Relationship between General and Spinal Anesthesia and Its Impact upon Breast Feeding: Comparative Study

العلاقةما بين التخدير العام والشوكي وتاثره على الرضاعة الطبيعية: (دراسة مقارنة)

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المستخلص:

الهدف: . لمعرفة العلاقة ما بين التخدير العام والشوكي وتأثره على الرضاعة الطبيعية دراسة مقارنة

المنهجية: الدراسة الحالية استخدمت تصميم المقارنة الوصفي في صالة العمليات القيصرية والردهات في قسم النسائية والتوليد في مدينة الامامين الكاظمين الطبية في مدينةِ بغداد. تم جمع العينة للفترة من (2) كانون الثاني 2014 الى نهاية (30) اذار 2014. عينة الدراسة شملت (150) ام ووليدها بصورة عمدية ، وقسمت عينة الدراسة إلى ثلاث مجموعات (50) تحت التخدير العام، (50) تحت التخدير الشوكي، (50) ولادة مهبلية طبيعية وتعتبر المجموعة الضابطة. صممت استمارة استبيانيه كأداة لجمع البيانات تناسب غرض الدراسة ، حيث اشتملت الاستمارة على بيانات الخصائص الاجتماعية ، والتاريخ الصحي الانجابي للأم ، معلومات عن عمر الوليد ، الوزن ، العلامات الحيوية ، تأثير التخد ير على الوليد بعد الولادة وتقييم الرضاعة الطبيعية بعد الولادة ، تم أجراء الدراسة الاستطلاعية لاختبار ثبات الاستبانة وجرى صدق المحتوى من خلال (15) خبير واستخدام الإحصاء والتحليل الوصفي في تحليل البيانات.

النتائج: أهم نتائج الدراسة تبين أن أعلى نسبة لعمر حديثي الولادة في (1 و 2) ساعة بعد الولادة، ووزن 3000 غم.، مجموعة التخدير العام قد أظهرت انخفاض في مقياس ابكار مقارنة بالمجموعات الاخرى . أظهر اختيار الأم للتخدير نسبة الأرجحية للتخدير العام مرتين نسبة الى التخدير الشوكي . فيما يتعلق بممارسة الأم الرضاعة الطبيعية، اوضحت نتائج الدراسة أن الأم في التخدير العام بدأت الرضاعة الطبيعية بعد محاولتين أو أكثر، بينما في الولادة المهبلية بدأت من المحاولة الأولى، فيما يتعلق من عدم القدرة على تحقيق الرضاعة الطبيعية، سجلت جميع الفقرات في التخدير العام تقييم الفشل، وكذلك في التخدير الشوكي ما عدا في الشعور بآلام شديدة بعد العملية ، الأم في غرفة الإنعاش وعدم تدفق الحليب نتيجة التخدير والتي سجلت تقييم النجاح وأخيرا، سجلت الولادة الطبيعيةِ تقييم النجاح في ضوء الاجزاء السابقة. أسباب تتعلق بالطفل"، مجموعة التخدير العام والشوكي سجلت تقييم الفشل في ضوء "الطفل يحتاج إلى نقل إلى وحدة العناية المركزة، وشعور الطفل بالتعب و عدم القدرة على الرضاعة الطبيعية" ، اما بقية الفقرات سجلت تقييم النجاح في حين الولادة المهبلية سجلت تقييم النجاح في جميع الفقرات . فعالية التخدير على الرضاعة الطبيعية تظهر الفشل في تقييم مجموعة التخدير العام والشوكي في ممارسة الأم، أسباب تتعلق الأم والوليد، في حين النجاح في الولادة المهبلية . فيما يتعلق بارتباط الأم والوليد ، وتظهر نتائج تقييم الفاعلية الفشل في مجموعة التخدير العام والنجاح في التخدير الشوكي والولادة المهبلية .

التوصيات: أوصت نتائج الدراسة ببونامج تعليمي للنساء خلال الحمل حيث ان الارتباط المبكر بين الأم و الوليد للحصول على الفوائد السريرية ، للرضاعة الطبيعية، وهناك حاجة إلى سياسات داعمة في المستشفيات ومراكز الولادة للمساعدة في تنفيذ هذا التداخل ، والذي يمكن أن يعتبر "طبيعي"

Abstract.

Objective: To identified the relationship between general and spinal Anesthesia upon breastfeeding and (demographic &reproductive) : Comparative Study.

