Assessment of Natal and Perinatal Outcomes for Twins and Singleton Pregnancy at Maternity Hospitals in Baghdad City: A Comparative Study

Anwar Abd-Aljabar Motieeb; M.Sc*, Dr. Ezedeen .F. Baha'aldeen; PhD**

* Academic Nurse Specialist, Nursing Department, Al-Rassafa Baghdad Health Directorate, Ministry of Health
**Assistant Professor, Department of Maternal and Neonate Nursing, College of Nursing, University of Baghdad

Abstract:
Objective: *A comparative study aims to assess the Natal and Perinatal outcomes for Twins and Singleton Pregnancy at Maternity Hospitals in Baghdad city.*

Methodology: *A descriptive, cross sectional study, using comparative approach between two groups (twins and Singleton Pregnancy) was carried out from 22th April, 2016 to 25th August, 2016. To achieve the objectives of study a purposive sample of (50) singleton laboring women, and (50) twins laboring women was selected from delivery rooms at five Hospitals in Baghdad city. The questionnaire validity was determined through a panel of experts. The reliability was estimated through a pilot study. The data was analyzed through the application of descriptive and inferential statistics approaches.*

Results: *The result showed that the majority of both groups were young women (20-30) years, live in urban areas, had primary school graduated, housewives, and no consanguinity with their husbands. The majority of singleton pregnancy women had no abortion, while (60%) of twin pregnancy women had (1) abortion in their life, and nearly half of singleton and twin pregnancy women did not visit primary health care center regularly.*
Concerning to the complication during pregnancy, the findings indicated that a small percentage of singleton and twin pregnancy women were suffering from anemia, pregnancy induced hypertension, get gestational diabetes, Pre mature rupture membrane, and Pre mature labor. Regarding to the current delivery characteristics, two third (66%) of singleton pregnancy women had normal delivery, while the majority (76%) of twin pregnancy women, cesarean section was done to them. Regarding to the Apgar scores, the result indicated that the majority of newborns in both groups were the Apgar score was between (7-10) degrees. Also, the result indicated that the majority of twin pregnancy women, cesarean section were done to them. The most important complications during labor are that (26%); (56%) of singleton and twin pregnancy women were suffering from mal presentation respectively.

Recommendations: *The study recommend the importance of continuous health education program to the pregnant women during their visit to the primary health care center is necessary, emphasize the importance of regular visits to singleton pregnancy women and especially to twin pregnancy women, and planned delivery for pregnancy women especially twin pregnant women in all maternity hospitals for a safe delivery is recommended.*

Keyword: *Assessment, Natal, Perinatal, Outcomes, Twin pregnancy, Singleton pregnancy*

I. Introduction

Naturally, the human reproduction is the birth of a single infant, while multiple births are un common, but multiple births participate to a significant ratio of pregnancy complications such as preterm birth, perinatal morbidity and mortality. Multiple pregnancies have increased risk of certain adverse outcomes as preterm birth, low birthweight and higher perinatal mortality rate when compared to singleton pregnancies[1]. In fact, there are two types of twin pregnancy. They are dizygotic (DZ) and monozygotic (MZ) or identical twins.Dizygotic twin result from simultaneous ovulation of two oocytes and fertilization by two different spermatozoa. Monozygotic twins or identical twins develops from a single ovum. Throughout the world the rate of MZ twins has been remarkably fixed among spontaneously conceived twin pregnancies, and isabout 3-4 per1,000 pregnancies[2; 3].

The differences of the twinning rate have been confined to DZ twinning. DZ twinning is repeated in families, and genetic analysis is beginning to identify genes contributing to these events.The other factors predisposing to DZ twinning including maternal age, ovarian hyper stimulation and the use of assisted reproductive technologies (ART). The mechanism of monozygotic twinning is still unwell understood and is considered to be a spontaneous or random event [4]. There is an increase in the number of twin births for women of all ages in the three decades of years. "There are largest increases among women aged 30 and over. From 1980 to 2009, rates increased 76% for women aged (30–34) years, and nearly 100% for women aged between

---

35–39, and more than 200 % for women aged 40 and over[5]. The birth rate of monozygotic twins is constant in all over the world (approximately 4 per 1000 births), while birth rates of dizygotic twins is vary by race, and the highest birth rate of dizygotic twinning occurs in African nations, while the lowest occurs in Asia. The increasing twinning rates are attributed to the using Assisted Reproductive Technologies (ART) [6]. Although the twin pregnancy is about 1% of all pregnancies but the complications of it account for up to 10% of perinatal mortality. Low birth weight and prematurity are the major causes of high perinatal morbidity and mortality in twins, and considered a high-risk pregnancy; different aspects of the risk include the mode of delivery[7].

