education programs along with effective training courses to upgrade the skills required to evaluate and enhance the quality of care.

Conflict of Interest: The authors didn't have any kind of conflict of interest in this study.
Source of funding: We didn't receive any kind of financial support from financial institutions or organizations.

Authors' Contributions: Authors contributed to the conceptualization, write the article and checking all the concepts of the manuscript. Here, **RTH:** Rajaa Tareq Hasan.

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