Methodology: The present study employs a descriptive comparative design held at the labor and delivery room , operational room for cesarean section and maternity word in maternity department at Al Emamain Al Kadhamain Medical City in Baghdad city. Data collection was initiated on 2nd January to end of March /2014. Purposive sample consisted of (150) mother and her neonate, The study sample divided into three groups:(50) under general anesthesia , (50) under spinal anesthesia ,(50) normal vaginal delivery and considered control group. An assessment tool was constructed for the purpose of the study, it was comprised of socio-demographic data, mother reproductive history, information about neonate age, weight, Apgar score, anesthesia effect on neonate after delivery and assessment of breast feeding immediately after birth and anesthesia effect on bonding.

Results : The main results of the study shows that the highest percentage of neonate age at (1 & 2) hours after delivery, **,** Neonate weight 3000 gm., general group had illustrated low Apgar scoring scale comparing with others groups. Mother choice of anesthesia, odds ratio indicator showed that choice of general anesthesia twice times of choice spinal anesthesia .Regarding mother practice of breast feeding, mother in general anesthesia started breastfeeding after two attempts or more ,while in N.V.D. started from first attempt, for the reasons of inability to achieve breast feeding, all items in general reported failure assessment, also in and spinal groups all items reported failure except in Feeling severe pain after the operation", " The mother in recovery room immediately after the operation", and "Lack of milk flow as a result of anesthesia" which reported pass assessment. Finally, N.V.D. has reported pass assessment in light of preceding part. Reasons related to child", general and spinal groups are reported failure assessments in light of "A child needs to transfer to the intensive care unit, and Baby feeling tired and not being able to breast feeding" items, and the leftover items are reported pass assessments. While, N.V.D. has reported pass assessment in all items. Effectiveness of anesthesia on breastfeeding shows failure assessment in general and spinal group in mother practice , reasons related to mother and newborn, while pass in N.V.D. group. Regarding mother-neonate bonding ,results of effectiveness shows failure assessment in general and pass in spinal and N.V.D. group..

Recommendations: Early mother-neonate bonding appears to offer some clinical benefit, particularly for breastfeeding. Supportive policies are needed in hospitals and birthing centers to help implement this intervention, which might be regarded as "natural".

Keywords: Breast feeding , Mother_ Neonate bonding, Anesthesia effectiveness.

Introduction:

The type of anesthesia used for the cesarean can influence on mother –infant bonding such us breastfeeding rates. Several studies have found that breastfeeding rates are significantly higher after spinal anesthesia than after general anesthesia because promoting breast-feeding Immediate after C-section and skin-to-skin contact of mothers and babies
to promote bonding .Breastfeeding can help restore the bond between mother and baby, healing the separation that has occurred. For many women, breastfeeding was the most healing thing in their lives after going through the cesarean[(1)].

Methodology:

The present study employs a descriptive comparative design held at the labor and delivery room , operational room for cesarean section and maternity word in maternity department at Al Emamain Al Kadhamain Medical City in Baghdad city. Data collection was initiated on 2nd January to end of March /2014. Purposive sample consisted of (150) mother and her neonate, The study sample divided into three groups:(50) under general anesthesia , (50) under spinal anesthesia ,(50) normal vaginal delivery and considered control group. An assessment tool was constructed for the purpose of the study, it was comprised of socio-demographic data, mother reproductive history, information about neonate age, weight, Apgar score, anesthesia effect on neonate after delivery and assessment of Sleep, crying and emotion, breast feeding immediately after birth and anesthesia effect on bonding. The instrument was constructed through the use of (2) level type of scale, and scored, yes (2) and No (1). The pilot study conducted on (10) mothers and their neonate to test the ,reliability of questionnaire, from 2nd January to 10th January 2014, the actual value is (0.7075), (0.7111),(0.8234) in (general ,spinal & N.V.D) respectively, this means that the items of the questionnaire were clear and understood and the questionnaire was adequately reliable. To make instrument valid, it was presented to a panel of expert in different medical and nursing specialties.

Data were collected through, application, observation, assessment, and interview techniques as a mean of data collection process. Data were analyzed through application of descriptive and inferential statistical data analysis approach through the use of SPSS Version 16.