Twin pregnancies are more prone to complications than single pregnancies. Early in pregnancy there is high risk of miscarriage and sometimes one fetus may dies and then reabsorbed resulting into the vanishing twin syndrome[8]. Other complications associated with twin pregnancy include high incidence of hypertension (pregnancy-induced hypertension, preeclampsia or eclampsia), gestational diabetes mellitus, bleeding in pregnancy (placenta previa or abruptio), preterm birth and small-for-gestational-age babies due Intrauterine growth restriction (IUGR), postpartum hemorrhage, congenital malformations" [9]; [10].

II. Methodology

A descriptive design by using comparative approach between two groups (twins and Singleton Pregnancy women) to identify the problems related to the natal and perinatal outcomes at Maternity Hospitals in Baghdad city. The study is employed through the present study from 22th April, 2016 to 25th August, 2016. The present study was conducted in (5) hospitals at Baghdad city which includes: Baghdad Teaching Hospital, Al-Yarmook Teaching Hospital, Al-Elwyia Maternity Hospital, Ebn-Albaladi Maternity Hospital, and Al-Karkh Maternity Hospital. A purposive sample of (50) singleton laboring pregnant women, and (50) twins laboring pregnant women were selected from delivery rooms of five Hospitals in Baghdad city. Data were obtained from pregnant women through the utilization of the study instrument, and interview technique for each laboring women and review their medical records as mean of data collection. Observation technique was used from the investigator during laboring in theaters rooms.

The study instrument comprised of six major parts, the first is concerned with the description of the demographic characteristics of study groups that includes the following variables (age of pregnant, residence area, mothers' level of education, women's occupation, , Consanguinity between spouses, births of twins in the family, family history with twins delivery. The second part is concerned with reproductive history which includes ;age at the marriage, number of gravidity, number of para, number of abortion, the period between current and last pregnancy, taking stimuli ovulation, type of previous delivery, number of previous Births, number of still births, number of a live children now, number of singleton delivery, number of twin births, is previous births got without medical intervention, types of medical intervention, chronic diseases, smoking habit for pregnant, and passive smoking. The third part is concerned with the information about current pregnancy Characteristics .The four part is concerned with complications occurred during current pregnancy (anemia, hypertension, hypotension, diabetes, eclampsia, pre-eclampsia, bleeding before birth, intrauterine fetal death, delayed intrauterine fetus growth, late birth, lack or increase of amniotic fluid, early explosion amniotic fluid bag, premature birth, others complication), date of current Birth, type of current delivery, is the twin one Placenta or two separated placenta, the methods of twin pregnancy are diagnosed, if the current delivery is normal, is it first or second twin, if the current delivery is C.S, is it second twin or both twin, the time period between the first and second twin in normal delivery, the complications during delivery. The five part is concerned with the complication which may be occurs during labor like (precipitous delivery, prolonged labor, dystocia, hypotonia, cervical dystocia, mal presentation, mal position, macrosomia, hydrocephalus & Congenital, anomalies, fetal distress, umbilical cord prolapsed, meconium, postpartum hemorrhage, uterine inversion, uterus rupture, retained placenta & membranes, perineal tear, uterus inertia, shock, hypertension, tachycardia, and bradycardia. While the six part is related to the information about neonate characteristics that include; the weight of first baby per grams, the weight of second baby per grams, the condition of first baby, the gender of first baby, the condition of second baby, the gender of second baby, Apgar score for first and second baby, is first or second baby inter NICU, the cause for interring NICU for each ones, the cause for both twin inter NICU, Is death occurred within 6 hours after birth, the cause for death to the first and second baby, the cause for death for both twin.The validity of questionnaire was estimated through a penal of experts related to the field of study, and its reliability was estimated through a pilot study. Reliability of the questionnaire was estimated through the use of Alpha Cronbach for the test-retest approach[11].Analysis of data was performed through the application of descriptive statistics (frequency, percentage) and inferential statistics (Alpha Cronbach, Reliability Coefficient, Chi Square.

III. Results

Table (1): Distribution of the Study Sample according to the Socio-demographic Characteristics Variables:

Variable	Type of pregnancy				x^2	df	P.value	S.
	Single (n=50)		Twin(n=50)					
1. Age	No.	%	No.	%				
20-25	11	22.0	22	44.0	6.357	3	0.095	N.S
26-30	22	44.0	19	38.0				
31-35	11	22.0	6	12.0				
36-40	6	12.0	3	6.0				
Mean ± SD	2.24 ±.94		1.80 ± .88					
2. Residency								
Urban	45	90.0	43	86.0	0.379	1	0.538	N.S
Rural	5	10.0	7	14.0				
3. Level of education								
not read and write	0	0	0	0	3.614	4	0.461	N.S
read and write	0	0	0	0				
primary school graduate	35	70.0	36	72.0				
intermediate school graduate	2	4.0	3	6.0				
secondary school graduate	3	6.0	1	2.0				
institute graduate	4	8.0	1	2.0				
college graduate and above	6	12.0	9	18.0				
4. Occupation								
Employee	6	12.0	7	14.0	3.089	3	.378	N.S
private sector	3	6.0	1	2.0				
Student	0	0	2	4.0				
Housewife	41	82.0	40	80.0				
5. Birth of twin in the family								
Yes	13	26.0	12	24.0	.053	1	.817	N.S
No	37	74.0	38	76.0				
6. Family History with twins delivery								
None	37	74.0	38	76.0	3.280	2	.194	N.S
Mother Family	3	6.0	7	14.0				
Father Family	10	20.0	5	10.0				

Table (1) shows that (44%) of single pregnancy women were in age group of (26-30) years, while (44%) were in age group of (20-25) years, and (90%);(86%) of singleton pregnancy women, and twin pregnancy women respectively in study sample were from urban residency. Regarding to the level of education, (70%) ;(72%) of singleton and twin pregnancy women were primary school graduated respectively, relative to the occupation status, (82 %); (80%) of singleton and twin pregnancy women were housewife respectively, and (74.0%); (76.0%) of singleton and twin pregnancy women respectively don't have history of twin pregnancy in their families.
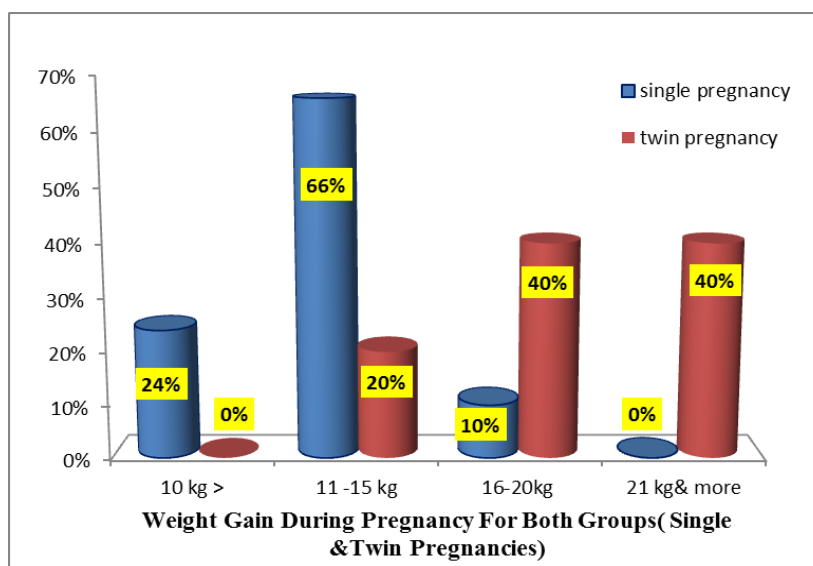

Figure (1): Distribution of both groups (single and twin pregnancies) regarding their weight gain during pregnancy:

This figure represents that (66%) of singleton pregnancy women had weight gain during pregnancy between (11-15) kg, while (40%) of twin pregnancy women had weight gain between (16-20): (21&more) kg.
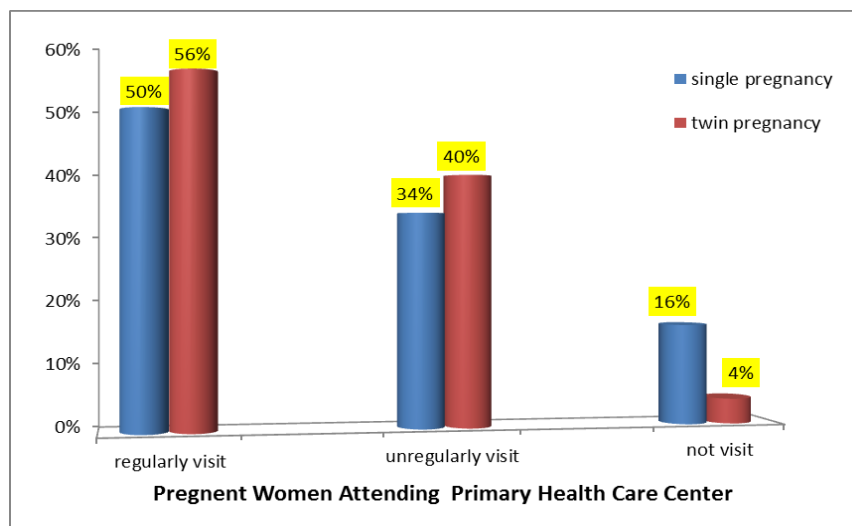
Figure (2): Distribution of both groups (single and twin pregnancies) regarding the pregnant women attending primary health care center:

This figure represents that high percentage (50%) ; (56%) of singleton and twin pregnancy women respectively were regularly visit to attending primary health care center.

Table (2): Distribution of the study sample according to the complication during pregnancy.

Variable	Type of pregnancy								X^2	df	P.value	S.
	Single (n=50)				Twin (n=50)							
Complication during pregnancy	Yes		No		Yes		No					
	No.	%	No.	%	No.	%	No.	%				
Anemia during pregnancy	2	4.0	48	96.0	5	10.0	45	90.0	1.382	1	.240	N.S
pregnancy induced hypertension	1	2.0	49	98.0	3	6.0	47	94.0	1.042	1	.307	N.S
gestational diabetes	1	2.0	49	98.0	2	4.0	48	96.0	.344	1	.558	N.S
Pre mature rupture membrane	2	4.0	48	96.0	5	10.0	45	90.0	1.382	1	.240	N.S
Pre mature labor	5	10.0	45	90.0	9	18.0	41	82.0	1.329	1	.249	N.S

Table (3) shows the complication during pregnancy ,the findings indicated that only(4%);(10%) of singleton and twin pregnancy women respectively had anemia, only (2 %); (6%) of singleton and twin pregnancy women respectively get pregnancy induced hypertension, (2 %); (4%) of singleton and twin pregnancy women respectively get gestational diabetes, (4 %);(10%) of singleton and twin pregnancy women had premature rupture membrane, and (10%);(18%) of singleton and twin pregnancy women were suffering from pre mature labor.

Table (3): Distribution of the Study Sample according to current delivery Characteristics (type of delivery and the causes of C/S):

Variable	Type of pregnancy				X^2	df	P.value	S.
	Single(n=50)		Twin(n=50)					
1. Type of Delivery	No.	%	No.	%				
N.D	33	66.0	12	24.0	17.818	1	.000	H.S
C/S	17	34.0	38	76.0				
2. N.D with(n= 33 for single) ; (n=12 for twin)								
Episiotomy	7	21.2	6	50.0	20.595	2	.000	H.S
Without Episiotomy	26	78.8	6	50.0				
3. Cause of C/S								
Fetal Distress	2	4.0	4	8.0	37.094	7	.000	H.S
Decrease fetus heart rate less than 100 b/m	2	4.0	4	8.0				
Meconium	1	2.0	2	4.0				
Mal presentation	13	26.0	28	56.0				
Cervical Dystocia	2	4.0	6	12.0				
Mal position	3	6.0	8	16.0				
Macrosomia	1	2.0	1	2.0				

This table indicated that two third (66%) of singleton pregnancy women had normal delivery, while the majority (76%) of twin pregnancy women, cesarean section was done to them. Regarding to the singleton pregnancy women with normal delivery (N.D): (78.8 %) of them their delivery was without episiotomy, while half of twin pregnancy women whose delivery of them was normal get episiotomy.