Results

Table (1): Distribution of Neonate Information Parameter in the studied groups

variables	Groups	General		Spinal		N.V.D.		C.S. (*) P-value
		No.	%	No.	%	No.	%	
Neonate Age / Hour	1	13	26	23	46	42	84	χ^2=6.082 P=0.193 NS
	2	22	44	18	36	8	16	
	3	15	30	9	18	0	0	
Neonate weight	< 2500	9	18	9	18	3	6	χ^2=9.130 P=0.166 NS
	2500 -	4	8	4	8	2	4	
	3000 -	34	68	35	70	37	74	
	3500 - 4000	3	6	2	4	8	16	
Apgar Score	0 - 3	18	36	0	0	0	0	χ^2=98.267 P=0.000 HS
	4 - 6	32	64	43	86	15	30	
	7 - 10	0	0	7	14	35	70	

(*) HS: Highly Significant at P<0.01, S: Significant P<0.05, NS: Not Significant . at P>0.05, NVD: normal vaginal delivery, χ^2: Chi-square, P: probability end , CS: comparative significant

Table (1) shows "Neonate Age" the highest percentage 35(70%), 41(82%), and 50 (100%), of them (1 & 2) hours, 34(68%), 35(70%), and 37(74%) of them weighing 3000 gm., finally, general group illustrated low Apgar scoring scale, 18(36%), and 32(64%) at the first and second scoring scale respectively, while at spinal group 43(86%) and 7(14%) at second and third scoring scale, as well as 15(30%) and 35(70%) at second and third scoring scale at the N.V.D. group respectively, P<0.05; NS: p value Non-Significant.

Table (2): Anesthesia Types Distributed According to Mother Choice of Anesthesia Type

Qu.	Resp.	Frequencies and Percents	Anesthesia type		Total	C.S. P-value
			General	Spinal		
Is mother choice anesthesia type	Yes	Freq.	35	28	63	C.C.=0.143 P=0.147 NS
		% Is mother choice anesthesia type	55.6%	44.4%	100%	
		% Anesthesia type	70%	56%	63%	
	No	Freq.	15	22	37	Odds Ratio Yes / No (1 : 1.833) 95% C.I. (0.80 , 4.18)
		% Is mother choice anesthesia type	40.5%	59.5%	100%	
		% Anesthesia type	30%	44%	37%	
	Total	Freq.	50	50	100	
		% Is mother choice anesthesia type	50%	50%	100%	
		% Anesthesia type	100%	100%	100%	

General (Yes) > Spinal (Yes) : (1.833 : 1), CI: confidence interval, C C:Contingency Coefficients, χ^2: Chi-square, , P: probability level, CS; comparative significant

Table (2) shows " Mother choice of anesthesia type ", mothers with answered yes reported 35(70%), and 28(63%) at general and spinal groups respectively, and statistically there is no significant different at P>0.05 between the two groups, but an odds ratio indicator showed that choice of general anesthesia twice times of choice spinal anesthesia .

Table (3): Mother Practices of Breast feeding and Reasons for the Inability to Achieve Breast-feeding" items at the Studied Groups with Assessment Scoring Scales

Anesthesia type	General					Spinal					N.V.D.				
Items	F	MS	SD	RS	Ass.	F	MS	SD	RS	Ass.	F.	MS	SD	RS	Ass
Mother – Neonate Bonding concerning with breast feeding:															
1- Mother practice of breast feeding															
Started breast feeding immediately after birth	50	1.14	0.35	57.0	F	50	1.20	0.40	60.0	F	50	1.64	0.48	82.0	P
Successful breast feeding from the first attempt	50	1.14	0.35	57.0	F	50	1.30	0.46	65.0	F	50	1.90	0.30	95.0	P
Started breast feeding after the first two attempts or more	50	1.58	0.50	79.0	P	50	1.52	0.50	76.0	P	50	1.28	0.45	64.0	F
Baby caught with his hand on the breast of his mother and not leave him	50	1.26	0.44	63.0	F	50	1.34	0.48	67.0	F	50	1.60	0.49	80.0	P
Breast feeding baby good	50	1.24	0.43	62.0	F	50	1.44	0.50	72.0	F	50	2.00	0.00	100	P
The baby search by mouth his mother's breast and picked up nipple	50	1.20	0.40	60.0	F	50	1.48	0.50	74.0	F	50	2.00	0.00	100	P
Continuation of breast feeding baby with his mother without stopping	50	1.28	0.45	64.0	F	50	1.46	0.50	73.0	F	50	1.96	0.20	98.0	P
Link and a strong relationship between the mother and her baby when…	50	1.20	0.40	60.0	F	50	1.44	0.50	72.0	F	50	1.84	0.37	92.0	P
The mother ask for her baby to stay longer with her	50	1.32	0.47	66.0	F	50	1.50	0.51	75.0	P	50	1.96	0.20	98.0	P
Expressions of joy on mother's face when embracing her baby	50	1.44	0.50	72.0	F	50	1.54	0.50	77.0	P	50	1.98	0.14	99.0	P
2- The reasons for the inability to achieve breast feeding															
a- Reasons related to mother															
Mother under the influence of anesthesia	50	1.84	0.37	92.0	F	50	1.72	0.45	86.0	F	50	1.00	0.00	50.0	P
The difficulty of achieving a comfortable position for breastfeeding	50	1.96	0.20	98.0	F	50	1.86	0.35	93.0	F	50	1.12	0.33	56.0	P
Need to help the mother to put the baby on the breast	50	1.90	0.30	95.0	F	50	1.84	0.37	92.0	F	50	1.14	0.35	57.0	P
Give the breast after 6 hours of birth	50	1.62	0.49	81.0	F	50	1.52	0.50	76.0	F	50	1.12	0.33	56.0	P
Mother feeling tired	50	1.82	0.39	91.0	F	50	1.50	0.51	75.0	F	50	1.38	0.49	69.0	P
Feeling severe pain after the operation	50	1.84	0.37	92.0	F	50	1.00	0.00	50.0	P	50	1.24	0.43	62.0	P
The mother in recovery room immediately after the operation	50	1.82	0.39	91.0	F	50	1.00	0.00	50.0	P	50	1.00	0.00	50.0	P
The mother taking pain killers which transfer to baby by breast feed	50	1.76	0.43	88.0	F	50	1.52	0.50	76.0	F	50	1.00	0.00	50.0	P
Lack of milk flow as a result of anesthesia	50	1.68	0.47	84.0	F	50	1.48	0.50	74.0	P	50	1.00	0.00	50.0	P
b- Reasons related to child															
A child needs to transfer to the intensive care unit	50	2.00	1.36	100	F	50	1.66	0.48	83.0	F	50	1.08	0.27	54.0	P
Baby feeling tired and not being able to breast feeding	50	1.64	0.48	82.0	F	50	1.50	0.51	75.0	F	50	1.10	0.30	55.0	P
Change in newborn heart beat as a result of anesthesia	50	1.44	0.50	72.0	P	50	1.46	0.50	73.0	P	50	1.06	0.24	53.0	P
Baby suffers from shortness of breath	50	1.46	0.50	73.0	P	50	1.48	0.50	74.0	P	50	1.00	0.00	50.0	P

Cut off Point = (RS=75%) ; Scoring Scales (No = 1 ; Yes = 2) i.e. with Pos. status, items under cut off point reported Failure assessment (F), otherwise reported Pass (P) and vice versa in – ve items., MS: Mean of score, SRS: relative sufficiency, SD: standard deviation , NVD: normal vaginal delivery, F:frequency

Table (3) presents the summary statistics of mother – neonate bonding concerning with breast feeding . Regarding "Mother practice of breast feeding, and reasons for the inability to achieve breast feeding" items.

The results show that with respect to sub domain's "Mother practice of breast feeding", and in light item "Started breast feeding after the first two attempts or more" and according to the scaling of scores assessment, general group are reported pass, and the leftover items has reported failure, as well as spinal group are reported pass assessment due to preceding item and in light of items "Asked for baby to stay longer with her", and Expressions of joy on mother's face when embracing her baby " and leftover items has reported failure. Finally, N.V.D. has reported pass assessment in light of the studied sub domain, except of " Started breast feeding after the first two attempts or more" which reported failure.

The results shows that with respect to sub domain's "The reasons for the inability to achieve breast feeding", and in light of the first part "Reasons related to mother" and according to the scaling scores of assessment, general group are reported failure in light of the studied items, as well as spinal group are reported failure assessments, except of items " Feeling severe pain after the operation", " The mother in recovery room immediately after the operation", and "Lack of milk flow as a result of anesthesia" which reported pass assessment. Finally, N.V.D. has reported pass assessment in light of preceding part.

For the second part " Reasons related to child", general and spinal groups are reported failure assessments in light of "A child needs to transfer to the intensive care unit, and Baby feeling tired and not being able to breast feeding" items, and the leftover items are reported pass assessments. Finally, N.V.D. has reported pass assessment in light of preceding part.