Table (4): Distribution of the Study Sample according to Complications during Labor

Variable	Type of pregnancy								X^2	df	P.value	S.
	Single (n=50)				Twin (n=50)							
Complication during Labor	Yes		No		Yes		No					
	No.	%	No.	%	No.	%	No.	%				
Precipitous Delivery	4	8.0	46	92.0	6	12.0	44	88.0	.444	1	.505	N.S
Prolonged Labor	2	4.0	48	96.0	3	6.0	47	94.0	.211	1	.646	N.S
Cervical Dystocia	2	4.0	48	96.0	6	12.0	44	88.0	2.174	1	.140	N.S
Mal presentation	13	26.0	37	74.0	28	56.0	22	44.0	9.301	1	.002	S
Mal position	3	6.0	47	94.0	8	16.0	42	84.0	2.554	1	.110	N.S
Macrosomia	1	2.0	49	98.0	1	2.0	49	98.0	.000	1	1.000	N.S
Fetal Distress	2	4.0	48	96.0	4	8.0	46	92.0	.709	1	.400	N.S
Meconium	1	2.0	49	98.0	2	4.0	48	96.0	.344	1	.558	N.S
Postpartum Hemorrhage	2	4.0	48	96.0	7	14.0	43	86.0	3.053	1	.081	N.S
Uterine Inversion	0	0	50	100.0	1	2.0	49	98.0	1.010	1	.315	N.S
Retained placenta &membranes	2	4.0	48	96.0	2	4.0	48	96.0	.000	1	1.000	N.S
Perineal tear	3	6.0	47	94.0	3	6.0	47	94.0	.000	1	1.000	N.S
Uterus inertia	2	4.0	48	96.0	2	4.0	48	96.0	.000	1	1.000	N.S
Shock	2	4.0	48	96.0	4	8.0	46	92.0	.709	1	.400	N.S
Tachycardia	2	4.0	48	96.0	4	8.0	46	92.0	.709	1	.400	N.S

Table (5) indicated that (8%);(4%) of singleton pregnancy suffering from precipitous delivery or prolonged labor respectively, and (26%); (56%) of singleton and twin pregnancy women were suffering from mal presentation respectively.

Table (5): Distribution of the Study Sample according to neonate Characteristics:

Variable		Type of pregnancy				X^2	df	P.value	S.
		Single (n=50)		Twin (n=50)					
Health Status of the Newborn		No.	%	No.	%				
Weight of first newborn	<2500 gm	7	14.0	34	68.0	30.136	1	.000	H.S
	2500-4000 gm	43	86.0	16	32.0				
Weight of second newborn	<2500 gm	0	0	40	80.0	100.000	2	.000	H.S
	2500-4000 gm	0	0	10	20.0				
Sex of first newborn	Male	23	46.0	33	66.0	4.056	1	.044	S
	Female	27	54.0	17	34.0				
Sex of second newborn	Male	0	0	33	66.0	100.000	2	.000	H.S
	Female	0	0	17	34.0				
Apgar Score for first newborn	4-6	5	10.0	11	22.0	2.679	1	.102	N.S
	7-10	45	90.0	39	78.0				
Apgar Score for second newborn	4-6	0	0	11	22.0	100.000	2	.000	H.S
	7-10	0	0	39	78.0				
First newborn Resuscitation	Yes	5	10.0	11	22.0	2.679	1	.102	N.S
	No	45	90.0	39	78.0				
Cause of First newborn Resuscitation n=8 for single n=13 for twin	Preterm	5	62.5	9	69.2	1.793	3	.617	N.S
	Fetal Distress	2	25.0	2	15.4				
	Meconium aspiration syndrome	1	12.5	2	15.4				
Second newborn Resuscitation	Yes	0	0	11	22.0	100.000	2	.000	H.S
	No	0	0	39	78.0				
Cause of Second newborn Resuscitation n= 11	Preterm	0	0	9	81.8	12.360	2	.002	S
	Fetal Distress	0	0	2	18.2				

Table (6) shows the neonate Characteristics which indicated that the majority of (86 %) of singleton pregnancy women, their neonate weight were between 2500-4000 gm, while the majority of twin pregnancy women, their first and second neonate weight were <2500 gm. and all of newborns for both groups were alive. Regarding to the Apgar scores: the result indicated that the majority of newborns in both groups were between (7-10).

IV. Discussion

1. Discussion of the socio-demographic characteristics variables to the study sample.

The result showed that (44%) of single pregnancy women were in age group of (26-30) years, while (44%) were in age group of (20-25) years. This result match with the review of most literature which mentioned that the safe age of woman for reproduction is less than 35 years. Also this result is disagree with study done of in Turkey, which indicated that maternal age was significantly higher in twins compared to singletons. [12]. This result is disagrees with another study, which found that majority (76.1%) of the women in this study were aged between 20-34 and the median age was 28 years with a range of 16-46 years[13]. Concerning to the residency area, the study shows that (90%) ;(86%) of singleton pregnancy women and twin pregnancy women respectively were from urban residency.Regarding to the level of education, (70%); (72%) of singleton and twin pregnancy women were primary school graduated respectively, table (1). As women's education increases, their decisions to get married and become pregnant are delayed. Their opportunities to join the labor force also increase. The girls' opportunities for better education, jobs, and income .As women's views and opportunities are expanded through education, children and marriage move down in the scale of importance. "The evidence on the former is fairly clear: the higher the level of schooling, the later the age at marriage and the more preferences are implemented by means of contraceptive use" [14].

This result is disagrees with a study found that Secondary education level was common accounting for 50.6% followed primary education 32.7% [13]. Peter (2012) Furthermore, and relative to the occupation status this table shows that, (82 %); (80%) of singleton and twin pregnancy women were housewife respectively. This result is agree with study, which found that the majority of women in his study, their occupations of most women (79.6%) were housewife[15]. With regard to the consanguinity, (56 %); (64%) of singleton and twin pregnancy women were not related with their husbands respectively. Concerning to the family history with twins delivery, (74%); (76%) of singleton and twin pregnancy women respectively don't have history of twin pregnancy in their families.

2. Discussion of complications during pregnancy for the Study Sample.

Result of this study shows the complications during pregnancy which were happened for both groups, table (2) indicated that the same percentage (96%) for both groups singleton and twin pregnancy women had no suffering from anemia.This result is agree with a study done in Turkey, which indicated that anemia was the most common maternal complication in all groups[12]. This result disagrees with study conducted in Baghdad Teaching Hospital, which indicated that anemia was found in 39 (55.7%) nulliparous women and 58 (82.9%) multiparouswomen, indicated significantly, that nulliparous were less likely to have anemia than multiparous[19]. Low level of complication was found in this study, were only (2 %); (6%) of singleton and twin pregnancy women respectively get pregnancy induced hypertension, and only (2 %); (4%) of singleton and twin pregnancy women get gestational diabetes.Also, table (2) demonstrate that (4.0%);(10%) of singleton and twin pregnancy women respectively get Pre mature rupture membrane, and (10%);(18%) of singleton and twin pregnancy women were suffering from Pre mature labor. Furthermore the result of this study indicated that (100%) of singleton and twin pregnancy women had never suffering from Eclampsia, pre- eclampsia, placenta previa, Abruptio placenta, still birth, Intra uterine growth retardation, post term gestation and Polyhydramnios.