Table (4): The Overall Assessments of Sub and Main Domains of Studying Effectiveness of General and Spinal Anesthesia upon Mother – Neonate Bonding with Assessment Scoring Scales

Anesthesia type	General					Spinal					N.V.D.				
Items	No.	MS	SD	RS	Ass.	No.	MS	SD	RS	Ass.	No.	MS	SD	RS	Ass.
Mother practice of breast feeding	50	1.28	0.23	64.0	F	50	1.42	0.32	71.1	F	50	1.82	0.11	90.8	P
Reasons related to mother	50	1.81	0.21	90.3	F	50	1.49	0.16	74.6	P	50	1.11	0.13	55.5	P
Reasons related to newborn	50	1.64	0.45	81.8	F	50	1.53	0.41	76.3	F	50	1.06	0.13	53.0	P
The reasons for the inability to achieve breast feeding	50	1.72	0.26	86.0	F	50	1.51	0.24	75.4	F	50	1.09	0.10	54.3	P
Mother – neonate bonding concerning with breastfeeding	50	1.50	0.15	75.0	F	50	1.47	0.19	73.5	P	50	1.45	0.07	72.5	P
Overall Assessment	50	1.51	0.10	79.0	F	50	1.46	0.08	73.0	P	50	1.42	0.06	71.0	P

Cut off Point = (RS = 75%) ; GMS i.e. of Neg. status, items ≥ (cut off point) are reported Failure assessment (F), otherwise they are reported Pass (P). MS: Mean of score, RS: relative sufficiency, SD: standard deviation , NVD: normal vaginal delivery

Table (4) presents Mother practices of breast feeding " sub domain, general and spinal groups reported failure assessment, while N.V.D. group reported pass, for "Reasons related to mother" sub domain, general group reported failure assessment, while spinal and N.V.D. groups reported pass, for "Reasons related to newborn" sub domain, general and spinal groups reported failure assessment, while N.V.D. group reported pass, for "The reasons for the inability to achieve breast feeding" sub domain, general and spinal groups reported failure assessment, while N.V.D. group reported pass, and for "Mother neonate bonding concerning breast feeding" main domain, general group reported failure assessment, while spinal and N.V.D. groups reported pass.

Table (5): The Association between Socio-demographical Characteristics Variables of General and Spinal Anesthesia Upon Mother-Neonate Bonding According to Cutoff point "Under/Upper"

Main Domains	Demographical Characteristics	General			Spinal			Normal		
		C.C.	Sig.	C.S.	C.C.	Sig.	C.S.	C.C.	Sig.	C.S.(*)
About breast feeding	Age Groups	0.293	0.454	NS	0.305	0.400	NS	0.419	0.059	NS
	Educational level	0.261	0.725	NS	0.287	0.482	NS	0.371	0.157	NS
	Occupation	0.163	0.504	NS	0.234	0.235	NS	0.234	0.235	NS
	Residency	0.142	0.309	NS	0.122	0.386	NS	0.083	0.558	NS
	Socio-Economic Status	0.131	0.646	NS	0.110	0.738	NS	0.206	0.328	NS

(*) HS: Highly Significant. at P<0.01; NS: Not Significant at P>0.0, CC: Contingency Coefficients, CS; comparative significant, Sig: significant

Relative to " Breast Feeding", main domain's responses, no significant difference are accounted at P>0.05 between the preceding factors.

Table (6): The Association between Reproductive and Neonate Information parameters of General and Spinal Anesthesia upon Mother-Neonate Bonding According to "Under/Upper" Cutoff point

Main Domains	Reproductive Information	General			Spinal			Normal		
		C.C.	Sig.	C.S.	C.C.	Sig.	C.S.	C.C.	Sig.	C.S.(*)
	Gravida	0.177	0.654	NS	0.222	0.460	NS	0.174	0.814	NS
	Para	0.040	0.960	NS	0.176	0.658	NS	0.214	0.493	NS
	Abortion	0.156	0.741	NS	0.247	0.353	NS	0.163	0.505	NS
	Type of previous delivery	0.094	0.801	NS	0.230	0.249	NS	0.083	0.842	NS
	Neonate Age	0.196	0.367	NS	0.193	0.379	NS	0.071	0.614	NS
	Neonate weight	0.109	0.897	NS	0.305	0.161	NS	0.329	0.109	NS
	Apgar Score	0.060	0.670	NS	0.024	0.868	NS	0.048	0.736	NS
	Neonate sex	0.003	0.982	NS	0.268	0.049	S	0.114	0.416	NS

(*) HS: Highly Significant at P<0.01; , Sig: significant at P<0.05; NS: Not Significant at P>0.05, CC: Contingency Coefficients, CS; comparative significant

Relative to Breast Feeding, main domain's responses, no significant difference are accounted at P>0.05 between the preceding factors, except with "Neonate sex" item at spinal group.P<0.05.

Table (7): Association of Anesthesia Types Distributed according to Overall Assessment for Studying Anesthesia Effect on (Mother Neonate Bonding Concerning Breast Feeding)

Anesthesia type	No. and Percents	About breast feeding		C.S. P-value
		Pass	Failure	
General	No.	23	27	C.C.=0.196 P=0.049 S
	% Anesthesia type	46.0%	54.0%	
	% About breast feeding	26.1%	43.5%	
Spinal	No.	30	20	
	% Anesthesia type	60.0%	40.0%	
	% About breast feeding	34.1%	32.3%	
Normal Vaginal Delivery	No.	35	15	
	% Anesthesia type	70.0%	30.0%	
	% About breast feeding	39.8%	24.2%	

CC: Contingency Coefficients, CS:comparative significant, No. Number, %:percentage, P:probability level, , Sig: significant

Regarding to subject's of redistribution of " Mother neonate bonding concerning Breast Feeding ", through under/upper cut off point of grand mean of score among different groups, table (8) shows that general group has reported failure assessment more than reported within spinal and N.V.D. groups in light of pass registration, and statistically there is significant different at P<0.05 among the studied groups.

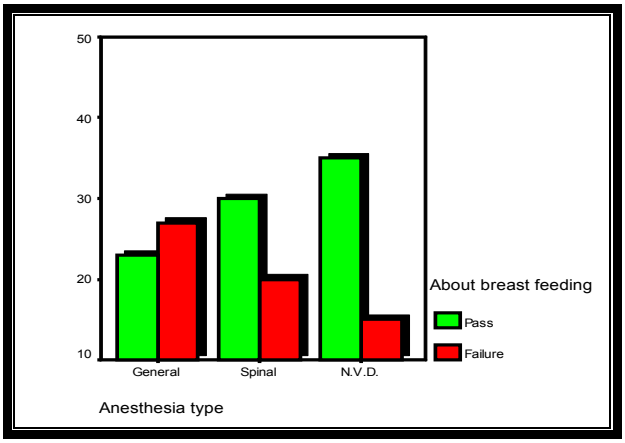

Figure (1): Cluster Bar Chart of Anesthesia Types Distributed According to Overall Assessment for Studying Anesthesia (Mother neonate bonding concerning Breast Feeding)

Figure (1) presents graphically cluster bar chart of Anesthesia types distributed according to overall assessment for studying " Mother neonate bonding concerning Breast Feeding" main domain.

Discussion:

Neonate Information Parameter (Age, Weigh and Apgar score): The present study shows that the majority of neonates age are reported at (1 and 2) hours, and they are accounted 35(70%), 41(82%), and 50 (100%) , at general, spinal and normal vaginal delivery groups respectively**.** No statistical significant differences were found between all groups (P=0.193).

Relationship of post-birth mother-newborn bonding, they found that the highest percentages 38(73%), 43(85%), and 48(96%) of mother – neonate bonding were found during (1-2) hours, in a randomized controlled study at general, spinal and normal vaginal delivery groups respectively. They found that no statistical significant differences between all groups and neonate age[(2)] .

In addition to that, the results regarding to neonate weight shows that highest percentage of them weighing 3000 gm., and they are accounted 34(68%), 35(70%), and 37(74%) at general, spinal, and normal vaginal delivery groups respectively. No statistical significant differences were found between all groups (P=0.166).

Relationship of post-birth mother-newborn bonding and neonate weight , they found that the highest percentages (40%) (47.5%) (45%) respectively for all study neonate, their neonate body weight (3-3.400) kgm , while in control (62.5%) have (3.500-3.900) kgm body weight of neonate with mean and standard deviation (SD) (3.270± 0.3329) (3.490± 0.3447) respectively . No significant differences

were found between all groups and body weight of neonate[2].

Regarding the Apgar scoring the present study general group had illustrated low Apgar scoring scale comparing with others groups, and they are accounted 18(36%), and 32(64%) at the first and second scoring scale respectively, while at spinal group they are accounted 43(86%) and 7(14%) at second and third scoring scale, as well as they are accounted 15(30%) and 35(70%) at second and third scoring scale at the N.V.D. group respectively. high statistical significant differences were found between all groups (P=0.000).