3. Discussion of study sample according to current delivery characteristics (type of delivery and the causes of cesarean section (C/S) :

With return to the table (3) the results indicated that two third (66%) of singleton pregnancy women had normal delivery, while (76%) of twin pregnancy women, cesarean section was done to them. This result is agree with study conducted in Turkey, which indicated that (73.5%) of the twins and (34.2%) of the singletons pregnancy women were delivered by cesarean section[12].This result is disagrees with a study which found that majority (77.3%) of the twin pregnancies were delivered vaginally, and (20.1%) delivered by caesarian section while (2.6%) had a combined delivery that is the first twin was delivered vaginally and the second by caesarian section[13]. This result disagrees with a study conducted in Baghdad Teaching Hospital , which indicated that the vaginal mode of delivery was reported in (64.3%) of nulliparous women and (58.6%) of multiparous while caesarean section was the mode of delivery in (35.7%) nulliparous and (41.4%) multiparous women[19]. Regarding to the normal delivery (N.D): (78.8 %) of singleton pregnancy women their delivery was without episiotomy, while (50%) of twin pregnancy women their delivery was normal and without episiotomy. Regarding to the cause of C/S: (26%) of singleton pregnancy, the cause was mal presentation, while (56%) of twin pregnancy women, the cause was mal presentation. Concerning to the type of twin, table (4) indicated that (70%) twin pregnancy women their type was dizygotic, while (30%) was monozygotic. This result is supported by a study stated that approximately two-thirds of twins are dizygotic[22]. Regarding to the period between the first and second twin in N.D: (100%) 0f twin pregnancy women the period between the first and second twin was less than 10 min.

4. Discussion of study sample according to the complications during Labor:

Concerning to the complications during labor, the finding of study in table (4) shows that (8%);(4%) of singleton pregnancy suffering from Precipitous delivery or Prolonged Labor respectively, and (26%); (56%) of singleton and twin pregnancy women were suffering from Mal presentation respectively.

5. Discussion of study sample according to the neonate characteristics:

Concerning to the neonate characteristics, table (5) indicated that (86 %) of singleton pregnancy women, their neonate weight were between 2500-4000 gm, while (68%) of twin pregnancy women, their first neonate weight were <2500 gm, and (80%) of them, the second neonate weight were <2500 gm. This result is supported by the result of a study) which mention that twins are more likely to be delivered preterm (< 37 weeks of gestation) than singletons. and, approximately 60% of the twins were preterm and weighed less than 2500g [23]. Chauhan et al (2010). This result dis agrees with a study found that the mean birth weight of twin A and twin B was significantly lower in nulliparous than multiparous group, for twin A it was (2180 ± 392)gm and (2317 ±364)gm, respectively, (P=0.015), for twin B the mean birth weight was (1898± 376) and (2 054 ± 341)gm, respectively, (P=0.011), this finding indicated that neonates of nulliparous women had smaller birth weight than those of multiparous women [19].

Regarding the condition of first and second newborn: All of first newborn for both groups were alive, and all of second newborn were alive.This result is supported by study, which indicated that there were no neonatal mortality happened during the hospitalization period [12]. This result is agrees with a study of which found that at the time of delivery out of the 1332 twins, 1252 (94%) were alive and 60(4.5%) were fresh stillbirths and 20(1.5%) were macerated stillbirths [13]. Regarding to the Apgar scores: (90%) of singleton pregnancy women, their Apgar scores for neonate were between (7-10), while (78%) of twin pregnancy women, the Apgar scores for their first and second neonate were (7-10). Based on researcher point of view, this result of Apgar scores for singleton and twin pregnancy is concerned a good result for both groups. This result is agree with study of done in Turkey, which indicated that Neonatal outcomes according to 1 and 5 minute Apgar score were significantly higher in singleton pregnancy women than those of twins [12]. This result is disagrees with study which found that Low Apgar score was more to first twins 76(14.5%) delivered vaginally compared to first twins 5(3.5%) delivered by caesarian section and this difference was statistically significant (p-value=0.003). Also more second twins 116(22.2%) delivery vaginally had low Apgar score compared to second twins 11(7.7%) delivered by caesarian section [13].

Regarding to the resuscitation needs: (90.0%) of singleton pregnancy women, their neonate no need for resuscitation, while (78%) of twin pregnancy women, their first and second neonate were no need for resuscitation. Concerning to the cause of resuscitation: 5(62.5%) of singleton pregnancy women, their neonate need for resuscitation because of preterm pregnancy. while (69.2%) ;(81.8%) of twin pregnancy women, their first and second neonate need for resuscitation because of preterm pregnancy respectively.