Apgar scores that were significantly lower in children from mothers who underwent general anesthesia C-section, as compared with spinal anesthesia. However, there were no differences with subarachnoid anesthesia. The trend is similar at 5minutes, found no differences in the 1min and 5min Apgar scores, when comparing with spinal anesthesia versus general anesthesia. When considering the neonates with Apgar scores less than 4 or 6 at 1 and 5min, the proportion receiving general anesthesia is not different from those receiving spinal anesthesia[3].

Mother Choice of Anesthesia Type:

Mother choice of anesthesia type, the results of present study shows that mothers with answered yes had reported 35(70%), and 28(63%) at the general and spinal groups respectively, and statistically there is no significant different at P>0.05 between the two groups, but an odds ratio indicator showed that answering with choice general anesthesia type are increasing twice times of choice spinal anesthesia type related of answering with no choice. No statistical significant differences were found between both groups (P=0.147).

Caesarean sections for mother performed over 36 months period, 90 patients had Caesarean section for general anesthesia. The mean age was 31.62 ± 4.8 years, the 90 patients under general anesthesia, only 55(54.4%) were choice general anesthesia with (p =0.121). And the second group 90 patients under spinal anesthesia, only 49(47.8%) choice spinal anesthesia (p =0.109), 55/49 had general anesthesia than spinal anesthesia choice. No statistical significant differences were found between both groups. This study was in agreement with the current study because most mothers having fears regarding spinal anesthesia, fear of needles, fear of complications of getting paralysis, fear of getting permanent headache , also many mothers trust in myths regarding spinal anesthesia, all these causes make the mother to abstain from having spinal one[4].

Mother-Neonate Bonding concerning Breast Feeding: The present study shows that mother – neonate bonding concerning with mother practice of breast feeding, and reasons for the inability to achieve breast feeding" items. The results shows that with respect to sub domain's "Mother practice of breast feeding", and in light of item "Started breast feeding after the first two attempts or more" and according to the scaling of scores assessment, general group are reported pass, and the leftover items has reported failure, as well as spinal group are reported pass assessment due to preceding item and in light of items "Asked for baby to stay longer with her", and Expressions of joy on mother's face when embracing her newborn " and leftover items has reported failure. Finally,

normal vaginal delivery .has reported pass assessment in light of the studied sub domain, except of " Started breast feeding after the first two attempts or more" which reported failure.

The results show that with respect to sub domain's "The reasons for the inability to achieve breast feeding", and in light of the first part "Reasons related to mother" and according to the scaling scores of assessment, general group are reported failure in light of the studied items, as well as spinal group are reported failure assessments, except of items " Feeling severe pain after the operation", " The mother in recovery room immediately after the operation", and "Lack of milk flow as a result of anesthesia" which reported pass assessment. Finally, normal vaginal delivery (N.V.D). has reported pass assessment in light of preceding part.

For the second part " Reasons related to child", general and spinal groups are reported failure assessments in light of " child needs to transfer to the intensive care unit, and Baby feeling tired and not being able to breast feeding" items, and the leftover items are reported pass assessments. Finally, normal vaginal delivery (N.V.D). has reported pass assessment in light of preceding part table (4.2.2). Regarding the association of anesthesia types according to overall assessment and anesthesia effect on mother-neonate bonding concerning with breast feeding, the results shows that the general group has reported failure assessment more than reported within spinal and NVD groups, and statistically there is significant different at p= 0.049.

Breast-feeding among mothers of healthy full-term babies who were delivered at the University of Port Harcourt Teaching Hospital Approximately 34% of the vaginally delivered (VD) mother initiated breastfeeding early, while no mother with Caesarean section had early initiation of breastfeeding. The mean time of breastfeeding initiation was 3.35 -/+ 2.6 hours in mother who had vaginal delivery, 6.50 +/- 3.4 hours and 5.9 +/- 1.9 hours in those who had Caesarean section with general or spinal anesthesia respectively. Among those with vaginal delivery, mothers younger than 25 years and of high socioeconomic class were found to practice early breastfeeding initiation. Delay in the time of repair of episiotomy and labor duration less than 12 hours were associated with early breastfeeding initiation. Early contact between baby and mother, help received on the delivery table and the presence of more than one delivery assistant also positively influenced breastfeeding initiation[5].

Similarly, the presence of a breastfeeding-trained delivery assistant enhanced the mother' practice of early initiation of breastfeeding. Observation of routine labor ward practices such as cleaning of the newborn and weight/length measurement had negative impact on the practice of early initiation of breastfeeding. Early contact between the mother and her newborn on the delivery table with assistance to initiate breastfeeding was the most important predictor of early breastfeeding initiation. Parity, attendance at the antenatal clinic, receipt of breastfeeding information and use of analgesics during labor did not show any statistical association with time of initiation of breastfeeding[6].