V. Recommendations

1. Continuous health education program to the pregnant women during their visit to the primary health care center is necessary; provide them with updated information about their pregnancy.
2. Emphasize the importance of regular visits to singleton pregnancy women and especially to twin pregnancy women.
3. planned delivery for pregnancy women especially twin pregnant women in all maternity hospitals for a safe delivery is recommended.

References

[1]. Carlin A, Neilson JP. Twin clinics: a model for antenatal care in multiple gestations. In: Kilby M, Baker P, Critchley H, Field D, editors. Multiple Pregnancy London: RCOG Press, 2006:121-138.
[2]. Hall JG. Twinning. Lancet 2003; 362(9385):735-43.
[3]. Imaizumi Y. A comparative study of zygotic twinning and triplet rates in eight countries, 1972-1999. J Biosoc Sci 2003;35(2):287-302.
[4]. Hoekstra C, Zhao ZZ, Lambalk CB, Willemsen G, Martin NG, Boomsma DI, et al. Dizygotic twinning. Hum Reprod Update 2008;14(1):37-47.
[5]. Luke B. (2000) Maternal nutrition. In Newman R.B. & Luke B. (eds) Multifetal Pregnancy. Philadelphia, P.,A. Baltimore, M.D.: Lippincott/Williams & Wilkins 192-219.
[6]. Simoes T, Aboim L, Costa A, Ambrosio A, Alves S, Blickstein I. Puerperal complications following elective Cesarean sections for twin pregnancies. J Perinat Med. 2007;35(2):104-7.
[7]. Anna Dera GHB, Louis Keith. The mode of delivery in twin pregnancy Part I. Neonatal outcome. Archives of Perinatal Medicine 2008;14(1): 7-22. (Brick, 2006).
[8]. Corsello & Piro, 2010.
[9]. Chan, 2006.
[10]. Kozier B, et al.: Fundamentals of nursing, Concepts, Process, and Practice, Seventh edition, Upper Saddle River Pearson, 2004, P.P: 865-876.

[11]. Emre Sinan G, Ömer L., Hakan A, Nuri D, Şenol K, Leyla M .: Maternal and Neonatal Outcome of Triplet Versus Twin and Singleton Pregnancies. Gazi Medical Journal, 2006: Cilt 17: Sayı 1: 45-48. Peter (2012) .

[12]. Bongaarts, J.: Completing the fertility transition in the developing world: The role of educational differences and fertility preferences. Population Studies,. Retrieved January 20, 2007, from *The Scholarly Journal Archive*. (2003), Vol. 57 (No. 3), pp. 321-326.

[13]. Hassoon, S .: Factors affecting contraceptive use in a sample of women ; Al-kadhymia Primary Health Center , Baghdad City ,Al-Taqani,Vol 4. 2010; pp: 1-8.

[14]. Sharddha.A, Bharti.B.M.,.: reproductive health in urban slums at Mumbai; Mumbai University,2006, pp: 14-45.

[15]. Kazi K.: Knowledge, Attitudes, and Practices of Family Planning among (500) Women of Rural Karachi, Pakistan, PhD dissertation, University of Karachi, 2006, pp. 185-205.

[16]. Ebrahim,S & Muhammed ,N .: Knowledge, attitude and practice of famlly planning among women in Basrah City South of Iraq, The medical journal of Basrah University, 2011 , Vol 29, No. 1&2, P.P : 70-76.

[17]. Morawah, Kurdi, Israa . :Effect of Parity on Maternal and Neonatal Outcomes in Twin Gestations, A thesis Submitted to the Committee of Iraqi Board Medical Specializations, in partial fulfillment of the Requirements for its fellowship in Obstetrics and Gynecology Baghdad, Iraq, 2014. Mohammed K (2015).

[18]. Kandys W.M., Oleszczuk J. (2000) Matczyny przyrost masy ciała w ciąży bliźniaczej. Relacja z częstością występowania porodu przedwczesnego. Gin. Pol. 71: 1356-9.

[19]. Sandler T.W. (1995) Langman's Medical Embryology. Fetal Membranes and Placenta: 101-21. Chauhan et al (2010).