Significant differences between study and control group in assessment of

breast feeding, in a quasi- experimental study, Mejbil , (2012), the effect of mother neonate bonding on early imitation of breast feeding, in starting breast feeding (first trial) directly) (p=0.000), starting breast feeding after second trials or more (p=0.000), catching mother breast by hands and not left it (p=0.000), good breast feeding (p=0.003), and neonate search about her mother's nipple (p=0.000), happy expression on mother face (p=0.003), and continuous breast feeding (p=0.000). While there are no significant differences between study and control group in mother desire for neonate to remain with her (p=0.077), and good bonding and relation between mother and her neonate (p=0.152)[7].

The Association between Socio-demographic characteristics and Effectiveness of Anesthesia upon mother neonate Bonding: In relation to mother's socio demographic characteristic shows no significant differences were found between all groups (Table 5).

The current study agreed with that aimed to evaluate the effect of mother age on neonate bonding surveys were collected from 50 respondents, all mothers with age (16 - 37) years. Ages ranged from (18-24) being the most highly represented group. There were no significant differences in any of the variables measured, the same as used in the present study. There is no standards of age to use mother neonate bonding[8].

Also present in a study which aimed to evaluate the effect of educational Level on bonding after CS, there was high significant difference in the distribution of these variables in study and control groups. The demographic data of the subjects showed that the majority were from age group of (21 - 25) years, and majority of maternal factor which effect on bonding after caesarean, was low levels of education, high significant differences were found between all groups (p= 0.006). Also they found that mother's occupation (housewives) present highest percentages for all groups (87.5%) (80%) respectively. There were no statistical significant differences between all groups in socio demographic characteristic[9].

Also study found that the greater number of mothers were living in urban areas (63%) this study was in agreement with the result of the present study[10].

In across sectional study was concerned about the mothers socioeconomic status ,the results indicate that most of them were derived out of low socioeconomic class ,and they found that this was an ordinary outcome of their society as a result of the tragedy of economic sanction. No statistical significant differences were found between all groups[11].

The Association between Mother Reproductive Health History, Neonate information parameters and Effectiveness of Anesthesia upon mother neonate Bonding: In relation to mother's Gravid, Parity and Abortion the present study reveals, no statistical significant differences were found between all groups in (Gravid, Parity and Abortion, Type of Previous Delivery, Newborn age, Weigh and Apgar score) respectively (Table 6).

Also in a study, the efficacy of mother neonate contact as compared to conventional care for low birth weight babies, a randomized controlled trial was done on 114 neonates, delivered at Jawaharlal Nehru Medical College (JNMCH) Aligarh India (March' 2006 to

September' 2007) by vaginal route and weighing ≤1800 grams at birth –58 neonates received mother-neonate bonding for 6-8 hours/ day in 4-6 sessions while 56 neonates in control group received conventional care (radiant warmers, cots in warm room). Efficacy was measured in terms of effect on growth, physiological parameters. there was no significant difference between two groups primipara in study group 21 (36.2%)) in control group 16 (28.6%), (p=NS) multipara in study group 9 (16.1%) in control group 8 (13.8%) (p=NS), abortion in study group & control group (p=NS)[12].

Also, **It is** found that the efficacy of type of Previous delivery on mother-neonate bonding , that there was high significant difference between both groups in type of Previous delivery (cesarean section or normal vaginal delivery), while no significant differences were found between place of previous delivery and mother –neonate bonding[12].

The Association between Neonate Information Parameter (Age, Weigh and Apgar score) and Effectiveness of Anesthesia upon mother neonate Bonding: The present study shows no statistical significant differences were found between all groups (Table 6).

Also found in their study found that the percentage of neonates with Apgar scores less than 7 at 1min was 25.9% for the general anesthesia group and 1.1% for the spinal anesthesia group (p<0.001); however, after 5 min, all neonates had a score over nine[13].

Recommendations :

1. Encourage, support and achieve the continuation of breastfeeding, educational programs should be organized during the antenatal, natal and postnatal periods.

2.Early mother-neonate bonding appears to offer some clinical benefit, particularly for breastfeeding. Supportive policies are needed in hospitals and birthing centers to help implement this intervention, which might be regarded as "natural".

3. Increase mothers awareness regarding spinal anesthesia performance, because less complication than general anesthesia, and more safer, less effect on newborn, newborns delivered under general anesthesia developed low APGAR score than that spinal anesthesia .

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